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S. HRG. 118–625, PT. 1

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

ON

S. 2226

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2024 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR, AND FOR OTHER PURPOSES

PART 1

U.S. SPECIAL OPERATIONS COMMAND AND U.S. CYBER COMMAND

U.S. STRATEGIC COMMAND AND U.S. SPACE COMMAND

U.S. CENTRAL COMMAND AND U.S. AFRICA COMMAND

U.S. NORTHERN COMMAND AND U.S. SOUTHERN COMMAND

DEPARTMENT OF DEFENSE BUDGET REQUEST

ARMY POSTURE

NAVY POSTURE

U.S. INDO-PACIFIC COMMAND AND U.S. FORCES KOREA

THE DEPARTMENT OF ENERGY AND NATIONAL NUCLEAR SECURITY ADMINISTRATIONON ATOMIC ENERGY DEFENSE ACTIVITIES

UNITED STATES EUROPEAN COMMAND AND UNITED STATES TRANSPORTATION COMMAND

AIR FORCE POSTURE

MARCH 7, 9, 16, 23, 28, 30; APRIL 18, 20, 26, 27; MAY 2, 2023



Printed for the use of the Committee on Armed Services

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM—Part 1

U.S. SPECIAL OPERATIONS COMMAND AND U.S. CYBER COMMAND ● U.S. STRATEGIC COMMAND AND U.S. SPACE COMMAND ● U.S. CENTRAL COMMAND AND U.S. AFRICA COMMAND ● U.S. NORTHERN COMMAND AND U.S. SOUTHERN COMMAND ● DEPARTMENT OF DEFENSE BUDGET REQUEST ● ARMY POSTURE ● NAVY POSTURE ● U.S. INDO-PACIFIC COMMAND AND U.S. FORCES KOREA ● THE DEPARTMENT OF ENERGY AND NATIONAL NUCLEAR SECURITY ADMINISTRATIONON ATOMIC ENERGY DEFENSE ACTIVITIES ● UNITED STATES EUROPEAN COMMAND AND UNITED STATES TRANSPORTATION COMMAND ● AIR FORCE POSTURE

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Available via: http://www.govinfo.gov

U.S. GOVERNMENT PUBLISHING OFFICE

60–101 PDF WASHINGTON : 2025

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DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MARCH 7, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

UNITED STATES SPECIAL OPERATIONS COMMAND AND UNITED STATES CYBER COMMAND

The Committee met, pursuant to notice, at 9:31 a.m., in room G–50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, Kaine, King, Warren, Peters, Manchin, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. I would like to call this hearing to order. Good morning. The Committee meets today to receive an update on the readiness and posture of U.S. Special Operations Command (SOCOM) and U.S. Cyber Command.

Our witnesses are Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (LIC), Christopher Maier, Commander of U.S. Special Operations Command, General Bryan Fenton, and Commander of U.S. Cyber Command and Director of the National Security Agency, General Paul Nakasone.

On behalf of the Committee, I would ask our witness to convey our appreciation to the men and women you represent and their families for their service and professionalism. We live in a complex and dangerous global security environment. From Russia's aggression in Europe to China's malign influence in the Indo-Pacific, to persistent threats from Iran, North Korea, and violent extremist groups, prevailing in this environment will require the tailored and often clandestine capabilities that only our special operations and cyber forces can provide.

The United States has been reducing its footprint in conflict zones around the world. As such, the special operations community is at an inflection point, but is no less relevant to the future challenges we face. As the Defense Department's recently released

Joint Concept for Competing makes clear, the object of our Nation's adversaries is to win without fighting.

The Concept warns that if we do not adapt to the realities of long-term competition, the United States risks ceding strategic influence, advantage, and leverage, while preparing for a war that never occurs.

The skills, knowledge, or perhaps most importantly, the relationships with foreign partners that our special operations forces have developed over the past 20 years of combat make them well-positioned to contribute significantly to the strategic competition. Assistant Secretary Maier and General Fenton, I look forward to an update regarding your efforts to focus and prepare our special operations forces (SOF) for the challenges ahead.

In particular, I would ask that you discuss the capabilities we need to build an enduring advantage over our competitors, and what lessons can be drawn from the ongoing conflict in Ukraine. As part of this, I would like to know how you are shaping the force of the future through new recruiting and retention efforts, including building a culture of accountability.

A number of high-profile misconduct cases have reflected poorly on the special operations community and additional efforts to buildupon SOCOM's [Special Operations Command's] 2020 Comprehensive Review of Culture and Ethics, seems necessary. I also want to hear how you are addressing the unique challenges faced by special operations family.

The Office of the ASD [Assistant Secretary of Defense] SO/LIC plays a critical role in the oversight of and advocacy for our special operations forces, as the service secretary-like civilian for SOCOM. I believe more must be done to assure ASD SO/LIC is provided the necessary authority and resources, including manpower, to fulfill these responsibilities. I look forward to hearing more about the Department's efforts on this front.

Turning to Cyber Command, I would like to commend our cyber forces and the intelligence community for their performance over the past year in exposing Russia's activities and helping Ukraine defend itself against both kinetic and cyber-attacks. Intelligence officials are understandably cautious about revealing hardware insights on adversaries, but this current surge has proven highly effective in strengthening the international community's response and creating dilemmas for Vladimir Putin.

This is a great example of competing effectively in the information domain, and I hope we will continue to make this kind of creative use of intelligence. Some of the tools in our toolbox, like the section 702 authority from the Foreign Intelligence Surveillance Act, or FISA, are critical to our ability to counter our adversaries' malign activities.

The Committee would appreciate your views on the importance of Section 702 of FISA, which sunsets at the end of this year, and why you believe it is essential that we renew that authority. We would like also to know what guardrails are in place to give the public confidence that the authority is being used judiciously.

General Nakasone, you have been working to mature the cyber force in advance its capabilities to conduct offensive, offensive, and supporting intelligence operations. It is widely recognized that our

cyber mission forces are struggling with shortfalls in personnel numbers. We know that addressing this issue is your highest priority.

The military services must also ensure their personnel management provides qualified and trained personnel to your Command at the beginning of their tours, so both the personnel and the Command can take full advantage of the time of their assignment to your force. I would also note that the private sector has realized the immense value of our cyber operatives and offering them very high compensation to leave the military.

The services must adjust accordingly by providing a creative combination of incentives to compete for and retain these personnel. Finally, over the last decade, a recurring debate has been waged over whether to sustain the dual hat arrangement whereby the Commander of Cyber Command also serves as the Director of the NSA [National Security Administration].

Recently, an independent panel established by the Director of National Intelligence and the Secretary of Defense and led by former Chairman of the Joint Chiefs of Staff, General Joe Dunford, concluded that the dual hat arrangement should be sustained. We would welcome your thoughts on this issue.

Thank you again to all witnesses for your service and appearance before us today. I look forward to your testimony. Now, let me recognize the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman, for that very fine and thorough statement. I very much appreciate that, and I want to thank our witnesses for being with us once again. The United States faces the most complex and daunting set of security challenges since the height of the cold war, and our witnesses today are on the front lines of those challenges.

From the Chinese Communist Party's (CCP) unprecedented military buildup, growing hegemonic ambitions, to Russia's brazen and unprovoked attack on Ukraine, our adversaries are testing American resolve. Our foremost adversary and competitor, the Chinese Communist Party, has stressed both SOCOM and CYBERCOM in ways we never imagined a decade ago.

Last year, General Nakasone said Chinese advances in cyber operations are unlike anything he has seen before. He also noted the People's Republic of China (PRC) is a more difficult adversary than the Soviet Union because they are much more tolerant of risk. This presents new challenges to our deterrence posture.

Although Beijing may be our foremost advisory, others are not far behind. The cyber capabilities of Russia, Iran, and North Korea have continued to surprise many. I would appreciate an update on DOD's work to implement a zero-trust architecture and provide defensive cyber tools across the Department and the industrial base.

I also look forward to discussing how collaborative cyber activities with our allies and partners such as hunt forward operations have helped to identify vulnerabilities, mitigate threats, and strengthen our network defenses. Military success in cyberspace depends on the readiness of our cyber mission forces. I hope to hear about how we can improve our cyber force readiness and accelerate

development of cyber capabilities, particularly on the offensive side. General Fenton is no stranger to the determination of the People's Liberation Army.

Having served as Commander of our Special Operations Forces in the Pacific, and the Deputy Commander of INDOPACOM [Indo-Pacific Command], his challenge is twofold, to build a force capable of enhancing our deterrence and warfighting in the Western Pacific, even as the threat environment facing our Nation demands that SOCOM should remain fully engaged in the fight against violent Islamic terrorist groups across the world, from Africa to South Asia.

His Command's work is critical to our country's security and is often the first to respond to our Nation's most pressing, unforeseen emergencies. In the 2022 National Defense Strategy. General Fenton's forces have been asked to assume significant risk.

I think this Committee will want to ensure his Command is fully resourced to mitigate that risk to the degree possible, and I would also ask General Fenton and Mr. Maier whether their authorities and resources in the upcoming year are sufficient for mission tasks. What is clear to me is that the role and importance of special operations forces is only increasing as the nature and complexity of threats facing our Nation increase.

The resources we provide to Special Operations Command should reflect that reality. Our first job in this community is to provide the tools our military needs to deter, and if not successful there, to defeat these threats. There is no doubt that continued real growth in the defense budget top line above inflation remains essential to our national security. This requires action now, not later.

Our adversaries are not waiting, neither should we. This Committee led the bipartisan charge to increase the defense budget in last year's cycle. Mr. Chairman, I frankly have little confidence that the Administration budget request this year will be sufficient. If it is not, this Committee will again need to step up to ensure that our military has the resources it needs to defend the Nation.

Thank you, Mr. Chairman, and thanks to our witnesses. Look forward to hearing from you.

Chairman REED. Thank you very much, Senator Wicker. We will begin with Secretary Maier, please.

STATEMENT OF THE HONORABLE CHRISTOPHER MAIER, ASSISTANT SECRETARY OF DEFENSE FOR SPECIAL OPERATIONS AND LOW-INTENSITY CONFLICT

Mr. MAIER. Chairman Reed, Ranking Member Wicker, and distinguished Members of this Committee, thank you for providing the opportunity to testify on the global posture of our Nation's Special Operations Forces, or SOF.

I am honored to appear alongside General Fenton and General Nakasone. I could not ask for better teammates than General Fenton and Command Sergeant Major Shane Shorter in ensuring your SOF enterprise is prepared to address the threats facing the United States today and in meeting the challenges to come.

I start with thanking Congress, and especially this Committee, for your enduring support of the men and women of SOF. I am particularly grateful for your assistance in building the organization I

lead, Special Operations and Low Intensity Conflict, or SO/LIC, with dedicated and gifted public servants.

Sitting before this Committee last year, I testified we were at an inflection point in SOF's transformation to focus more on the pacing challenge of China and the acute threat posed by Russia, while maintaining enduring capabilities to counter violent extremist organizations, address Iran's destabilizing behavior, and conduct no fail crisis response around the globe.

Today, in updating you on this progress and the work that remains I will highlight three areas, SOF's ongoing transition in support of the National Defense Strategy, the development of SO/LIC, and our continued emphasis on empowering and supporting our people.

First, we are transforming the SOF enterprise to achieve the goals of the National Defense Strategy (NDS). While SOF's role in counterterrorism is widely understood and appreciated, my team and I work daily to ensure the value proposition of SOF in integrated deterrence and campaigning against strategic competitors is accounted for and incorporated into the Department's processes.

As it has been in every major military challenge this Nation has confronted since World War II, your SOF will play an essential role. To start the deep relationship SOF has forged with allies and partners over the last 2 decades, often through shared challenges and sacrifice, has produced an international SOF enterprise that provides us unique, firsthand understanding of a global operating environment.

It also has enhanced the resilience of our allies and partners to resist aggression. Second, drawing on the resilience—second, drawing on those relationships and our ability to reach some of the most difficult locations on the globe, your SOF formations provide unique access and placement that creates options for our Nation's leaders, and SOF as adept at creating dilemmas for our adversaries.

Here, I would highlight the many years of our investment in transforming the Ukrainian forces into highly capable force that is consistently outperforming Russia on the battlefield today. Representing the value that SOF brings to the Joint Force is one of my primary responsibilities, and we continue to make progress institutionalizing SO/LIC's role as Congress has directed.

Through my role providing civilian leadership for the organized train and equip of SOF, we have established over the last year in the Department a series of recurring processes and delivered key outcomes for the SOF enterprise. For example, the Special Operations Policy Oversight Council, which I chair, provides a senior level forum to address SOF unique challenges across the Department.

We also have made progress on important initiatives to deter our adversaries and fill warfighting gaps, especially on irregular warfare and information operations. I am also proud that SO/LIC played a central role in the Department's landmark Civilian Harm and Mitigation Response Action Plan.

Finally, I would emphasize the first SOF truth remains truer today than ever, humans are more important than hardware. None of our efforts are possible without our most important resource, our people. With the strong support of Congress, we continue to evolve

the Preservation of the Force and Family, or POTFF Program, to address SOF unique challenges and to optimize physical, psychological, social, spiritual, and now cognitive performance.

We also continue to prioritize a diverse, capable force by removing barriers to participation and advancement of SOF, an operational imperative if we are to succeed in an ever more complex geopolitical environment. Recent publicized challenges remind us that we must continue to evaluate our approach to force employment, accountability, and most importantly, present and engaged leadership.

A healthy SOF culture that reflects our Nation's values is essential to readiness and core to ensuring we remain the most lethal SOF enterprise the world has ever known. Investing in our people is a cornerstone of ensuring your SOF are ready to take on our Nation's toughest challenges, because it is not a question of if, but when the call will come.

Mr. Chairman and distinguished Members of this Committee, I thank you again for your partnership and support, and for this opportunity to testify today. I look forward to your questions.

Chairman REED. Thank you, Mr. Secretary. General Fenton, please.

STATEMENT OF GENERAL BRYAN FENTON, UNITED STATES SPECIAL OPERATIONS COMMAND

General FENTON. Chairman Reed, Ranking Member Wicker, and——

Chairman REED. Could you bring that closer, General, the microphone as close as possible?

General FENTON. Thank you. How is this, Chairman? Chairman Reed, Ranking Member Wicker, and distinguished Members of this Committee, thank you for the opportunity to appear before you today. I am honored to testify alongside the honorable Chris Maier and General Paul Nakasone, and I am equally honored to be here on behalf of the dedicated men and women of U.S. Special Operations Command.

Joining me today is Command Sergeant Major Shane Shorter, USSOCOM's Senior Enlisted Leader. Command Sergeant Major Shorter is representative of the incredible USSOCOM team, particularly our noncommissioned officer corps.

Our noncommissioned officers are the backbone of our military and a decisive advantage within your special operations community, and they make us the envy of every military around the world. We are thankful for the leadership and support of this Congress, particularly this Committee, a committee with the legacies of Senators Nunn and Cohen, who had the vision and determination to establish USSOCOM almost 36 years ago.

Thank you for your decades of steadfast support ever since. Your special operations forces remain a national advantage, as we enter a decisive era, an era where the strategic competitors such as the People's Republic of China and Russia seek to reshape the rules based international order, and in response, your special operations forces strengthen and sustain deterrence globally as part of the Department of Defense's approach to integrated deterrence.

With SOF's World War II origins and DNA rooted in decades of experience in strategic competition, now drawing upon are 20 plus years of hard-won combat credibility and coalition experience, your SOF provide creative, tailorable, and asymmetric options for our Nation, while creating dilemmas for our competitors.

As part of the broader joint force, we campaign every day to deter and prevent aggression, counter coercion, close warfighting gaps, and tackle shared challenges alongside allies and partners, all in support of accelerating the Department of Defense's strategic momentum toward our NDS objectives.

Yet your SOF also remain vigilant in protecting our Homeland and United States interests from the persistent threats posed by global terrorist networks. In doing so, your SOF work tirelessly alongside a trusted network of allies and partners, U.S. interagency counterparts, and our Joint Force teammates to disrupt VEOs wherever they may be.

While we campaign for integrated deterrence and counter violent extremists, your SOF capability to respond to crisis represent a critical strategic edge and advantage for our Nation. Agile, tailored, modernized, and capable, they enable us to undertake sensitive, high-risk missions, crucial to safeguarding and rescuing our citizens, and protecting vital national interests.

Foundational to all these efforts remains our longstanding collaborative partnership with ASD SO/LIC [Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict's] Chris Maier and his team. The oversight, policy guidance, and advocacy within the Department provided by AS SO/LIC are essential for the modernization, readiness, and well-being of our SOF units and their families.

Together, we are committed to placing people as our number one priority, and we are preparing for the future by investing in them and by leveraging our Nation's diverse talent to solve diverse challenges. To those listening today who are considering service to our Nation know the profound sense of calling and purpose that those of us serving in uniform share.

We know that a deeply rewarding journey lies ahead for those who choose to join. You will be part of an incredible team of men and women tackling the toughest challenges for our Nation. Just yesterday, I had the privilege of hearing from Colonel retired Parris Davis, our Nation's most recent Medal of Honor recipient, and a Green Beret.

At yesterday's ceremony to induct him into the Pentagon's Hall of Heroes, he summed up his military service and time with a Green Beret in three words, purpose, opportunity, and pride. As we speak here today, more than 5,000 servicemembers are USSOCOM are deployed, and they share his sense of purpose and pride.

They are defending our Nation and standing shoulder to shoulder with allies and partners in over 80 countries to make our world a safer place. The courage and commitment of our special operations community, our military inspires the CSM and me daily, and we are immensely proud to serve with them. I look forward to your questions.

[The joint prepared statement of The Honorable Christopher P. Maier and General Bryan P. Fenton follows:]

JOINT PREPARED STATEMENT BY THE HONORABLE CHRISTOPHER P. MAIER AND GENERAL BRYAN P. FENTON

INTRODUCTION

Chairman Reed, Ranking Member Wicker, and distinguished Members of this Committee, thank you for this opportunity to discuss the posture of our Nation's Special Operations Forces (SOF). We are honored to present an account of the priorities, activities, and investments that ensure SOF are prepared to meet today's challenges and those to come.

On behalf of the Special Operations community, we thank you for your leadership and steadfast support. Congress's support ensures our SOF remain the world's most capable and credible, contributing integrally to safeguarding and advancing U.S. national interests. Both U.S. Special Operations Command (USSOCOM) and the Office of Special Operations and Low Intensity Conflict (SO/LIC) were established through the foresight and determination of Congress. Your enduring commitment enables our force to tackle the Nation's most challenging security problems while building enduring advantages.

SOF remain a national advantage in this decisive decade, as they have been since their formation. This will be an era marked by dramatic geopolitical, technological, economic, and environmental changes globally. SOF combine decades of combat-tested and coalition experience to advance Department of Defense (DOD) efforts to strengthen and sustain deterrence with creative, tailorable, and asymmetric options for our Nation. Together, SO/LIC and USSOCOM directly contribute to DOD and broader U.S. efforts to deter aggression by our strategic competitors, counter acute forms of coercion, and tackle shared challenges alongside our Allies and partners. With our unmatched capabilities, SOF also remain vigilant and committed to protecting Americans and America's interests globally with enduring responsibility for countering violent extremist organizations and responding to crisis.

The National Defense Strategy (NDS) is clear that we will advance our priorities through integrated deterrence, campaigning, and actions that build enduring advantages. Integrated deterrence requires the United States to sustain strategic deterrence and its conventional military advantage, including in space and cyberspace—complemented by credible irregular warfare capabilities. Competitors continue to seek advantage through coercive and malign activities in the "gray zone" below a threshold they perceive as likely to prompt a U.S. military response. SOF are uniquely positioned to draw upon our joint, global, full-spectrum, all-domain capabilities to provide asymmetric options for our Nation and create dilemmas for competitors, allowing our Joint Force to gain warfighting advantage and close warfighting vulnerabilities.

To ensure SOF are well-prepared for current and future challenges, we are focused on supporting our shared priorities—People, Win, and Transform—to strengthen our force and families, succeed for the Nation, and modernize for the future.

Advancing Civilian-Military Partnership

The Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict's (ASD(SO/LIC)) oversight, policy guidance, and advocacy within DOD are essential for the modernization, readiness, and well-being of SOF and their families. As ASD(SO/LIC) reports directly to the Secretary of Defense in exercising authority, direction, and control of special operations-peculiar administrative matters, SO/LIC maintains a seat at the table alongside Secretaries of the Military Departments in key decision forums, such as the regular Service Secretary meetings, the Deputy's Management Action Group, and the Joint Requirements Oversight Council. Participation in these forums empower ASD(SO/LIC) to provide effective and enduring civilian representation of SOF equities and competencies to DOD and national leadership—a voice that is even more important in this period of strategic transition for the Department and for SOF.

SO/LIC's unique role ensures key SOF-led capabilities are integrated into strategic concepts and associated investments are made to critical priorities such as irregular warfare, operations in the information environment, and undersea capabilities. SO/LIC ensures SOF concepts and capabilities inform and support DOD's broader planning, investment, capability development, and experimentation. For example, the Special Operations Policy Oversight Council (SOPOC) enhances integration between SOF, the Military Services, and the Combatant Commands, with the shared goal of ensuring SOF can meet Joint Force requirements with essential support from the Department. SO/LIC has instituted regular meetings of the SOPOC to integrate governance of SOF as well as SOF capabilities and processes across DOD as envisioned through the enactment of reforms in the Fiscal Year 2017 Na-

tional Defense Authorization Act (NDAA) and subsequent legislation. Additionally, senior leaders from SO/LIC, USSOCOM, and the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) co-chair a biannual SOF Acquisition Summit—with participants from each Military Department and several USD-level organizations—to address challenges impacting USSOCOM's acquisition, technology, and logistics efforts in order to enable agile and innovative support to SOF operations.

The SO/LIC–USSOCOM relationship is defined by multilayered collaboration, characterized by near-continuous engagement across all echelons from top leadership to working levels. Over the past year, this collaborative partnership has continued to deepen as we have been developing a co-authored future operating concept, detailing our vision for SOF operating alongside the Joint Force in the future and guiding near-term force design considerations. At the heart of this operating concept are our three shared priorities: People, Win, and Transform.

PEOPLE: STRENGTHEN OUR FORCE & FAMILIES

Our people are the competitive and comparative advantage of our SOF formations. The creativity and commitment of these men and women are essential to adapting tactics, technologies, and organizations for tomorrow's challenges. We believe unreservedly that the first SOF Truth endures: "Humans are more important than hardware." Together, we are committed to investing in our people through tailored education and training, leveraging our Nation's diverse talent, and enhancing readiness, resilience, and professionalism.

Investing in Our People

We continue to invest in our men and women by adapting SOF-peculiar education and training for both today's environment and future requirements, coupled with tailored talent management for our highly skilled personnel. In full partnership with the Services, SOF-focused recruiting, assessing, training, and education yields the most highly developed workforce within DOD—often with language, regional expertise, and cultural knowledge proficiency unique to SOF.

SOF's persistent, global campaigning efforts enable tactical units to cull the latest battlefield lessons learned—notably from Eastern Europe, the Indo-Pacific, and the Middle East—while continually adapting and improving the specialized training pipelines. SOF service components institutionalize these lessons and pair them with requirements to prepare the force to integrate new and emerging technologies.

As one example, USSOCOM's Joint Special Operations University (JSOU) provides the unique ability to offer SOF-peculiar, joint education and academic expertise for the force, bridging the gap between practitioners and academia. JSOU hones its educational offerings to complement Service-specific professional military education programs with tailored courses. Publications, such as the Resistance Operating Concept, ensure both SOF practitioners and Allied and partner SOF are equipped with academic resources relevant to current challenges.

As another example, the Army SOF component—via U.S. Army Special Operations Command's (USASOC) John F. Kennedy Special Warfare Center and School—has adapted its training enterprise for the evolving strategic environment. The Special Forces pipeline recently modernized portions of its heavy weapons, antiarmor demolitions, and long-range communications courses to better operate alongside local partners in contested environments—drawing upon the operational requirements and lessons learned in Eastern Europe. The Civil Affairs qualification course modernized its culmination exercise to focus on pre-conflict strategic competition and setting conditions for the rapid reconstitution of governance immediately following a near-peer conflict. The Psychological Operations culmination exercise now incorporates synthetic internet and real-time sentiment analysis to educate students on foreign malign influence techniques and activities in the information environment. Finally, USASOC recently established a robotics and unmanned systems integration course that teaches students how to fabricate, integrate, and employ unmanned systems—while also training how to counter these same technologies. With support from SO/LIC, these changes were informed by SOF experimentation in the Indo-Pacific, lessons learned in the Middle East, and observations from Russia's ongoing, brutal war in Ukraine.

To steward investments in education and training, SOF talent management enables USSOCOM to address distinct career needs and best use the skills of its talented, high-demand, low-density workforce. Specialized training and operational experience for personnel engaged in unique, and often sensitive, SOF activities require a more flexible career management system. A tailored career model optimizes operational employment potential for individuals with unique skill sets while providing incentives to attract and retain the most talented individuals to select SOF career

fields. Additionally, the increasing complexity of the operating environment and the realities of ubiquitous technical surveillance require a greater emphasis on identity management and expansion of advanced skill sets across the SOF enterprise.

Leveraging Diverse Talent

As the NDS highlights, our dynamic, diverse, and innovative society remains a core strength and source of American advantage. Maintaining the world's finest SOF in the decades to come requires leveraging all the dimensions of diversity within the Nation's deep pools of talent. Building a diverse force is both an operational and strategic imperative for SOF.

We continue reinforcing efforts to enhance diversity in our workforce and foster inclusive work environments through USSOCOM's Diversity and Inclusion Strategic Plan and the accompanying 2022 Implementation Action Plan—as outlined in the April 2022 presentation to Congress. The SOF enterprise is committed to welcoming all capable individuals, ensuring they are part of inclusive teams, and supporting their equitable career advancement. The SOF Executive Committee on Diversity and Inclusion—co-chaired by SO/LIC and USSOCOM—continues to provide senior-leader oversight and fosters accountability for sustained progress in implementation.

We continue to make essential progress in removing barriers to women's and minorities' participation and advancement within SOF while also working with the Services to attract the best talent. Women and minority servicemembers serve in key leadership roles throughout all four SOF components and within various SOF headquarters. Women have also continued to successfully enter SOF-specific career fields within our most elite units. Throughout SOF, women servicemembers' representation has increased approximately 40 percent over the past 5 years. While this progress is important and notable, it is not sufficient. Our sustained commitment to the Diversity, Equity, Inclusion, and Accessibility strategic goals and implementing successful best practices from across the enterprise will spur continued progress.

In 2022, USASOC released its "Women in Army SOF Study" to identify barriers female servicemembers encounter and establish best practices to recruit, integrate, and retain women in our formation. Based upon input from over 5,000 participants, the study's findings generated 42 recommendations related to education and training, equipment modernization, mentorship and sponsorship, healthcare, childcare and other matters. Though specific to the Army component, many of the findings are applicable across the joint SOF enterprise and will inform future joint implementation efforts.

Additionally, in August 2022, the Navy SOF component—Naval Special Warfare Command (NSW)—formally established its Assessment Command (NSWAC) to transform how its units compete for talent by building a sustainable architecture for diversified outreach, by conducting more rigorous pre-assessments for character, cognitive, and leadership attributes, and by strengthening NSW's culture of continuous assessment. NSWAC is taking a whole-person approach to identify, prepare, and mentor qualified candidates from diverse backgrounds to complete training programs and pursue a successful career in NSW. As this new command was being developed, NSW conducted 60 outreach events with more than half specifically focused on increasing force diversity and inclusivity with underrepresented demographics. These efforts will enhance the way NSW continuously assesses and selects its incoming officers and enlisted personnel.

The SOF enterprise similarly requires a highly skilled and diverse civilian workforce. Like our uniformed personnel, USSOCOM's civilian workforce includes women and minority members serving in key roles throughout its components and various headquarters, including in senior executive leadership positions.

At the same time, SO/LIC has continued to make progress in establishing and filling civilian positions for the Secretariat for Special Operations to support the ASD(SO/LIC)'s administrative oversight responsibilities. Over the past several years, these efforts have resulted in a team of highly skilled and experienced civilian personnel with expertise in capabilities development, budget, acquisition, civilian and military personnel, force management, legislative affairs, and special access programs. Given the relatively small size of the Secretariat, we continue to focus our hiring efforts on areas where civilian oversight can have the greatest impact on SOF readiness, resiliency, and transformation to meet future challenges.

Enhancing Readiness, Resilience & Professionalism

The Preservation of the Force and Family (POTFF) program—along with our Warrior Care Program (WCP)—continues to enhance readiness and resilience for our formation and their families. The POTFF program delivers a holistic, multi-

faceted approach to human performance, resilience, and rehabilitation through a combination of USSOCOM, Service, and DOD resources. The WCP provides recovery care coordination for those who have been challenged due to wounds, injuries, or illnesses. SOF commanders have overwhelmingly embraced both programs as critical to promoting career longevity, mitigating injury, enhancing retention, and increasing quality of life. The combination of POTFF and WCP provides a continuum of support for our personnel through performance enhancement, injury recovery, and transition assistance.

An increased focus on cognitive performance and brain health is necessary to prepare SOF to operate in an increasingly complex, information-rich environment. This focus complements POTFF's broader holistic approach to human performance across five domains—psychological, cognitive, physical, spiritual, and social and family. Cutting-edge work in the cognitive performance arena has also resulted in demonstrated improvements in self-regulation, cognitive processing speed, and sustained attention among the majority of those participating in cognitive training. Additionally, USSOCOM has partnered with DOD Health Affairs and the DOD Traumatic Brain Injury (TBI) Center of Excellence on brain health initiatives to include enhancing TBI prevention efforts, surveillance modalities, treatment protocols, and research studies. We are grateful for Congress's support in all these areas, including the fiscal year 2023 appropriation to continue a pilot study into the long-term effects of repetitive low-level blast exposure in SOF—another of USSOCOM's ongoing brain-health initiatives.

We remain determined to prevent suicide and other forms of self-harm. SOF leaders focus on underlying risk factors through continuous training and education. We have also engaged the Nation's leading experts to identify novel ways to address this problem. Through persistent efforts to destigmatize seeking care, we have witnessed an increase in servicemembers seeking preventative mental health resources. Thanks to a combination of POTFF and Defense Health Agency resources, access to both preventative and emergency mental health care has improved measurably.

The WCP provides valuable support and advocacy for wounded, injured, and ill SOF personnel. Over the past year, we have retained nearly 70 percent of wounded SOF in military service, keeping the talents and dedication of these highly trained, skilled, and experienced personnel in our formation. The WCP also remains a trusted partner and tireless advocate for expanding government and private capabilities to care for our servicemembers and their families, including through both increased access to programs at the Department of Veterans Affairs (VA) polytrauma facilities and novel partnerships with non-Federal entities. We appreciate Congress' support for Section 522 of the fiscal year 2023 NDAA which included a USSOCOM-initiated proposal to improve servicemembers' ability to receive charitable support in order to fill gaps in services that neither DOD nor the VA can provide.

Supporting families also remains a critical component of enhancing readiness and resilience within SOF. A range of family focused initiatives support our force and their families across all Service components. As one example over the past year, we have acted to expand childcare access by facilitating Service funding for the Child Development Center at Camp Bull Simons on Eglin Air Force Base, Florida. Our men and women of the Army's 7th Special Forces Group, and other units in the area, stand to benefit from this expanded support from both the Departments of the Air Force and Army.

Our enduring commitment to professionalism within SOF is critical to preserving the trust of our Nation and senior leaders that we have earned over decades. This commitment includes sustaining high professional standards, emphasizing engaged leadership, and maintaining accountability. We are nearing full implementation of the recommendations from the 2019 Comprehensive Review on SOF Culture and Ethics, on which we routinely report to Congress, including as detailed in the forthcoming biannual report. The Comprehensive Review Implementation Team has diligently overseen the continued efforts to codify institutional adjustments. USSOCOM's components have taken active roles in refining their processes to select key leaders, enhancing ethical training throughout the force, and ensuring accountability for lapses in conduct—all of which will continue.

Behavior that erodes hard-earned trust or threatens cohesiveness—especially harassment, assault, and extremism in any form—has no place in SOF formations. Period. We will continue aggressively implementing our prevention and response programs and vigorously investigating allegations of misconduct and holding personnel accountable, as appropriate. We continue to execute all DOD and Service policies, including the ongoing implementation of the Sexual Assault Independent Review Commission recommendations to improve reporting processes, victim advocacy, and prevention of harmful behaviors. We are fundamentally committed to removing be-

haviors that promote discrimination, hate, or harassment and that are inconsistent with the oaths to defend the Constitution against all enemies foreign and domestic.

WIN: SUCCEED FOR THE NATION

SOF are strengthening and sustaining deterrence globally as part of DOD's approach to integrated deterrence. Drawing upon decades of combat-credibility and coalition experience, SOF provide tailorable, asymmetric options for our Nation while creating dilemmas for strategic competitors. With a range of options to deter aggression and counter coercion, SOF support Joint Force deterrence, including by bolstering Allies' and partners' resilience and resistance, ensuring precision access, countering misinformation, and mitigating risk.

Our SOF enterprise supports NDS priority efforts to deter aggression by the People's Republic of China (PRC) and Russia—strategic competitors who threaten the rules-based international order. We continue to focus our campaigning activities to support these joint, interagency, and multinational efforts while also providing asymmetric approaches to compete as both the PRC and Russia seek resources and partnerships globally, including in Africa, the Middle East, and South America. By persistent campaigning, SOF actively compete for influence while identifying coercive and malign behavior in the "gray zone"—often offering options to judiciously counter such behavior.

SOF leverage unique authorities to collaborate and operate with Allies and partners—our greatest strategic advantage for tackling shared challenges and promoting effective integrated deterrence. Since September 11, 2001, the transnational shared challenge of violent extremism has necessitated deep integration with capable Allies and partners, often via their SOF units and their own interagency partners. Operations over the past 20 years have also necessitated leveraging the unique capabilities of our U.S. interagency community and integrating with the Joint Force across domains.

While the threat of violent extremism persists today and will continue in the years to come, we have honed our approach to conduct sustainable counter violent extremist organizations (C-VEO) operations and remain vigilant in protecting Americans and America's interests globally. The SOF enterprise stands committed to succeed for the Nation by strengthening our partnerships, campaigning for integrated deterrence, countering violent extremism, and leading in our DOD-wide responsibilities.

Strengthening Partnerships

Partnerships are fundamental to SOF and to all our missions and endeavors. We now benefit from unparalleled integration with our Allies and partners, the interagency community, and the Joint Force strengthened over decades and honed particularly over the past 2 decades of global operations. While the shared challenge of countering violent extremism facilitated unprecedented levels of operational partnerships, these mutually beneficial relationships have extended to the full range of SOF operations globally. Ever-expanding partnerships remain the cornerstone of SOF campaigning.

SOF benefit from our Nation's unmatched network of Allies and partners. We cannot surge trust in a crisis, so we work every day to sustain this distinct strategic advantage over our adversaries by reinforcing America's latticework of Allies and partners. At its headquarters alone, USSOCOM hosts exchange officers and foreign liaison officers from 27 Allied and partner nations, offering an unrivaled ability to provide options to understand and act worldwide.

Through persistent engagement over decades, SOF have fostered extensive interoperability and generational relationships with Allied and partner SOF, deepened by operating shoulder-to-shoulder during combat and other high-risk operations for over 2 decades. Authorities under 10 U.S.C. § 333 (Building Partner Capacity) and 10 U.S.C. § 322 (SOF Training)—the latter enabling the Joint Combined Exchange Training (JCET) program—are essential to further enhancing collaboration and promoting interoperability. In 2022, SOF formations executed 173 JCETs in 77 countries training over 2,000 U.S. SOF personnel alongside over 7,000 Allied and partner counterparts.

SOF's integration with our U.S. interagency partners is equally important to leverage our Nation's full capabilities to enhance awareness and provide expanded options. This set of trusted relationships facilitates information sharing, enables collaboration, improves decisionmaking, and enhances synchronization for effective whole-of-government responses. Routine collaboration with interagency partners—such as the Department of State, the Department of Justice, the Department of the Treasury, and the National Counterterrorism Center, among many others—has enhanced USSOCOM's response to a range of threats over the past year, including ad-

versary unmanned aerial systems, violent extremism, adversary misinformation, and near-peer malign activities.

As one example, Operation Gallant Phoenix (OGP)—a U.S. interagency and multinational C-VEO initiative launched by USSOCOM in 2014—has enabled international and interagency partners to share information and disrupt VEOs. Coupled with Counter Threat Finance authorities and expertise, information-sharing operations, like OGP, continue to provide expanded options to disrupt illicit financing and deter malign activities. Well beyond C-VEO efforts, the OGP model is applicable to countering coercive activities in the "gray zone" and deterring aggression.

USSOCOM also maintains collaborative, mutually supporting relationships across the Joint Force. Close coordination with Geographic Combatant Commands enables SOF to support both regional and transregional campaigning efforts—particularly important as competitors, like the PRC and Russia, pursue malign strategic objectives globally. USSOCOM's Theater Special Operations Commands—each aligned with a specific Geographic Combatant Command—coordinate SOF campaigning in their respective theaters, ensuring activities both support regional strategic objectives and maximize transregional efforts. Operating transregionally has proven critical for C-VEO efforts and is necessary to gain advantage over strategic competitors, particularly in countering coercive "gray zone" activities. Strong collaboration with Functional Combatant Commands also ensures synchronization across essential warfighting domains.

Special Operations, Cyber, and Space forces are unique in their global reach, persistence, endurance, and responsiveness. Each brings complementary capabilities to enable our respective missions. SOF often require cyberspace and space capabilities to see and sense the operational environment, or if required, to strike an adversary. Cyberspace operations may rely on SOF's physical access and placement to deliver effects. All of these capabilities can be integrated into campaigns, which enhance the effectiveness of the Joint Force. Our ongoing efforts to enhance SOF-Cyber-Space capabilities continue to evolve and now include integration with USSTRATCOM capabilities. This effort leverages quadrilateral coordination and synergy among USSOCOM, USCYBERCOM, USSPACECOM, and now USSTRATCOM in addition to other interagency partners. This partnership generated new options to bolster deterrence by building warfighting advantage and closing warfighting gaps across domains and regions—while providing options for escalation management. In this effort and others, USSOCOM's Space Force Service Element remains critical to integrating space-based capabilities and identifying SOF-peculiar space requirements.

Last, our efforts to promote opportunities for experimentation between SOF components and their respective Services have deepened ties, resulted in operational breakthroughs, and improved warfighting effectiveness. In 2022, USSOCOM participated in the Army's Project Convergence, experimenting with SOF, cyber, and space capabilities to disrupt near-peer adversaries. Further, SOF supported the USEUCOM-sponsored "Atreus" series of operations, conducting the first-ever demonstration of the palletized precision munition in Europe. Combining Air Force innovation efforts with the air-drop expertise of Air Force SOF and our MC–130 crews enabled the launch of multiple, long-range offensive weapons from non-traditional strike platforms, like cargo aircraft. Efforts like these create credible, strategic dilemmas for our competitors and deepen ties with our Allies and partners.

Campaigning for Integrated Deterrence

SOF campaign globally and across domains to strengthen and sustain deterrence, supporting DOD's integrated deterrence. SOF operations, activities, and investments can undermine adversary confidence that their aggression will succeed, shaping their decision calculus. The access, placement, and influence generated by SOF's long-term commitments to building partner capacity and improving interoperability provide expanded, low-cost options to gain awareness, shape the operating environment, and present adversaries with multiple dilemmas. Additionally, SOF remain ideally suited to identify a competitor's coercive activities in the "gray zone" and counter them with deliberate, credible options while managing escalation.

SOF's placement and access are unique in their breadth. Over 5,000 SOF are currently deployed to over 80 countries executing a range of activities that enable the Joint Force to campaign for military advantage. Our active duty force is bolstered by National Guard and Reserve SOF supporting wide-ranging operations globally in over 30 countries. This multifunctional reserve component also deployed domestically to 18 states last year, providing essential Defense Support to Civil Authorities and natural disaster relief.

Our SOF enterprise continues to refine its campaigning activities to support priority efforts to deter aggression by the PRC and Russia—with an emphasis on the PRC as our pacing challenge. Efforts to compete with the PRC are not limited to

the Indo-Pacific, and neither are the efforts to compete with Russia limited to Europe. Though SOF are active in both regions, these strategic competitors seek resources and partnerships globally, competing with us and our Allies and partners for influence in Africa, the Middle East, and South America.

Over the past 4 years, SOF's campaigning activities to counter coercion and deter aggression by strategic competitors have more than tripled—comprising nearly 50 percent of the deployed forces in fiscal year 2023. SOF also provide specialized expertise from our stateside forces to support Combatant Command priorities globally through U.S.-based operational support—a disciplined approach to provide tailored, low-density capabilities to support specific operational needs.

In the Indo-Pacific, SOF continue longstanding efforts to build partner capacity with Allies and partners, building generational relationships grounded in trust. We remain focused on honing the core maritime capabilities of the NSW and Marine Raider formations to preserve and strengthen U.S. warfighting advantage. Multiple SOF elements, including Air Force Special Operations units, leverage large-scale, joint exercises to experiment with emerging technologies and creative options to extend SOF's operational reach.

In Eastern Europe, SOF continue their decades-long commitment to enhancing interoperability with Allied SOF throughout Europe. Additionally, SOF operate alongside critical Allies to support whole-of-nation resilience efforts and enhance resistance capabilities if threatened with territorial aggression. SO/LIC and USSOCOM also actively support United States efforts to bolster Ukraine's defense following Russia's ongoing brutal and unprovoked invasion—fully aligning these activities with Security Assistance Group—Ukraine. Since 2014, following Russia's previous aggression in Crimea and Eastern Ukraine, SOF supported multinational training efforts with Ukrainian SOF forces and provided Military Information Support Operations assistance to illuminate and counter Russian disinformation.

Strategic competitors—specifically Russia—threaten established international rules in the Arctic and pose increasing challenges to North American security. SOF play a role in bolstering domain awareness and integrated deterrence in the Arctic as part of the Joint Force. Over the past year, SOF strengthened capabilities to operate and prevail in the austere Arctic environment. Large-scale, joint exercises and operations, such as Arctic Edge and Polar Dagger, provided venues for more than 500 U.S. and multinational SOF to experiment and operate in the North American Arctic region.

A critical way the Department is seeking to gain and maintain enduring advantage in strategic competition is through SOF-led, but not SOF-limited, irregular warfare (IW) operations, activities and investments. IW is a critical tool to campaign across the spectrum of conflict, enhance interoperability and access, and disrupt competitor warfighting advantages while reinforcing our own. To further institutionalize IW across the Joint Force, we are updating policy, informing doctrine, and modernizing IW education and training. Through the establishment of the Irregular Warfare Center, we will continue to strengthen our understanding of IW through research, analysis, and engagement with Allies and partners.

SOF continue to campaign in the information environment, exposing and countering adversary propaganda and disinformation to better compete in the cognitive dimension. The PRC and Russia continue to act assertively in the information environment to manipulate populations worldwide. As DOD's Joint Proponent for Military Information Support Operations (MISO) and the Coordinating Authority for Internet-based MISO, we are adapting our psychological operations forces for the evolving information environment. SO/LIC continues to improve guidance for and oversight of those who organize, train, and equip these specialized forces and those who conduct operations in the information environment. As part of the ongoing rebalancing efforts, MISO activities to counter strategic competitors have more than tripled over the past 3 years—comprising over 60 percent of the MISO activities worldwide in fiscal year 2022. The USSOCOM-hosted Joint MISO WebOps Center (JMWC) continues to coordinate Combatant Commands' MISO conducted via the internet and actively engage foreign audiences to illuminate and counter hostile propaganda and disinformation.

SOF's crisis response capabilities remain a critical strategic hedge and advantage for the Nation. Agile, tailored capabilities enable SOF to execute no-fail hostage rescue missions and to counter an adversary's efforts to produce or deploy weapons of mass destruction. Repeatedly during 2022, SOF provided vital forces and command and control for crises requiring rapid deployment, complex problem-solving, and synchronized effects—whether responding to regional crises or safeguarding Americans globally. USSOCOM continues to optimize its global posture while sustaining the ability to respond to crises worldwide.

Last, the critical authorities granted by Congress continue to allow SOF to campaign effectively against State and non-State actors, achieving an outsized impact across multiple mission sets. Operations supported by fiscal year 2018 NDAA Section 1202 (Irregular Warfare) have proven essential for applying SOF capabilities to expose malign activity and impose costs on malign actors. Operations supported by 10 U.S.C. § 127e (Counterterrorism) provide flexible options to apply counterterrorism (CT) pressure in otherwise inaccessible or contested areas—increasingly important as USSOCOM optimizes its C-VEO capabilities. Authorities under 10 U.S.C. § 127f (Clandestine Operational Preparation of the Environment) and Fiscal Year 2020 NDAA Section 1057 (Intelligence / Counterintelligence) support SOF activities with greater clarity and transparency, providing options to campaign for U.S. advantage.

Countering Violent Extremism

We remain vigilant in protecting Americans and America's interests globally through SOF's enduring C-VEO capabilities. SOF have played a critical role in degrading VEOs and disrupting innumerable plots to attack Americans and our interests since September 11, 2001. SOF formations continue to work tirelessly alongside trusted Allies and partners, our U.S. interagency counterparts, and Joint Force teammates, harnessing important capabilities to address the shared challenge of violent extremism and global terrorist networks that threaten our Homeland, our citizens, and our interests overseas.

As we focus our campaigning efforts to address the priorities of integrated deterrence, SOF continue to pursue a sustainable approach to C-VEO operations by prioritizing threats, working closely with international and interagency partners, and modernizing approaches to degrade VEO capabilities. Wherever feasible, SOF embrace a "partner-led, U.S.-enabled" campaign approach to C-VEO, built on a disciplined prioritization of risks to drive decisionmaking and avoid strategic distraction. This approach allows partner-led, unified action to pool resources and share responsibility for our shared security challenges, reducing our collective security burden. We will leverage and enable our partners' unique capabilities to provide an expanded array of options to disrupt VEO threats.

For example, during operations over the past year to counter the Islamic State of Iraq and Syria (ISIS), SOF have worked closely with international and interagency partners to disrupt illicit financing, interdict foreign fighters, and illuminate propaganda.

USSOCOM continues leading in its role as the DOD's Coordinating Authority for C-VEO through our Department-wide campaign planning, assessments, and recommendations. Its annual VEO threat assessment highlights its transregional approach involving multiple Combatant Commands.

Violent extremists will continue to use terrorism as a tactic to achieve their objectives. Drivers of extremist violence exist in deep, multigenerational ideological divisions that military force alone cannot overcome. Ongoing geopolitical, technological, economic, and environmental change often exacerbate regional instability, threatening effective governance and fueling radicalization. As a result, violent extremism and terrorism will persist in the future, representing an enduring threat to the United States, our Allies, and partners.

After sustained global pressure since 2001, the threat to the United States Homeland posed by VEOs based in the Middle East and Africa has diminished, yet persists. Further, the threat to United States citizens and interests overseas remains. The continued availability of safe havens and under-governed spaces perpetuate the risks of VEOs' external attacks. In East Africa, al-Shabaab presents an ongoing risk to United States interests both in Somalia and throughout the region. In West and Central Africa, the operations of Russian private military company Wagner are only exacerbating threats posed by al-Qaeda's affiliate JNIM and ISIS. In Afghanistan, ISIS-Khorasan is strengthening its connections to the wider ISIS enterprise and increasing attacks across the region. In Yemen, al-Qaeda in the Arabian Peninsula presents a continued threat of conducting or directing attacks externally. In Iraq and Syria, ISIS senior leaders demonstrate the intent and capability to target American interests despite the losses of critical operatives and personnel since 2019. Senior al Qaeda leaders also remain committed to attacking the United States Homeland and continue to encourage attacks by their affiliates.

Violent extremists continue to incorporate new technologies and adapt their tactics, posing an ongoing global threat to our citizens and a risk to the effectiveness of our CT efforts. Adversary unmanned aerial systems (UAS) pose a pressing challenge, exhibiting a rapid evolution in employment and lethality exceeding improvised explosive devices over the past 2 decades. While the evolving UAS threat from VEOs is troubling, capable State adversaries and their aligned paramilitary forces

have also successfully employed UAS to target American, Allied, and partner forces—most notably in Iraq and Syria over the past year. Given these trends, SOF must continue to modernize for the evolving CT environment.

Advancing Department-Level Responsibilities

In addition to USSOCOM's designation as DOD's Coordinating Authority for C-VEO and Internet-based MISO, the command also invests heavily in its longtime role as the Coordinating Authority for Countering Weapons of Mass Destruction (C-WMD) and its recently established role as Global Coordinator for Counter-Small UAS (C-sUAS) Prior-to-Launch efforts. USSOCOM continues to provide DOD-wide campaign planning, assessments, and recommendations in these capacities.

The command's role as DOD's Coordinating Authority for C-WMD draws upon its international, interagency, and joint relationships to counter WMD proliferation and deter aggressive actions by State and non-State actors. Aligned with DOD's strategic priorities, USSOCOM hosted a PRC-focused C-WMD Senior Leaders Seminar focusing on threats within the Indo-Pacific. This event bolstered support to DOD-wide strategies, plans, and policies while improving interoperability with our international partners. USSOCOM seeks to incorporate select Allies and interagency partners to an even greater degree in the planning efforts for the updated DOD Functional Campaign Plan to Counter WMD. The forthcoming, revised plan will drive deeper interoperability and strengthen deterrence to defend the Homeland and our Allies' and partners' interests.

In addition to DOD-wide responsibilities, USSOCOM supports Geographic Combatant Command planning efforts with critical expertise in this specialized C-WMD field. USSOCOM forward-positioned C-WMD subject matter experts to augment and assist USEUCOM contingency planning efforts prior to the Russian full-scale invasion of Ukraine. This proactive posture ensured critical chemical, biological, radiological, and nuclear defense readiness considerations were included in regional campaign plans.

Similar to its Coordinating Authority role for C-WMD, USSOCOM continues to expand and refine its efforts as the Global Coordinator for C-sUAS Prior to Launch efforts, by identifying opportunities to target and disrupt adversarial sUAS and the networks responsible for production, proliferation, and use. In this capacity, the command is actively coordinating with Combatant Commands to synchronize requirements for intelligence collection, technology development, operations, and plans—all closely aligned with interagency and intelligence community partners intended to disrupt sUAS prior to launch. Further, USSOCOM is working closely with SO/LIC and across the DOD on C-sUAS-related policy, authorities, and resources to enhance SOF's capability to lead in this role.

SO/LIC and USSOCOM continue to support DOD's civilian harm mitigation and response (CHMR) efforts. Both SO/LIC and USSOCOM played a central role in the development of the Civilian Harm Mitigation and Response Action Plan (CHMR-AP) and continue to support its ongoing implementation. SO/LIC leads CHMR policy efforts within DOD and serves as the executive secretariat for the CHMR Steering Committee, which is co-chaired by the Under Secretary of Defense for Policy, the Vice Chairman of the Joint Chiefs of Staff, and the Comptroller. In furtherance of that effort, ASD(SO/LIC) co-chairs regular sub-steering committee meetings with representatives from across the force to advance CHMR-AP implementation across DOD.

Finally, apart from Coordinating Authority roles, USSOCOM also serves as the DOD's lead component for synchronizing Counter Threat Finance activities, including integrating, standardizing, and advocating for this important capability. The 10 U.S.C. § 284 (Support to Counterdrug Activities and Activities to Counter Transnational Organized Crime) authorities and the associated Fiscal Year 2004 NDAA Section 1022 authorities remain valuable assets, supporting interagency partners to identify and counter competitors' illicit activities in the "gray zone." These authorities provide options to illuminate and counter malign activity by global terrorist networks and PRC-and Russian-affiliated transnational organized criminal networks, which are often closely tied to illicit networks associated with drug trafficking organizations.

TRANSFORM: MODERNIZE FOR THE FUTURE

We are building enduring advantage by the continued investment in our people, technologies, and organizations—marked by a commitment to evolve, modernize, and optimize for the future operating environment. Our future operating concept will guide this ongoing transformation through a focused force design effort that examines how we envision SOF operating as part of the Joint Force in the future.

With the direction and advocacy of SO/LIC, USSOCOM is accelerating its wide-ranging modernization efforts and leveraging its essential acquisition authorities that enable it to capitalize on our Nation's innovation ecosystem—with an emphasis on surface and subsurface maritime platforms; counter-UAS; next-generation intelligence, surveillance, and reconnaissance (ISR); mission command systems; and collaborative and autonomous unmanned systems. Modernization also requires strategic discipline and a complementary emphasis on divesting dated or obsolete platforms that are no longer operationally relevant or effective in the current and future environments.

We seek to set the gold standard for data-driven decisionmaking for our Service-like and Combatant Command responsibilities—focusing on the talent, architecture, and processes needed to capitalize on data and artificial intelligence (AI)-related technologies. This includes partnering with industry and academia to modernize our digital infrastructure, foster a data-literate workforce, and apply data analytics and AI for decision insight from the headquarters to the tactical edge.

To set resourcing priorities for future capability development, SO/LIC and USSOCOM jointly issued Capabilities and Programming Guidance which formed the basis of SOF's 5-year Program Objective Memorandum and the President's budget request. Additionally, ASD(SO/LIC) designated two "special interest" acquisition programs—undersea maritime platforms and Armed Overwatch—allowing us to identify and rapidly remedy issues for these essential investments. Both actions represent important steps in enhancing oversight and advocacy for SOF's transformation.

Building an Enduring SOF Advantage

The SOF enterprise continues to modernize its materiel and systems and incorporate emerging technologies to build enduring advantage. The command leverages its acquisition authority to modernize special operations capabilities in five focus areas: Next-Generation ISR, Next-Generation Mobility, Data and Networks, Precision Effects, and Hyper-Enabling the Operator/Biotechnologies.

Supported by SO/LIC, USSOCOM has coordinated closely with the Under Secretary of Defense for Research and Engineering (USD(R&E)) and the Services to collaborate on and experiment in each of these focus areas. USSOCOM's unique attributes of being inherently globally deployed, partnered, and joint while also possessing acquisition authorities position it to contribute to the overall modernization of the Joint Force. Specifically, the command is well-positioned to be the partner of choice supporting three of USD(R&E)'s technology priorities: within cyber, focusing on MISO capabilities; within directed energy, focusing on electronic warfare/electronic attack at the tactical edge; and biotechnologies.

Next-Generation ISR enables finding and fixing a target in a contested environment and consists of fusing three data streams from cyber-based ISR, space-based ISR payloads, and small autonomous and collaborative unmanned systems. In the cyber domain, we are integrating tools to provide an open architecture mission command system optimized for SOF's role in integrated deterrence. We are also leveraging the full range of open-source data to ensure SOF have access to timely, geo-rectified, and accurate data to inform their decisions. To better harness advances in space, USSOCOM has established a collaborative arrangement with the Space Force and the Space Development Agency to experiment with payloads that will provide its forces with space-based capabilities at the tactical edge. Finally, we are aggressively pursuing collaborative autonomy through our AI for small unit maneuver efforts across our portfolio of ground, air and maritime unmanned and unattended sensors.

As part of the Next-Generation Mobility efforts, we continue to modernize our platforms to prevail in contested environments while working closely with the Services. We are equipping our existing aviation platforms with advanced infiltration and penetration capabilities—such as the Silent Knight terrain-following/terrain-avoidance radar for our rotary-and fixed-wing fleets and radio-frequency countermeasures for our MC–130's. USSOCOM has partnered with both the Air Force and Defense Advanced Research Projects Agency for development of high-speed, vertical take-off and landing platforms and the Army for its Future Vertical Lift program. Finally, we are investing in modernized surface and undersea maritime platforms in close partnership with the Navy—including one of ASD(SO/LIC)'s "special interest" acquisition programs. These efforts in developing, testing, and fielding a range of maritime capabilities will strengthen deterrence in the Indo-Pacific and across the globe.

The Armed Overwatch program provides SOF with an affordable and deployable crewed aircraft system capable of conducting close air support, precision strike, and armed ISR. This program remains central to SOF's Precision Effects modernization

efforts that will provide critical situational awareness and force protection to SOF ground forces executing missions in austere and permissive environments.

Precision Effects are not limited to kinetic fires as USSOCOM modernizes its electromagnetic warfare capabilities—best exemplified by its C-UAS efforts. While the command hones capabilities to defeat UAS prior to launch, it is also closely teamed with SO/LIC and the Army's Joint Counter-UAS Office to detect and defeat UAS that pose a threat to deployed SOF and our partners. Through a System Integration Partner contract, USSOCOM has taken a unique software-centric approach to C-UAS which will enable it to effectively counter the evolving threat. The command is pursuing a system-of-systems, open architecture approach to C-UAS that will allow for the rapid integration of both emerging and proven technologies.

Within the Data and Networks modernization area, USSOCOM is advancing technologies across three broad capabilities: operations and intelligence fusion for its tactical commanders, protection of its operators from ubiquitous technical surveillance, and influence operations in the cyber domain. The Mission Command System/Common Operating Picture deployed after only 1 year of development by embracing agile software development techniques and is USSOCOM's gateway to DOD's Joint All-Domain Command and Control (JADC2). As SOF operate in increasingly contested environments alongside partners, we must provide identity management capabilities to protect them, their partners, and their families. Finally, USSOCOM will continue to modernize internet-based and other MISO efforts with automation and AI-enabled capabilities to operate more effectively in the information environment.

Acknowledging the criticality of its network infrastructure, USSOCOM continues to implement a zero-trust architecture, providing greater security across the SOF enterprise. To ensure alignment, we are working closely with partners across DOD during implementation, including the National Security Agency and the Defense Information Systems Agency. USSOCOM has already implemented many of the zero-trust principles, focusing heavily on the principles of least privilege, multi-factor authentication, and controlling access to moving forward. We are also seeking to accelerate the transition to cloud-based architectures with modern data science environments. These efforts are integral to advancing JADC2 and ensuring resilient networks now and in the future.

The final modernization focus area—Hyper-Enabling the Operator/Biotechnologies—focuses largely on developing emerging technologies, enabling SOF to rapidly deploy promising capabilities. Hyper-Enabling the Operator pursues technologies to provide decision advantages by optimizing information for individuals and teams conducting partnered operations—with the goal of enhancing effectiveness. Our biotechnology efforts are closely aligned with the Preservation of the Force and Family program to address the physical and cognitive well-being of SOF. Our ongoing brain health efforts remain a critical component of this effort—combining best-in-market, leading-edge data and AI industry partners with nutrition and health partnerships while leveraging state-of-science commercial and academic labs.

Across all areas, USSOCOM continues to steward the acquisition authority granted by Congress. The command leverages the additional flexibility provided through tools such as Commercial Solutions Openings, Other Transaction Agreements, and Middle Tier Acquisition. This acquisition agility enables USSOCOM to benefit from rapidly changing technologies—many of which are evolving quickly in the commercial sector and are often produced by small businesses.

Leveraging Data-Driven Technologies

USSOCOM continues to serve as a pathfinder within DOD for integrating data-driven technologies, leveraging AI powered by machine learning (ML), deep understanding, neural networks, and similar cutting-edge technologies. The command is working with partners across DOD and in close cooperation with industry and academia to identify and deploy data and AI capabilities across the SOF enterprise to enhance decisionmaking from the boardroom to the battlefield.

The SOF enterprise continues to maximize its involvement in DOD-wide initiatives, led by the DOD Chief Digital and AI Office, to identify opportunities to implement data-driven technologies. To this end, USSOCOM was among the first to welcome teams as part of the Deputy Secretary of Defense's Accelerating Data and AI Initiative in early fiscal year 2022. Additionally, USSOCOM's efforts to accelerate the adoption of Advancing Analytics (known as Advana) are enabling the command to link Service data and SOF data to illuminate the command's business operations in unprecedented ways. Notably, the command has linked approximately 300 disparate SOF and Service datasets together to create a "single source of truth" for

baseline data and performance-related insights for its personnel, financial, materiel, and education activities.

Other recent AI initiatives include capabilities developed for information operations, medical research, predictive maintenance, intelligence, and autonomous vehicles. As one example, USSOCOM's Intelligence Data Science Team is applying AI to intelligence problems across the SOF enterprise. AI/ML disciplines such as topic modeling, network analysis, natural language processing, and predictive modeling are being applied to publicly available information and sensitive intelligence data to address intelligence requirements. Promising opportunities exist to further leverage data analytics and AI technologies in additional areas to include financial planning, logistics, personnel management, cyber, and a variety of operational applications.

Across these efforts, we recognize the importance of deploying ethical and responsible AI capabilities. With partners in industry, academia, and U.S. Government agencies, we seek to employ explainable AI capabilities to ensure algorithms and models are aligned with our moral, ethical, and legal obligations. As the SOF enterprise explores the potential of emerging algorithmic technologies, to include natural language processes and large language models, we will remain closely aligned with DOD-wide initiatives to promote responsible and explainable AI to mitigate algorithmic risks, ensure traceability, and guard against unethical, illegal, or immoral outcomes.

CONCLUSION

From SOF's earliest history of strategic competition from World War II to the cold war through combat operations during the Global War on Terror, our SOF today stand ready to meet the challenges of this decisive era. Many decades of problem-solving, courage, and relentless determination attest to SOF's ability to succeed for the Nation today and in the future. SOF's unmatched, combat-tested capabilities provide options to prepare, prevent, and prevail in this era of strategic competition—whether creating dilemmas for our competitors, countering coercion, reassuring Allies and partners, disrupting VEOs, or responding to crises. As creations of Congress, SO/LIC and USSOCOM will continue to provide the leadership and advocacy necessary to ensure that SOF remains the world's most capable special operations force. With your continued support, we will confirm that our Nation's SOF are unquestionably a national advantage.

Chairman REED. Thank you very much, General Fenton. General Nakasone, please.

STATEMENT OF GENERAL PAUL NAKASONE, COMMANDER UNITED STATES CYBER COMMAND/ DIRECTOR, NATIONAL SECURITY AGENCY/ CHIEF, CENTRAL SECURITY SERVICE

General NAKASONE. Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, I am honored to testify beside Assistant Secretary Christopher Maier and General Bryan Fenton.

Joining me today is Command Sergeant Major Sheryl Lyon, the U.S. Cyber Command and National Security Agency Senior Enlisted Leader. We are honored to represent the military and civilian members of U.S. Cyber Command. In the contested cyberspace domain, U.S. Cyber Command acts against foreign adversaries that threaten our Nation through malicious cyber activity and enables action by our Federal, private, and allied partners.

For instance, a combined U.S. Cyber Command NSA [National Security Agency] Election Security Group countered malicious cyber actors and oversaw measures to enable the Department of Homeland Security and the FBI, among other domestic partners, to defend the recent midterm elections.

The 2022 election cycle proceeded from primaries to certifications without significant impacts due in part to our effort. Going forward, success for U.S. Cyber Command will be measured by how

effectively foreign adversarial actors are prevented from achieving their strategic objectives.

Last year saw significant maturation for U.S. Cyber Command but our work is not done. In 2023, we must continue to focus on our people, our partners, and our ability to deliver a decisive advantage. We must improve readiness, bolster our resilience, and maintain a culture of continuous improvement.

We will continue to deliver warfighting advantage for the Joint Force and partners throughout competition, crisis, and conflict. We are doing so by executing our service like authorities to build and sustain campaigns in and through cyberspace and the information environment.

Through these efforts, we seek to counter adversaries in competition, to deter conflict, and prevail against aggression. Aligning efforts of both U.S. Cyber Command and NSA is essential to achieving these goals and is in the best interest of the Nation and national security. It all starts with people, the men and women of U.S. Cyber Command working with NSA and partners here and abroad.

We win with people. The men and women of the United States Cyber Command are grateful for the support of this Committee and Congress that has been given to our command. I look forward to your questions.

[The prepared statement of General Paul M. Nakasone follows:]

PREPARED STATEMENT BY GENERAL PAUL M. NAKASONE

Chairman Reed, Ranking Member Wicker and distinguished Members of the Committee, thank you for your enduring support and the opportunity to represent the men and women of U.S. Cyber Command (USCYBERCOM). I am honored to be here beside Assistant Secretary of Defense Christopher Maier and General Bryan Fenton. I look forward to describing how USCYBERCOM continues to deliver return on investment by using the authorities and resources provided by Congress and highlighting the work ahead for 2023.

Guided by the National Defense Strategy, USCYBERCOM focuses on building enduring advantages through campaigning to support Integrated Deterrence. USCYBERCOM acts against foreign adversaries that threaten our Nation and expands capability through cooperation with Federal, private and allied partners. We seek to outmaneuver our adversaries as they look for opportunities to exploit the United States' dependence on data and networks in critical infrastructure, the Defense Industrial Base and private industry.

USCYBERCOM is the Nation's premier military cyber force—one whose world-class talent and strategic partnerships defend U.S. interests while delivering warfighting advantage to the Department of Defense (DOD). It executes its mission along four lines of effort to create and maintain advantage against our adversaries:

- We generate insights and options in defense of the Nation;
- We secure, operate and defend the Department of Defense Information Network (DODIN), ensuring mission advantage for the Department of Defense;
- We develop options for full-spectrum cyberspace operations to assist Combatant Commanders and the Joint Force to achieve their objectives; and
- We boost the strength of America's allies and partners in cyberspace.

USCYBERCOM will buildup its people, partners and decisive advantage. The Command directs operations through its components. These include the Cyber National Mission Force (CNMF); Joint Force Headquarters-DOD Information Network (JFHQ-DODIN), the commander for which is dual-hatted as the Director of the Defense Information Systems Agency); Joint Task Force Ares and other Joint Force headquarters elements. The commanders of Army Cyber Command, Marine Corps Forces Cyberspace Command, Fleet Cyber Command/Tenth Fleet, Air Forces Cyber/16th Air Force and Coast Guard Cyber Command also lead their Service cyber components.

Operational success in the cyberspace domain demands speed, agility and unity of effort. Hence, the roles, missions and responsibilities of USCYBERCOM and Na-

tional Security Agency (NSA) must be mutually supportive in this mission space. A recent report on the dual-hat leadership structure completed by a Secretary of Defense and Director of National Intelligence-directed Senior Steering Group (comprising defense and intelligence leaders) found "substantial benefits that present compelling evidence for retaining the existing structure." The successes that USCYBERCOM and NSA have experienced in defending our elections, in engaging ransomware actors, and in many other missions with the other Combatant Commands, rest on the alignment of USCYBERCOM and NSA. The Senior Steering Group highlighted these accomplishments for the Secretary of Defense and Director of National Intelligence, finding that the dual-hat structure is in the best interests of USCYBERCOM, NSA and the Nation. Success in protecting the national security of the United States in cyberspace would be more costly and less decisive with two separate organizations under two separate leaders. The enduring relationship is vital for both organizations to meet the strategic challenges of our adversaries as they mature their capabilities against the United States.

Present and Future

USCYBERCOM persistently engages adversaries, countering cyber actors and their affiliates who are seeking to harm the United States, its interests and its allies. Skilled and dangerous cyber actors exist, many of them serving foreign military and intelligence organizations. USCYBERCOM provides options to counter malicious actors who exploit cyberspace to support their intelligence operations, steal intellectual property, promote violent extremism, impair democratic processes, coerce perceived rivals and fund transnational illegal conduct.

The National Defense Strategy named the People's Republic of China (PRC) as our military's pacing challenge. The PRC combines authoritarianism with a revisionist foreign policy and stands as the only competitor with both the intent and power to reshape the global order to its advantage. Its rapidly modernizing military is building capabilities far in excess of China's defense needs while supporting Beijing's coercive diplomacy. Competition with the PRC takes place on a global scale, and although that contest remains below the threshold of armed conflict, it is nonetheless strategic in its effects and its implications. PRC-sponsored cyber actors represent a sophisticated and growing threat to the United States' and allies' interests.

China is learning from Russian actions in Ukraine and elsewhere. The National Defense Strategy calls Russia an acute threat to the free and open global system, noting that Moscow flouts international norms with its destabilizing actions. Russia's aggression in Ukraine threatens the peace and stability of Europe. The United States and our allies are working to ensure the strategic failure of their attempt to change the status quo by violence.

Russia's military and intelligence cyber forces are skilled and persistent. Russia has attempted to influence elections, through malign activities, in the United States and Europe and has enabled intelligence collection on a global scale. Moscow has a high tolerance for risk and collateral damage in its cyber operations. This boldness is evident in Russia's indiscriminate cyberattack on Viasat satellite communications in Ukraine and across Europe in support of the invasion of Ukraine last year.

Russia and Ukraine are engaged in a complex struggle in cyberspace that includes significant support from independent actors. Before the crisis unfolded, USCYBERCOM partnered with United States European Command (USEUCOM) and Ukraine by deploying "hunt forward" cyber experts to assist Ukraine's efforts to harden their networks against Russian aggression. Since the crisis began, USCYBERCOM has focused on defending secure communications capabilities at USEUCOM and Ukraine—ensuring the posture of our Nation's nuclear command and control and strengthening DODIN defense.

The National Defense Strategy emphasizes our enduring commitment to deterring aggression in the Middle East and promoting stability in East Asia. Iran remains a destabilizing force in its region, and its cyber actors are proficient and aggressive. Tehran's paramilitary and intelligence forces sponsor a variety of malicious cyber activities against Iran's neighbors and against the United States, as we saw in last year's midterm election. Pyongyang also maintains cyber forces supported by North Korean information technology workers dwelling in other countries. They remain a threat, although much of their recent activity has been devoted to evading international sanctions by stealing cryptocurrency for the regime's use.

Non-State actors also remain a threat in cyberspace. International cybercrime, often organized or executed by actors in Russia, continues to be a concern. USCYBERCOM and NSA enable efforts by the Department of Treasury, the Federal Bureau of Investigation (FBI) and other partners to disrupt ransomware, cryptocurrency theft and other criminal activities. In addition, violent extremist groups are also active in cyberspace. The Islamic State in Iraq and Syria, al Qaida

and associated terrorist groups maintain the intent to target Americans, although their capabilities have been eroded. Our Marine component, JFHQ-C (marines), works with allies and partners to disrupt violent extremist group mobilization online and to support diplomatic efforts.

USCYBERCOM is fully engaged in its efforts to defend the DODIN, disrupt adversary campaigns to harm America and its interests, enhance our partners' defense, and support Joint Force objectives in cyberspace. Authoritarian adversaries feel threatened by the freedoms that democratic states regard as commonplace, and thus they not only deny such freedoms to their own people, they campaign in cyberspace to impugn the legitimacy of democratic societies and to intimidate opposition at home and abroad. As the National Defense Strategy suggests, it will take a whole-of-government—and indeed, a whole-of-nation—effort to bend this trajectory back toward international respect for the principles of the United Nations Charter.

Defense of the Nation

Defending the Nation is paramount among our missions. It means defending our military systems, networks and the critical infrastructure that enable national security. Every Combatant Command's operational plan across the Department assumes that our commanders will be able to leverage data and communicate orders and data rapidly and securely across the battlefield. In this regard, USCYBERCOM plays a crucial role in the defense of military systems, networks and data.

USCYBERCOM and NSA collaborated in defense of the 2022 midterm election. Foreign attempts to meddle in our electoral process via cyber means escalated in 2016 and have persisted in every election cycle since. USCYBERCOM expects them to continue into the future as the prospect of distracting our leaders, pitting Americans against one another on divisive issues and undermining public trust in the democratic process is too tempting for foreign adversaries. USCYBERCOM seeks to render these campaigns inconsequential, in conjunction with the FBI and Department of Homeland Security Cybersecurity and Infrastructure Security Agency (DHS/CISA) partners.

In 2022, USCYBERCOM and NSA teams staffed a combined Election Security Group (ESG) to coordinate cybersecurity, intelligence and operations. The efforts of the ESG enabled DHS and the FBI, among other domestic partners, to defend electoral processes and take action against foreign actors working to subvert the midterms. The 2022 midterms progressed from primaries to certifications without significant foreign malign influence or interference.

The Cyber National Mission Force (CNMF) played an important role in the defense of the midterms and is vital to many of our other efforts as well. CNMF conducts missions to counter malicious cyberspace actors and covers both the offensive and defensive aspects of our defend-the-nation mission set. USCYBERCOM established the CNMF as a subordinate unified command on December 19, 2022 at the direction of the Secretary of Defense. Elevating the CNMF to the status of a sub-unified command not only recognized the importance of its enduring mission, it gave the CNMF greater ability to manage its personnel and readiness and to request manpower, funding and resources through DOD processes.

Since 2018, the CNMF has deployed hunt forward teams 40 times to 21 countries to work on 59 networks, generating insights and imposing costs on common adversaries. These partner-enabled operations have exposed malicious cyber activity by China, Russia, Iran and cyber criminals; made partner-nation networks more secure; increased our global cybersecurity partnerships; led to the public release of more than 90 malware samples for analysis by the cybersecurity community and ultimately kept us safer here at home. In competition, there is no substitute for sharing accurate, timely and actionable intelligence to expose adversarial activity with like-minded domestic and international partners.

Last year, we created a combined USCYBERCOM-NSA China Outcomes Group to oversee this shift. The China Outcomes Group aligns components in USCYBERCOM and NSA, enhances intelligence insights, improves cybersecurity and delivers operational outcomes for the Nation. Resources are prioritized and focused on deterring and countering the PRC's aggressive behavior.

Cyberspace is a global domain. Adversaries often penetrate privately owned networks and devices, using ever-increasing technical capabilities to disrupt operations or gain illicit value via activities such as intellectual property theft, targeting of personal information and installation of ransomware. USCYBERCOM is working under recently expanded statutory authorities and aligning efforts with NSA's Cybersecurity Directorate to bolster companies' ability to defend themselves against exploitation by cyber actors. This collaboration and broad sharing of insights with the private sector provides mutual benefits. An example of this is our UNDERADVISEMENT program, which links cybersecurity expertise across industry and govern-

ment, leading to several operational successes as well as pointing the owners of victim systems toward threats that they can eradicate. In conjunction, NSA's Cybersecurity Directorate runs its Cybersecurity Collaboration Center to share best practices with industry partners and gain additional insights into the technical challenges they are encountering.

Strategic Initiatives

The success of our operations to support the National Defense Strategy depends on training and readiness. We have prioritized improving the readiness of our cyber forces since USCYBERCOM became a unified Combatant Command in 2018, and there has been progress in the last several years. The staffing and training of our teams are improving. In addition, USCYBERCOM has enhanced its ability to monitor the status of the Cyber Mission Force (CMF) at the team, mission element and individual levels. USCYBERCOM is crafting standards for cybersecurity defenders across the DOD Cyberspace Operations Forces Service-retained cyber forces. The creation of these standards will improve the ability to defend networks while enabling our CMF teams to hunt foreign adversaries where they hide and foster a culture of innovation, collaboration and compliance that USCYBERCOM seeks to build.

Strong partnerships are crucial to cyberspace operations. When working in unison, our diplomatic, military, law enforcement, homeland security and intelligence capabilities make a powerful combination that can disrupt the plans of malicious cyber actors. As we saw in our collective defense of the 2022 midterm election, such effects become even more decisive when we include our allies and foreign partners. Their reach often exceeds our own, especially in host-nation systems. As part of our regional engagement strategy in the Indo-Pacific, we are working closely with partners such as Australia, Japan and South Korea to share information that will impose costs on foreign adversaries. Likewise, we continue to do the same with other partners in Europe and Asia. We are also working to enhance partnerships with academia and industry experts who assist us in concept and capability development.

Implementing USCYBERCOM's Service-like authorities will allow it to deliver priority capabilities with agility and at speed. In fiscal year 2024, USCYBERCOM will assume control of the resources for the Cyber Mission Force cyberspace operations and capabilities. Enhanced budgetary control (EBC) gives USCYBERCOM the ability to directly allocate resources for greater efficiencies during the Department's programming phase and ensure they remain aligned with priorities through execution. EBC will lead to better alignment between USCYBERCOM responsibilities and authorities for cyberspace operations.

Expanding USCYBERCOM's role in acquisition is another important step in the implementation of Service-like authorities. The Joint Cyber Warfighting Architecture (JCWA) is USCYBERCOM's premier platform that enables Cyber Operations Forces to conduct full-spectrum cyberspace operations. The Under Secretary of Defense for Acquisition and Sustainment is granting USCYBERCOM greater technical responsibility and authority to direct the development, integration and fielding of critical capabilities and infrastructure in the JCWA. Included in the Fiscal Year 2023 National Defense Authorization Act is a provision directing the establishment of a Program Executive Office (PEO) within USCYBERCOM. This PEO would assume Service-like acquisition decision authority for JCWA program components by fiscal year 2027.

USCYBERCOM depends on support from the National Guard and Reserve. Service cyber components employ Reserve Component personnel to support operations and reinforce relationships with government agencies, increasing the synergy between USCYBERCOM and these organizations. In addition, Army Cyber Command benefited from the expertise of civilian data scientists during their mobilizations to support research and development projects that would not typically be possible with traditionally trained active duty forces. National Guard components on State active duty, and in the State Partnership Program (SPP) work in various efforts to protect State, industry and foreign-partner systems. The SPP offers additional capacity to support increased cyberspace security cooperation activities in support of national defense strategy objectives. We gain valuable insights from the specialized expertise that Reserve Component personnel can bring from their civilian jobs in industry and academia, and such ties have helped us build partnerships across America.

USCYBERCOM recognizes its challenge to grow and develop its military and civilian workforces. Cyber Excepted Service (CES) allows USCYBERCOM to offer cyber professionals opportunities to use their skills and contribute greatly to the national security of the United States. Since CES implementation began, USCYBERCOM has seen positive improvements to the recruiting and hiring timeline.

Enhancing diversity, equality and inclusion is a priority. USCYBERCOM and NSA cannot afford to overlook or neglect talent wherever it resides nor can we allow workplace challenges of any sort to discourage professionalism or inhibit creativity. Our impact for the Nation depends on fostering a wide range of viewpoints and free-ranging debate to encourage innovation and problem-solving, and we will not tolerate harassment in any form or behavior that stifles civil discourse.

Conclusion

Success for USCYBERCOM will be measured by how effectively foreign adversarial actors are prevented from achieving their strategic objectives. USCYBERCOM will counter adversaries in competition to defuse crises, deter conflict and prevail against aggression. Aligning efforts of both USCYBERCOM and NSA is essential to achieving these goals and is in the best interest of the Nation. It all starts with people—the men and women of USCYBERCOM working with NSA and partners here and abroad—We win with People.

Last year saw significant maturation for USCYBERCOM, but our work is not done. In 2023, we must continue to focus on our people, our partners and our ability to deliver decisive advantage. We must improve readiness, bolster our resilience and maintain a culture of continuous improvement. We have and will continue to deliver warfighting advantage for the Joint Force and partners throughout the full spectrum of competition, crisis response and conflict. We are doing so by executing our Service-like authorities to build and sustain campaigns in and through cyberspace and the information environment.

USCYBERCOM's efforts to defend against and contest adversary campaigns in and through cyberspace have been enhanced by the support of this Committee. Designing our campaigns to stay in constant contact with foreign adversaries (persistent engagement) and synchronizing Offensive and Defensive Cyberspace Operations with DOD Information Network Operations are the critical initiatives that allow USCYBERCOM to maintain its advantage in cyberspace. These concepts will continue to be key to our effectiveness and are necessary to outmaneuver and outpace our adversaries wherever they are.

The men and women at U.S. Cyber Command are grateful for the support this Committee has given to our Command. We can only succeed with a strong partnership with Congress. Thank you, and I look forward to your questions.

Chairman REED. Thank you very much, General Nakasone. Gentlemen, thank you for your testimony. As I indicated in my opening statement, Mr. Secretary, we have made progress in strengthening the ASD SO/LIC to act as a service Secretary-like position regarding SOCOM, but there is more to do, particularly with respect to personnel, facilities, and other aspects of your office. Could you comment on what more must be done?

Mr. MAIER. Thank you, Chairman, and again, I would think this Committee in particular for the ongoing and very consistent support for the ASD SO/LIC position, and indeed my staff.

Mr. Chairman, I give you a quick snapshot to say that I think we have established a degree of momentum and a bit of irreversibility, which certainly wasn't the sense of things when I first took this role, and a lot of that has to do with the continued support of Secretary Austin, Deputy Secretary Hicks.

I think, as I have testified in this Committee before, the best snapshot I can give the Committee is when the Secretary of Defense convenes his service secretaries, it convenes the Secretary of the Army, the Secretary of the Air Force, and the Secretary of the Navy, and me as ASD SO/LIC to ensure that SOF voice and perspective is in the room.

To your question, Mr. Chairman, on areas of growth, I think we do need to continue to add staff. We have added about 20 or 25 people over the last 2 years with support from this Committee, and that is against about 50 people currently.

It is a very small staff compared to the services, even with our limited authorities relative to them, and then I think most impor-

tantly, leadership billets. We need more ability for people in a very hierarchical Defense Department to be able to participate in meetings at the right level of seniority, sir, so, I would highlight those.

Chairman REED. Thank you very much, Mr. Secretary. General Fenton, what is the value of SOCOM in having properly empowered service Secretary-like civilian like Secretary Maier?

General FENTON. Senator, thank you very much for that question, and I would say on a couple of fronts, very, very, very big value. First and foremost, as the Secretary Major just mentioned, his ability to be at the service, excuse me, of Secretary tables with the Secretary of Defense and represent issues for the SOCOM team along the lines of people, education, training, and even as he mentioned, where SOF will be and play a big role in terms of integrated competition. Excuse me, that is extremely important for the SOCOM enterprise.

I would say, next, his ability to be with the service secretaries and represent issues from SOCOM back to the services that we take our folks in from is very important for us, and we are very grateful for that.

Certainly, his direction, in many ways, throughout the Department in terms of how SOCOM views not only integrated deterrence but crisis response in counterterrorism has been a welcomed guidance for me.

I am very grateful to have a service Secretary, and as I told you. I think, Chairman, when I was that confirmation, I looked forward to testifying next to my service Secretary.

Chairman REED. Thank you very much, General. General Nakasone, the issue of readiness with cyber mission forces has been a persistent issue we have discussed at the Committee on numerous times.

The Cyber Mission Forces play a very key role and they have very demanding task. They require personnel with special aptitude, training, and experience. One of the ironies, of course, is when you develop such a person, he or she becomes very attractive for outside employers, so you have a retention problem as well as other problems.

In some cases, in the past, it has been indicated that the services are not providing you the skilled and trained individuals you need, which does not provide you with the maximum possible use.

Could you comment on the present situation with respect to Cyber Mission Forces, and also any steps that we should be taking to improve their readiness?

General NAKASONE. Chairman, as we take a look at the readiness of 133 teams, it really comes down to three Rs. It is the readiness piece of it—I am sorry, it is the recruiting piece of it. It is the training piece of it.

It is the retention piece of it, and so, when you look at that, where I see this right now is the fact that the services have done a good job of recruiting the forces that I need. Assigning the numbers are one of the things that we are working with right now to make sure that we have all of the folks that we need. We have worked very, very hard to get the training to a very simple and predictable level.

That continues to improve. The other piece that we need to work hand in hand with the services is the retention piece, which you highlighted. The challenge of someone that has this type of training is very, very attractive, to the outside.

But several of the Services, the marines included, have made tremendous progress in this, in being able to focus their marines on doing what these marines wanted to do, which is cyber operations. In being able to stay within our force for long periods of time, we see a reflective retention rate that is much higher.

Chairman REED. Well, thank you very much. Gentlemen, again, thank you for your testimony. Let me recognize Senator Wicker.

Senator WICKER. Thank you. First question to General Fenton, and this is about the naval small craft instruction and technical training school, NAVSCIATTS, which provides training to foreign forces on small boat operations and unmanned aerial systems. The annual operating cost is $14.8 million, and that is divided across multiple stakeholders, including the Navy, SOCOM, and our foreign partners.

General Fenton, let me ask you, do you agree with General Richardson, the Commander of SOUTHCOM, who said the school generates outside return on investments? Ukrainian troops were being trained there last year when President Putin launched his unprovoked and illegal attacks on their country.

Do you agree, sir, that NAVSCIATTS provides value to our Combatant Commanders and key foreign military partners?

General FENTON. Senator, thank you for that question. I am absolutely familiar with these NAVSCIATTS, as you refer to. I was more familiar with it when I was in INDOPACOM as a Deputy Commander, and there I saw value in that type of training, and I will say in many types of training, certain.

We thank this Committee for a number of efforts that SOCOM has at its disposal in terms of 333, the 1202, and 127-echo that increase the capability of our forces and create partnerships in the way that we need those partnerships, and in SOCOM we call those partnerships pacing——

Senator WICKER. And $14.8 million is a relatively modest investment, would you agree?

General FENTON. Senator, I am not familiar with the budget. I am familiar, again, with the type of training that NAVSCIATTS produces.

Senator WICKER. Okay. We have established that there is value there, so I appreciate that. Let me turn then to General Nakasone. Tell us about cyber in support of our Ukrainian allies and the Russian use of cyber in support of their illegal and aggressive invasion of Ukraine.

General NAKASONE. Senator, the story begins on the 3d of December 2021, when we deployed a hunt forward team to Kyiv. That began a 70-day journey for us to ensure that Ukraine was at a much higher State of cyber readiness.

As you know, we saw early attacks on specific Ukrainian sites within their government, and we also saw continued attacks as the invasion approached. What we were able to do during that time was work with a series of partners to bring the tools and tech-

nology to Ukraine that was able to assist them as Russia conducted continued attacks.

We continue today with support to a number of different Combatant Commands, United States European Command, and the training mission for Ukraine. Also too U.S. Strategic Command, as we take a look at ensuring that our NC3 network, our nuclear command and control and communications network, is the top and most important network and is fully secure.

As we move forward, we continue full spectrum operations with a series of partners to include Ukraine to provide them assistance as they battle the Russians.

Senator WICKER. Well, Okay. Do you expect Russia is able to intensify new capabilities in a spring offensive this year?

General NAKASONE. From the cyber perspective, we are watching this very carefully, Senator. They are a very capable adversary. We continue to work very tightly with our other partners within the U.S. Government, CISA [Cybersecurity and Infrastructure Security Agency], FBI [Federal Bureau of Investigation], to ensure that our U.S. critical infrastructure is protected, and NATO in general to ensure that they are aware of the tradecraft of the Russians might use.

Senator WICKER. Okay, Secretary Maier, what more do you need? You were asked and you said you need to add staff, and then you need more attention to the leadership billets.

Do you have what you need in terms of funding right now to do this and to deal with your enormous challenges, and if we give you the same amount you got this fiscal year with an inflation adjustment, will that be enough?

Mr. MAIER. Ranking Member, speaking just to my specific office, I think we are probably on a good pathway just in terms of funding. I already highlighted some of the other requirements.

In terms of the entire special operations enterprise, I think our priorities are represented, understanding full well that the challenge with inflation means that if our budget is flat, that reduces our buying power, so that is something we will need to keep a close eye on, sir.

Senator WICKER. Yet you need additional staff and you need increased leadership billets.

Mr. MAIER. Yes, sir. I think we are on a good trajectory with the leadership billets. We are part of that conversation in the Department. I think especially in outyears years, we are going to need to add more staff to build that capability to really help this transition I have described, from counterterrorism crisis response to also include the peer competition that we have talked about and I expect we will talk about more, sir.

Senator WICKER. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker. Senator Shaheen, please.

Senator SHAHEEN. Thank you, gentlemen, for being here this morning, for your testimony, and for your service to the country.

I think I would start this question with you, Secretary Maier, because SOCOM and CYBERCOM really are at the nexus of DOD's efforts to address the weaponization of information, which I think

has become as much an issue for us as we are looking at our ability to be successful around the world as our military capability.

Can you, Secretary Maier, talk about DOD's role in addressing that misinformation, and how DOD coordinates with other agencies and Departments within Government to address disinformation?

Mr. MAIER. Yes, thank you for the question, Senator Shaheen. I would broadly start with describing DOD information as rooted in military objectives. As we talk about how this fits into the interagency, we have a distinct role and a value to play, but not for broad messaging, not for all the work that, say, the State Department or some other entities would do.

I think we have looked at significant components of the information operations enterprise and really tried to tighten and target it more so the value proposition and the measures of effectiveness are there. This is really a journey we are on, and I think it is one that the leadership of the Department is very, very focused on.

I would leave you with the idea that this is much more of a priority in the context of integrated deterrence that the national defense strategy calls out, because information is so critical, as you said, to all the aspects of success, especially as we start to think about adversaries we are trying to deter, ma'am.

Senator SHAHEEN. As you think about our efforts to recognizing—you are saying that we are trying to be more focused and how we address information at DOD. But clearly, what happens at State and in other Government agencies affects what DOD does. Are there policy changes? Are there resources? Is there coordination that should be done that we should be thinking about? I would ask General Fenton and Nakasone to respond to that as well.

Mr. MAIER. Briefly, ma'am, I think we need to invest more in the DOD information operations enterprise. It has not been one that has frequently been a focus, frankly, and I think with more capability in the Department and all hands, our ability to coordinate in an interagency standpoint. That is still very much a work in progress, ma'am.

Senator SHAHEEN. General Fenton.

General FENTON. Senator, I would echo all of Secretary Maier's comments. Then I would add that the integrated deterrence approach, I think, does demand a whole-of-government approach in information operations, and SOCOM is one part of that in the Department side, but we also coordinate with other agencies of the Government to ensure that we are integrated and that folks know that the SOCOM piece is a traditional military activity.

The information operation space, as I like to say, is a place we absolutely have to be as part of a military, traditional military activity, and to get effects for Commanders either to message an adversary, to see misinformation and provide that to a host nation.

Senator, I think our key message to the SOCOM enterprise as we move forward is, we remain aligned with the Department and certainly as part of the whole Government approach. It is a key part for us, and our State colleagues and other colleagues in the U.S. Government are very important as we do that.

Senator SHAHEEN. General Nakasone.

General NAKASONE. Senator, it begins overseas. We are very familiar in how to do these operations. We have seen it in the elec-

tions. We have seen it with Russia, Ukraine. We have seen it with Iran.

The same actors that are interfering in our elections are the same actors that are doing influence operations. We go after them. This is what persistent engagement is for U.S. Cyber Command and the National Security Agency. We find them and we continue to ensure that we understand exactly what they are doing.

We examine their tradecraft, and then we share it with a series of different partners. This is only done effectively, as both the Secretary and General Fenton have indicated, is with partners. Inside the United States, sharing signatures with the FBI who share it with social media companies, being able to work with allied partners who have a broader understanding.

But then I think it is also with, how do you bring the totality of our Government against them. Whether it is State Department, Treasury, FBI, being able to go after them.

The one thing we have learned, though, on this is that they never go away. They are always there, and you always have to be persistent.

Senator SHAHEEN. The Fiscal Year 2020 NDAA, trying to better focus the Department's efforts on information operations and then establish a principal information operations adviser, and ask the Secretary of Defense to conduct information operations and require a strategy and posture review that was due more than a year ago.

It still hasn't been delivered by the Department. Can you tell us what the status of that report is, Secretary Maier, and when we could expect delivery?

Mr. MAIER. Senator, yes, we understand both the strategy and the posture review are overdue. They both are now in senior level coordination, so above my level. They passed through my review.

I would expect in a matter of weeks they would come to you. I would say, in understanding the times out, that these have helped to animate a lot of the conversations and deep action within the Department to really focus down it in on posture, and then the strategy has prompted a relook at how we go about doing information operations, per your opening question, ma'am.

Senator SHAHEEN. Thank you, so, I should assume we would have it by maybe the end of April?

Mr. MAIER. That is our intent. Yes, ma'am.

Senator SHAHEEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shaheen. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. General Fenton, in your nomination hearing last year, you agreed with your predecessor, General Clark, that without sustained counterterrorism (CT) pressure, we are going to continue to see terrorist groups that are more able to focus on planning and preparing for external attacks. Do you still agree with that statement?

General FENTON. Senator, I absolutely agree with that statement. There is a direction to the SOCOM team from the Secretary of Defense to have that as one of our three main priorities, integrated deterrence, counterterrorism, counter violent extremist organization (VEO), and crisis response.

Senator FISCHER. I remain highly concerned that we aren't seeing sustained CT pressure that we need in Afghanistan, especially with respect to ISIS-K [Islamic State of Iraq and Syria-Khorasan]. It is my understanding that we have only had one single strike in over a year.

I don't believe that that translates into sustained CT pressure against ISIS-K. Can you describe the challenges of conducting the over the horizon CT operations without the reliable partners on the ground, without basing it in neighboring countries, and without reliable access to airspace?

General FENTON. Senator, thank you for that opportunity to comment. On the first portion of that reference to Afghanistan, I would defer certainly to General Kurilla, his team. They have a more fulsome insight with a series of partners, than I would have, and additional challenges.

SOCOM being one part of a whole Government team, I am sure there are many others that would give you a different insights and probably some more fulsome data. But what I would tell——

Senator FISCHER. Do your insights, sir, differ with some of theirs that they have made to this Committee?

General FENTON. No, but what I would tell you, Senator, is that part of addressing ISIS [Islamic State of Iraq and Syria] in Afghanistan is addressing it globally. When I look at that question, I certainly view it through the Secretary's priority, and for us, defend the Nation, and I think counterterrorism and VEO, it is a very high priority for SOCOM.

As we think about it, we certainly, first and foremost know that your Special Operations Command team, in partnership with COCOM, because ISIS Islamic State of Iraq and Syria] is a global organization, can sense, see, and strike anywhere in the globe.

In essence, many of our operations are in places where we are not proximate to the target, and in fact, last year, an operation that went off in Northwest Syria to remove ISIS, number one, from the battlefield, we had to fly across Syria to get there. We are very far from that target.

But our ability to see it, sense it, and then strike it, unquestionable, and I think we have been able to do that globally throughout this year in places, Somalia with sustained pressure on ISIS, against an ops and communications node.

I would add also that that global pressure for SOCOM, in concert with partnerships, goes on even in the Indo-Pacific. So, my sense to you, Senator, is that we absolutely have to keep the pressure on ISIS, on any of those terrorist networks.

If I think about it with a number of the operations that have occurred, and I would be happy to talk more in a closed setting, it has been an extremely challenging year for these extremist operations, with a number of operations we put together, to include in Syria.

Senator FISCHER. Well, SOCOM has been primarily focused on counterterrorism mission for the last 20 years. The special operation forces have a lot of capability that they can bring to the Indo-Pacific. You earlier mentioned your experience there, and I value your knowledge and experience.

Can you provide an update on how you plan to rebalance your forces that you have through restructure, training, and exercises, or to develop any kind of unique capabilities in order to meet the increased demand signal that we are getting from INDOPACOM.

General FENTON. Thank you very much for an opportunity to comment on that. I think as we—Senator, as we look at our priorities across the when category of integrated deterrence, crisis response, and counterterrorism, it is an adjustment.

I have heard it referred to in other places as a pivot. I would tell you it is an adjustment for how we are going to address strategic competition, integrated deterrence. It is in our DNA. We have been doing it—we have, as your special operations forces, were really born to do this. In INDOPACOM, I think what it means is, through the lens of prevention, deterrence, and preparation, beginning with partnerships, partnerships with nations in that region that want the U.S. there.

They want to see a U.S. capability, and frankly, in many ways, when that U.S. capability shows up, through the lens of special operations forces, we are absolutely able to move a partnership toward the United States and away from the PRC [People's Republic of China].

I think that same type of partnership helped us in Ukraine with the training that we were doing there with the Ukrainians, from 2014 and on, saw the special operations way of warfare and the way of doing business. All of that is very applicable to what we are doing in the Indo-Pacific, but I defer certainly to Admiral Aquilino for a more fulsome of how he sees it, because I am always in line with his requirements.

We do that through our Theater Special Operations Command, our TSOC, Special Operations Command Pacific. We take lead from them at the SOCOM enterprise. But we are invested there, Senator Fischer, in a way to deter, prepare for, and then if needed, prevail in conflict.

Senator FISCHER. Thank you, and thank all of you, gentlemen, for your service.

Chairman REED. Thank you, Senator Fischer. Senator Gillibrand, please.

Senator GILLIBRAND. Thank you, Mr. Chairman. General Nakasone, we have been working together on helping to develop a greater cyber capability amongst new personnel, and we created this cyber academy for civilian workforce, which should be accepting its first class in 2024, applications in 2024 for a class in 2025.

We are using the universities that NSA has already assessed as having the correct cyber capability and cyber curriculum. But in light of your testimony, I wanted to ask, would it be helpful to you to have a dedicated cyber force training just for permanent Cyber Command personnel for the military side as well? If you did want that, what would that look like?

General NAKASONE. Senator, first of all, thank you for the work that you have done to build a greater population of cyber savvy folks. I am not sure that we need an academy yet. What I am very, very focused on is being able to look at the continued success we are going to have with the program that you have worked with in New York.

I am very interested in continuing the successes that we have had across the National Guard with State partnership programs. You are very, very familiar with the New York National Guard's work with Brazil, and other National Guard forces here.

I am also very, very focused on ensuring that the ROTC [Reserve Officer Training Corp] and academy programs continue to have strong growth in terms of the numbers of people that can be commissioned into our force.

Chairman REED. Thank you, Senator Gillibrand. Senator Cotton, please.

Senator COTTON. Thank you, gentlemen. Mr. Maier, you acknowledge in your opening statement that the shift away from counterterrorism is the primary role of our Nation's special operations forces.

But far from decreasing the need for those forces, I would suggest that the current threat environment calls for even more capability. The need to continue our counterterrorism missions, support foreign and internal defense activities to bolster allies, and engage in new types of operations that are going to counter Chinese and Russian aggression.

In that operating environment, would a decrease in force size or budget seem like a reasonable step to you?

Mr. MAIER. Senator Cotton, thanks for the question. Yes, this is the crux of the challenge, right. We are being asked to do more and our forces is probably static. So, I would not advocate for a reduction in forces, sir.

Senator COTTON. I regret that you are here today, and not 48 hours from now when we are going to get the President's budget. Because I am troubled that you may, in fact get a reduction in budget or forces. Have any thoughts on what we are going to see on Thursday?

Mr. MAIER. Senator, as I think you know, I can't talk to what is likely to be in the budget, but I think as General Fenton and I both said, the priorities that we have identified are represented in that budget.

Senator COTTON. That is Okay. Well, if my fears are proven out, I think you can count on many Members of this Committee, probably in both parties, to try to make sure that our special operations forces have the resources they need. General Fenton, do you agree that SOCOM requirements and your relevance are growing in this threat environment, not decreasing?

General FENTON. Senator, I would agree with that. I think that the SOCOM requirements to be in campaigning and competition are absolutely important and exceedingly asked for by Combatant Command teams, where I draw my requirements from. Certainly, in line with our Theater Special Ops Command, the TSOCs.

But we see it because much of this begins with partnerships. Partnerships that we forge through the SOCOM team and enable. The payoff in many ways can be looked at in the vicinity of Ukraine.

Senator COTTON. So, a decrease in either your budget or your personnel levels would add risk to your mission and therefore to our Nation.

General FENTON. Well, Senator, I—no one wants to see a decrease in the personnel or the budget. I would tell you that I think it would not reflect the requirements, number one, a decrease of that, and number two, we would be forced at some point to make hard choices, because each and every time I think you will see me give you the best Special Operations Command for the budget we get.

Senator COTTON. Okay. Mr. Maier, when you talk about your personnel, I want to return to something else you had in your opening statement because I want to make sure we are using this personnel budget the right way. You talked about the need for more staff. I got to tell you, that gets my hackles up pretty quickly.

I think we have plenty of staff in the Pentagon, way too much. Frankly, I think we have too many people dressed like you and me and not enough people dressed like the men to your right in your left, performing these jobs. Could you explain a little bit more about what kind of staff you are talking about and why you would need more staff?

Mr. MAIER. Senator, I was referring specifically to the special operations low intensity conflict staff that performs the title 10 responsibility of the organized train, equip for SOCOM.

Frankly, sir, a lot of what these staff do on a daily basis is try to articulate the SOF value proposition back into the Department with the services. Some of my concern is that as we go from the less intense environment of counterterrorism or go toward a less intense environment without the intense focus on counterterrorism, that some of what SOF has traditionally been afforded will be lost in that.

Sir, sometimes this is just as simple as making sure that we have the SOF value proposition represented in resourcing, training, planning. I have been frankly surprised at times of how that has been forgotten or too narrowly defined as being a counterterrorism problem.

My 40 some odd staff are very much in that business, and it is the analytics. It is supporting special programs, other things like, that that are very, I think, akin to the SOF value proposition, but don't have representation often within the broader Department, sir.

Senator COTTON. Okay. General Fenton, one final question. In your opening statement, you talked about the strategic transition for the special operation forces. Could you explain a little more about the role that special—that your force, the special operations forces, are going to be expected to play in the future fight? If so, if you can at an unclassified level, maybe help share that story.

General FENTON. Senator, thank you for that. I will focus on integrated deterrence, and where the Secretary and the Department have asked us to be aligned. When I think about that, I think about a long three, really three lenses, prevent, prepare, and then prevail.

I think on the prevention side, it is all about being forward, it is about being deployed, or our skills, cultural understanding, language, and a familiarity with many of these environments that come from organizations in our enterprise that know those places as well, such as our first Special Forces Group in the Indo-Pacific,

for instance, have a very deep familiarity with all things that go on in many of the partner nations.

I think it is key to keep that certainly thick and strengthened. Part of it is being out training, advising, assisting, building capabilities, and using many of the tools this Committee gives us in the form of security cooperation, 1202, and counterterrorism tools. That is a very key part.

I think it also allows us an opportunity to help the Joint Force and enable them as we are out in those environments and are able to prepare through our understanding of everything from seabed all the way to the space domain.

Then work in concert with General Nakasone and Jim Dickinson in a SOF space cyber triad. I think those are all very important. There is an acceleration toward that. It began before, certainly under General Richard Clarke, and we are accelerating that in the special operations team, while we stay vigilant on the counter-terror mission and certainly our crisis response duties as directed by the Secretary.

Senator COTTON. Thank you, gentlemen.

Chairman REED. Thank you, Senator Cotton. Senator Blumenthal, please.

Senator BLUMENTHAL. Thanks, Mr. Chairman. Let me begin by adding an exclamation point to the point that Senator Cotton just raised about the need for ample resources devoted to our national defense, most especially the kind of work that you are doing. I think your testimony today reinforces my hope that we will have bipartisan support for that kind of sufficient investment in our national defense.

I have been to Ukraine three times over the roughly last year, once before the invasion, and had an opportunity to talk to some of the special forces trainers who were there working with Ukrainian personnel. General Fenton, I am hoping that there has been continued training outside of Ukraine. I realize none of those special operations forces are located physically there now.

When I was there last, a number of weeks ago, none were there, at least visibly to us. But I am hoping that that training mission is continuing outside of Ukraine.

General FENTON. Senator, thank you for that. It absolutely is continuing outside of Ukraine in a number of locations, bringing the capability that continues to assist Ukrainians off as part of the entire Ukrainian military, and that training goes on, along.

A number of the lines you have seen before, the capability to defend themselves, the capability to mission plan and orient, an understanding of the intelligence, and certainly an understanding of creating dilemmas for the Russian formation.

The Ukrainian SOF is a key part of the Ukrainian military's approach. We do that, as your special operations team, certainly under General Cavoli's direction and watching in concert with his teammates in order that that is integrated with the entirety of the approach the SecDef directed.

Chairman REED. What is your assessment as to how well the Ukrainian special forces have operated?

General FENTON. Senator, I think they have been superb from the very beginning, and I will start the journey in the 90's when

Special Operations, and Special Forces in particular, or ten Special Forces Group made contact with Ukrainian forces after the fall of the Soviet Union.

That generational relationship, something that is very, very important to your special operations community, in my sense laid the pathway for in 2014 our ability to really get after it after the first invasion by the Russians.

Senator BLUMENTHAL. Thank you.

General FENTON. They have done superbly well and they have been extremely willing to prepare and to fight.

Senator BLUMENTHAL. And to learn.

General FENTON. And to learn, yes, sir.

Senator BLUMENTHAL. General Nakasone, I think a number of experts have been somewhat surprised that the Russians haven't been more aggressive in the cyber sphere against Ukraine in this past year.

What is your assessment as to why they haven't been more aggressive, why they have been somewhat apparently quiescent, or maybe the Ukrainians have just resisted and fended them off without our knowing it?

General NAKASONE. Senators, the Russians have been very active in Ukraine in terms of conducting a number of cyber-attacks, including destructive and disruptive attacks. I think there is several pieces of the story here that are important though.

First of all, when you begin the plan and you think it is going to be a very easy invasion, perhaps you don't do enough planning with regards to your enabling activities. Second, give full credit to the Ukrainians. They did a tremendous job in terms of building their cybersecurity resilience.

The third piece is, is that this is again for persistent engagement, my discussion previously, being able to enable and act with your partners. The Russians have not been as successful, and there is a number of reasons for that.

I would point also to the fact that we have been able to bring a series of partners, including the private sector, that have a tremendous capability and capacity against the Russians.

Senator BLUMENTHAL. I have been impressed when I have spoken to President Zelenskyy with his focus on cyber. Do you think that there is a greatly increased danger or risk of Russian cyber-attack if the counteroffensive anticipated this spring by Ukraine is successful?

General NAKASONE. We are watching this very carefully. This is the matter of vigilance that I spoke to earlier, because by no means is this done in terms of the Russia, Ukraine situation. As Russia looks at armaments coming into the country, as Russia looks at different support, how do they react?

One of the things that we are charged with is ensuring the security of the U.S. critical infrastructure and key resources with our partners in DHS [Department of Homeland Security] and FBI. This is something that we are working closely every single day on, Senator.

Senator BLUMENTHAL. Thank you. Thank you very much to you all and thank you for your service.

Chairman REED. Thank you, Senator Blumenthal. Senator Ernst, please.

Senator ERNST. Thank you, Mr. Chair. Thank you, gentlemen, excuse me, for being here today. Secretary Maier and General Fenton, I really do commend your submission of the joint statement to our Committee.

It reflects both alignments and oversight from civilian policymakers, as well as our uniformed leaders, so thank you for submitting that.

Secretary Maier and General Fenton, as outlined in your SOF vision and strategy, how does the SOF balance its various missions with great power, competition, counterterrorism, and crisis response, your three main missions? Because right now we are seeing great power competition increase, ever increasing with Iran, of course our pacing threat with China, and of course with the Russian incursion and war in Ukraine.

So, how do you balance those missions, and how should that great power competition affect your mission?

Mr. MAIER. Thank you, Senator. I will take it from a more strategic level, and then ask General Fenton to speak in more detail. I would say, first and foremost, it is a risk assessment and it is weighing against the requirements.

There is always more requirements from the Combatant Commanders than we can meet as a force and those numbers keep going up. But I think at the same time, we are very focused on the idea that while the strategic focus is, of course, on the pacing challenge of the PRC and the acute threat of Russia, we can't be surprised by an attack from another adversary.

I think managing that risk is many cases what the SOF enterprise does very well. We are in essence the hedge against that risk. It is a constant effort to look for areas where we can innovate, to be able to do more, do things on a more sustainable fashion, and in some cases look for where we are getting what my New England friends would call a twofer, where we are able to do counterterrorism work and have those partnerships and access that then helps us also on the National Defense Strategy (NDS) priorities, ma'am.

Senator ERNST. Yes, thank you. General Fenton.

General FENTON. Senator, thank you for that question. I think to your point on balance and adjustment, that is an—I am constantly focused on that in the Command. As you mentioned, integrated deterrence, crisis response, and counterterrorism operations, all of those extremely prior—extremely high priority for the SOCOM team.

I think on the integrated deterrence side, we take our lead from the Combatant Commands and their requirements for engagement in their regions, what they need for partnerships, how they need capabilities build, and Senator, in many ways our counterterrorism tools and the form factors that we have in terms of how we present forces.

Those are equally applicable in the integrated deterrence, the requirements from the COCOMs, for developing a force and competing with adversaries such as the PRC, as they are for actual

counterterrorism efforts that you know very well. I think it is a balance. Some of those tools are interchangeable.

We can bring them across a spectrum. Very often it is about the relationships that then turn into things that we have seen in Ukraine and we just have mentioned here, SOF investment early, and we have seen that in many other places as well.

Senator ERNST. Thank you. I appreciate that, and I know that my colleague, Senator Cotton, talked about your top line and strength cuts and how that would impact SOF. I am very, very concerned about that.

It doesn't matter what Commander it was, whether it was General Tony Thomas, or Rich Clarke, or now you, General Fenton, I have always brought this up in discussions and every SOCOM Commander I have visited with has said, ma'am, we are going to make do. You know, we will execute the mission regardless of the budget. I get that.

But I just need to stress to this Committee, how important it is that we continue to fund you at the appropriate levels. You give us the greatest bang for the buck with what you do all around the globe, so we won't question that.

But I do want to dig in a little more. I, General Fenton, I have supported Section 1202, irregular warfare authorities. That was done in the Fiscal Year 2018 NDAA, and your joint statement describes this as essential for applying SOF capabilities against malign actors.

In your personal opinion, would enabling those partner forces that are responding to hostilities enhance SOF's irregular warfare contribution to great power competition?

General FENTON. Senator, thank you for that, and I will thank this Committee for the 1202 authority. That is a very important tool in the arsenal of the special operations tools that we use to either develop partnerships, build capability and capacity of a nation, and certainly, then move forward.

Thank you very much for that. It is key for us to engage in partnerships at that level that involve irregular warfare, our ability to operate and buildup a capability of a nation, also have it able to look at any malign influences that is coming into it and identify those, and then address them.

Those forces that we work with provide options for their national command leadership, as well as dilemmas for any adversary. Senator, I would say of a very small investment in many ways.

Almost like your special operations team. It is a very small investment, but for a very high return on the dollar. So, I thank you very much for that and happy to talk more about it in closed session.

Senator ERNST. Very good. Thank you very much, gentlemen. Thank you, Mr. Chair.

Chairman REED. Thank you, Senator. Just let me recognize Senator Hirono and ask Senator King to preside while I attend the Banking Committee. Senator Hirono.

Senator HIRONO. Thank you, Mr. Chairman. Thank you all for your testimony today, and General Fenton and Secretary Maier, thank you for meeting with me earlier.

General Nakasone, I have been deeply concerned by the State of critical infrastructure on and off military installations, crumbling and out-of-date infrastructure lead to delays and maintenance schedules, and put communities at risk for environmental disasters, as we have seen in Hawaii.

But it also leaves infrastructure that is critical to our national security, but often as an afterthought, like wastewater treatment plants and pipelines, exposed to cyber-attacks. That is why I very much appreciate President Biden's National Cybersecurity Strategy's focus on defending critical infrastructure, i.e. things like wastewater treatment plants and pipes.

How would the Department of Defense collaborate with other Federal agencies to implement the infrastructure goals outlined in the President's National Cybersecurity Strategy?

General NAKASONE. Senator, from a cybersecurity perspective, we begin, first of all with a focus on DOD critical infrastructure. Two weeks ago, I was in Hawaii to see Admiral Aquilino and to work with him in terms of looking at the DOD critical infrastructure within the islands.

We work with a series of partners when requested to provide that assistance. That comes as a request for assistance from other agencies to the Department, of which then we would be part of that assistance.

Senator HIRONO. Don't you think that maintaining our—the physical aspect of our critical infrastructure is a very important part of your ability to do your mission?

General NAKASONE. Certainly, we need a platform upon which to operate. I agree with you, Senator. What we are focused on, though, is obviously the cyber elements of that and then working again through the Department to assist and answer those requests.

Senator HIRONO. I think it is all we need to look at these things in a much more total kind of an aspect. That is why it was really important for Admiral Aquilino to ask for an assessment of the infrastructure needs across the services in Hawaii, but I would say across the country.

For, again, you, General Nakasone and General Fenton, the Administration's NDS identifies China as the pacing challenge for our military, and to create enduring deterrence, it is critical that we remain the partner of choice in the Indo-Pacific area, which is why I have supported additional funding for exercises in the region and building on long standing relationships, like the compacts of free association, which we are concluding our negotiations on.

What opportunities have your respective Commands had for multilateral training last year, specifically in the Pacific AOR [area of responsibility], and how will you build from those going forward? This is for General Nakasone and Fenton.

General NAKASONE. Senator, we began with Cyber Flag, which is our annual keystone exercise. We invited a series of partners from the Pacific, that includes Korea, that includes Australia, that includes other nations within the Pacific that decided to come and exercise with us. That is one piece of it.

The second piece is what I had spoken to previously, which is a State partnership program, working very, very closely with Hawaii, the Hawaii Army National Guard, Hawaii Air Force Reserve and

National Guard to be able to assist them as they take a look at Indonesia and the Philippines, two countries that are partnered with the State of Hawaii. That is an area that I think has got tremendous potential in the coming year.

Senator HIRONO. General Fenton, I am particularly interested in really strengthening—I agree with your area of focus, General Nakasone, but also the Pacific Island nations such as Palau and Marshall Islands and Micronesia. Can you add to the response, please?

General FENTON. Senator, I can. I will start with your special operations team out there through the Theater Special Operations elements, SOCPAC, Special Ops Command Pacific, is part of all the INDOPACOM exercise events.

It is very key for us because our ability to build partners and allies, along with the entire INDOPACOM team for your special ops, is a pacing item. It is very important and certainly a high priority for this Nation and the Secretary of Defense.

Below that we also have our own either bilateral or multinational special operations training events in the region or back in places around bases that we have in CONUS. Our ability to be linked up with the INDOPACOM, desired in states for partners and allies, and really enable that, plus what we bring in, it is in our nature, it is in our DNA to be a partner force of choice, I think is very, very impactful for Admiral Aquilino and INDOPACOM.

I would say to your, partnering anywhere is important to us, so to the island nations, whether it be Oceania, Micronesia, Melanesia, Polynesia, your special ops team has relationships there already.

Some of that is not in exercise, but certainly in contact or in deployments as we have had throughout the years, and we will continue to do that, and strengthen it as the INDOPACOM team and Commander would want.

Senator HIRONO. Thank you. My time is up but I just wanted to mention, General Fenton, that I did appreciate that in your prepared remarks, you talk about diversity of thought and background in our people as a critical enabler of the American advantage. Thank you very much, and the focus on maintaining that kind of diversity, I completely agree with you. Thank you, Mr. Chairman.

Senator KING. Senator Tuberville.

Senator TUBERVILLE. Thank you, Senator King. Thank all of you for your service. Thanks for being here today. General Nakasone, I like what you said in your opening, we win with people. I think that is everything that we do, especially our country.

In your department, when you are looking to recruit people, obviously cyber is your purview, what other areas do you look for in young people? Information technology? I mean, what all areas do you look for in recruiting somebody for cyber?

General NAKASONE. You look for someone that can do critical thinking, Senator. That begins with—there are more than just information technology majors out there that are successful in cyber. There are linguists, there are mathematicians, there are liberal arts majors. What we are looking for is someone that has an interest, has a passion to do this type of work. That doesn't want to

leave work until they are able to get the access that is necessary for us to have an effect.

Senator TUBERVILLE. Is that growing? Is—are we losing more to the private sector? How is that going?

General NAKASONE. First of all, on the recruiting piece, the services have tremendous success in recruiting cyber forces. They are not having a problem filling it. I think the challenge becomes later on is there are a number of choices that young people have, and so, I think we have to think a bit differently here.

First of all, maybe we need to lengthen the obligation to become trained in cyber because it is so attractive. Second, I do believe that when you come to our forces, that is the only thing that you should do for your career.

Much in the same way I have watched special operations forces be successful. When you become a special operations force operator, that is what you are doing all the time, and that is what they want to do. Our force is the same way you.

Senator TUBERVILLE. Yes. How is retention in your Department of young people once they fill their duty? Do we have pretty good retention to re-up——

General NAKASONE. It is a mixed bag service. Senator, I can certainly come back to it with the numbers. But the challenge, of course, is that there are a lot of choices, and so that is what we have to make sure that we are on guard for.

Senator TUBERVILLE. How concerned are you about TikTok and the influence that they are having on Americans kids?

General NAKASONE. So TikTok concerns me for a number of different reasons. One is the data that they have. Second is the algorithm and the control, who has the algorithm. Third is the broad platform.

Influence operations, as we talked about previously, it is not only the fact that you can influence something, but you can also turn off the message as well when you have such a large population of listeners.

Senator TUBERVILLE. Yes, thank you for that. General, you don't have a recruiting problem, do you?

General FENTON. Senator, I will start that we are recipient of services and I would want all to know that we are very integrated with their recruiting efforts, and there are some challenges out there for the services.

Right now, your special operations team is not having a recruiting problem. We are aggregated at a very high level of recruitment. The Department has got a retention number, I think, that is one of the highest in decades, and we are right there along with them.

Senator TUBERVILLE. Yes, you require the most rigorous training standards in military, correct?

General FENTON. Senator, we require very high standards, and folks who want to come and be part of that journey, who have determination, grit, initiative, willingness to see something through, and frankly, what we really look for is somebody—a quiet professional. Maybe he will do this mission and succeed, and then get ready to do the next one.

Senator TUBERVILLE. Would you agree that it is also the most riskiest part in our military?

General FENTON. Senator, there is a lot of our teammates out there across the services that do some incredible feats of both their mission and bravery. I would say we are one part of what our Department has as the most incredible military formation in the history of mankind.

Senator TUBERVILLE. That is a pretty diplomatic way to put it, General.

[Laughter.]

General FENTON. They do some really tough mission.

Senator TUBERVILLE. Yes, very tough. You know, I think there is a lesson here for the rest of our military, and it is not everybody, but, America's youth want to serve an organization with purpose and patriotism. I mean, we all saw that growing up. In light, it seems people rise to standards that you set for them. I mean, I saw that in my former life of coaching.

I mean, you set a standard and most of the time, if you push them hard enough, no matter where they won't or not, they will reach that standard. I want to thank for what SOCOM does and everything that you all stand for, because you are on the front lines every day and you are usually the first one to get there and the last one to leave. Thanks to your group, and the people that stand up for this country, and patriotism that they have for us. Thank you very much. Thank you, Mr. Chairman.

Senator KING. On behalf of the Chairman, Senator Warren.

Senator WARREN. Thank you, Mr. Chairman. One of the primary purposes of this hearing is to evaluate your Command's budget requests. Most Federal agencies have to balance their must haves against their nice to haves when it comes to requests for money, and they have to account for long term costs.

For example, the maintenance of fleet vehicles that they want to buy, but not the Department of Defense. DOD submits its budget for the things it wants, and then it submits a second list of things that they want funded and they don't add what the long-term costs will be. DOD calls this second list unfunded priorities.

I call it a wish list. Now, last year, some parts of DOD stuck to their budgets and didn't put anything on a wish list, but not SOCOM, nope. SOCOM got $13.2 billion in its regular budget, then turned around and asked for $656 million additionally.

Now one of the items on SOCOM's wish list last year was $8.7 million to ensure that a SOCOM armament facility could meet blast exposure standards that protect servicemembers from traumatic brain injury.

General Fenton, do you agree that if SOCOM needs funding for a project that will ensure that it is in compliance with basic safety standards and help protect workers from brain damage, that project should be part of the Command's budget?

General FENTON. Senator, I put a high priority on safety.

Senator WARREN. Should it be part of your budget then?

General FENTON. Any budget I build will reflect my priorities, and priority is safety, and certainly align with the NDS.

Senator WARREN. So that means you think that something like this should be in the base budget?

General FENTON. Senator, I put a high priority on safety and my budget will——

Senator WARREN. But you are telling me your budget reflects your priorities and somehow this didn't even make it in the basic budget.

Look, let me ask it this way then. This armament facility improvements weren't funded last year, so are you going to put that in your base budget this year or are you going to count on Congress to add extra money for it? Which it didn't do last year.

General FENTON. Senator, the first thing I will do is get intimately familiar with the armament facility you are discussing right now. I am 6 months of the job. I am still working my way through a number of certainly locations in the special ops community.

I will take that for the record and get back to you, but my budget will be reflective of my priorities that are aligned with the national defense strategy, and safety of our entire force is certainly a high priority for me.

Senator WARREN. Well, I appreciate that, but I just want to make another point for the record. I wasn't born yesterday. You know, I get what is happening here. SOCOM and other commands are gaming the system.

They take costs that should be part of a base budget request's essential programs, like funding to come into compliance with brain injury prevention standards, and then put them on the wish list, daring Congress not to fund them, and that way they can boost their overall budget allocation.

In January, I sent a letter to Secretary Austin, along with Senators Braun, Lee, and King, telling DOD not to send Congress any wish lists as part of this year's budget. So, General Fenton, this is your first time submitting a budget as the Commander of SOCOM.

You will be sending it over to Congress this week, so you should be right on top of this. Will you pledge not to request any unfunded priority items on top of your annual budget request?

General FENTON. Senator, I will submit the budget that reflects my priorities aligned against the NDS, and I will submit that, and any UPL [unfunded priority list], required by law, that reflects facts of life changes, accelerated capabilities, and any additional NDS initiatives——

Senator WARREN. Let me stop you right there. I just want to be required—you need to submit a list, you are right. That is required by law. But you don't need to put anything in it or ask for any funding from it.

The list from European Command and Transportation Command were blank last year. That is, they lived within their budget. They did not come back for an additional bite at the apple.

I am just asking if you will agree to do the same thing. That is what budgets are about. They are about making your priorities clear, and I want to know if you are willing to live within the budget you have from the DOD and not come back here for more.

General FENTON. Senator, I would submit a budget that is aligned with my priorities and aligned with the NDS.

Senator WARREN. Is that a yes or a no?

General FENTON. Senator, as requested by law and by law, I will submit a UPL. I will take into consideration any facts of life——

Senator WARREN. Okay. That is, frankly, that is not even a very artful dodge. Look, we don't have any other part of the Federal

Government behave this way and for good reason. The budget process is about making tough choices and setting clear priorities.

Anything in the regular budget must include an analysis of the long-term costs, not things that are on the wish list. I have a bipartisan bill to eliminate waste like this, but DOD could shut it down voluntarily right now, and I urge you to do that. Thank you, Mr. Chairman.

Senator KING. On behalf of the Chairman, Senator Rounds.

Senator ROUNDS. Thank you, Mr. Chairman. Gentlemen, first of all, thank you for your service to our country. I have to admit, I like seeing options in the budget. I like seeing alternatives. It doesn't mean that everything that is on the budget is necessarily going to be funded by or recommended by this Committee.

But to see the other options out there, from my perspective, I appreciate seeing those others that sometimes may not make it all the way through the budget process. General Fenton, SOCOM has undoubtedly been reorienting from counterterrorism to preparation for a high end, near-peer fight.

Assume a situation in which we had to respond under Article 5 and support our NATO allies in Europe, and China concurrently took military action to claim Taiwan. What do you assess would be SOCOM's capability to support a two-theater war concurrently in Europe and the Pacific?

General FENTON. Senator, what I can tell you now is that your special operations team is already globally deployed, 5,000 personnel in 80 different countries at Combatant Command request, and at times a Departmental request.

Our ability to address the integrated deterrence piece, crisis response, and counterterrorism, we were absolutely able to do all that. We are able to do the front-end competition, integrated deterrence with training, building capability partners and allies, and at the same time, we are also ready to prepare an environment for the Joint Force and prevailing conflict.

Senator ROUNDS. I think what I am really trying to get at is, is it seems as though our policy here is not necessarily to win in two theaters. We need everything that we can do to be in a position to give the young men and women on the front lines every opportunity. We should be talking about now before it ever happens.

With regard to a budget which you will prepare, and bring in, and lay out, would it be fair to say that there are other items that could be done in the very near future that could help us do a better job of preparing for a two front defensive capacity?

General FENTON. Senator, I stay focused daily on readiness and training, and providing the President and Secretary a range of options for whatever conditions they may put in front of us.

As you describe, some level of potential two front, or we stay trained and ready to provide options across a number of contingencies that the Department has asked us to plan for, along with the Combatant Commands.

At the same time, also providing dilemmas for the adversaries, both either in integrated deterrence or in—high in conflict.

Senator ROUNDS. Thank you. General Nakasone, as we all know, the Cyber Mission Force comprises elements provided by all of the

services. Is there anything we should do to better execute this construct?

General NAKASONE. Senator, I will be coming back to the Committee under 1502, the NDAA section that came out in the recent NDAA, to talk about the shortfalls. That comes at the end of March.

That will be the first indicator that I will have to be able to communicate with the Committee. I suspect between that and section 1534, which requires me to come back at the end of June with the Secretary and the Chairman to talk about shortfalls in readiness, we will be able to outline exactly what we think are the areas.

There are some, and there are areas that we can work with the services to improve.

Senator ROUNDS. Thank you. Also, General, last year we discussed the benefit of an SPM13 and SPM21, and what they provided the Command to effectively conduct cyber operations, recognizing that they are both classified in nature, but basically, they have streamlined and lay out a collaborative effort in which to provide accelerated timeframes for cyber operations.

As you look over the year since, what, if anything, has changed in your assessment and the impact they have had on cyber operations?

General NAKASONE. Senator, really very little impact. If I can rewind the clock just a bit, 2018, as you recall, you assisted with us to make sure that within the NDAA that we saw cyber as a traditional military activity, that was a huge step forward for us.

I would also say that the policy memorandums that you talked about there, they are their foundation for what we do, any matter that is much more predictable, both for ourselves and for policymakers. So, we continue to work with it. We are continuing to move forward.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman.

Senator KING. Thank you, Senator. General Nakasone, on a scale of one to ten, where ten is essential for the national defense and one is nice to have, where would you rank section 702?

General NAKASONE. Ten plus and let me talk a little bit about 702. Thank you, Senator, for that question. As you know, FAA 702 allows the U.S. intelligence community to collect the information and communications of foreign targets of interest operating outside the United States that use U.S. infrastructure services.

Outside the United States, the intelligence community can collect against foreign targets of interest. It is critical for what we do. What have we seen since FAA 702 was enacted in 2008 and reauthorized two times? It has disrupted terrorist plots. It has alerted us to cyber-attacks.

Finally, it has uncovered critical infrastructure (CI) threats. Last year, we are able to utilize this in a series of ransomware, in a series of being able to uncover what adversaries were trying to do to us against our critical infrastructure. Most importantly, as General Fenton can testify, is what we were able to do against—an essential piece that we need as a Nation.

Senator KING. I think the key word is essential. Thank you, General. Talk to me about the relationship between electronic warfare and cyber. Is elect—who is in charge of electronic warfare. Because

in a conflict, electronic warfare and cyber is going to be where it begins.

General NAKASONE. So traditionally the service has had electronic warfare capabilities that they deploy with their forces. I think what you speak to is a synchronization of this battlefield in cyberspace, which we are starting now to work very, very closely with the Combatant Commands.

Senator KING. I am concerned that if electronic warfare is scattered among the services, it is not going to have the attention, for example, that cyber has because we have Cyber Command.

Electronic warfare is definitely going to be part of the conflict, whether it is jamming or disabling satellite communications, those kinds of things. There is no central—what you are telling me is there is no—it is not part of your Command and there is no Central Command that controls it.

General NAKASONE. Is not part of my Command. But again, a lot of the electronic warfare that is done, is done in support of service requirements, and so, they have service forces that do this.

I think what you are speaking to, Senator, is much in the same way we have tactical forces that assist the services, is there some type of national capability that we might need? I think that is something that we have to look very carefully on.

Senator KING. I worry about coordination and duplication, two sides of the same coin. You mentioned briefly in your opening statement, election interference in 2022. Is election interference, in terms of cyber, an ongoing problem? It hasn't gone away.

General NAKASONE. It hasn't gone away. This is something we will deal with for as long as I can look at the future and we see cyberspace and the ability for adversaries to influence what goes on.

Senator KING. Is it things like hacking and meddling with the system, or is it more in terms of disinformation?

General NAKASONE. What we have seen, Senator, really, when you talk about infrastructure, that is more of an interference piece. We see the influence piece much more prevalent these days and being able to operate outside the United States, go after trolls and other different actors that are trying to create influence.

Senator KING. These can be Russia, Iran, North Korea, China. They are actively involved in trying to affect and interfere in our politics. Is that correct?

General NAKASONE. You have hit the top four plus proxies.

Senator KING. China cyber capability, is it on the rise? They have been not as aggressive in terms of elections and interference as the Russians have been over the last 10 years or so. Is China starting to become more aggressive or are you seeing more activity, less worry about reputational risk, and those kinds of things?

General NAKASONE. They have a different playbook, I think, than the Russians, from what we have seen. The other piece is that as I mentioned last year, this is a very capable, capable force. We can cover many of the areas that I can discuss in closed testimony, but again, a very formidable foe.

Senator KING. The new National Cyber Strategy was just issued last week. Any gaps? I don't expect you to criticize it, but do you have any suggestions you can share with us?

General NAKASONE. I am really pleased with the National Cyber Strategy. I think that this is something that we have long wanted in terms of what is the responsibility of both the Government and the private sector, and being able to meld that is critically important for us.

I think in the weeks to come, obviously the Department of Defense's cyber strategy will nest within that, and so I think for the first time, we will probably have, from the Government all the way down to our department something that is very effective.

Senator KING. Think of that as a coherent Government wide strategy.

General NAKASONE. Yes, Senator.

Senator KING. Thank you, General. Senator Budd.

Senator BUDD. Thank you all for being here. General Fenton, there has been a series of concerning incidents, suicides, murders, overdoses, drug trafficking arrests surrounding the special operations community at Fort Bragg.

But I think you and Members here of the Committee, we know that those reports, they are not indicative of the thousands of incredible men and women at USASOC. I am hoping that you can discuss some of the issues that we are actually seeing in Bragg, including those, and if you can describe what SOCOM is doing to combat these challenges.

I will just say that our office is here to help, and I am sure on both sides of the aisle, all of us are here, on your team in that regard.

General FENTON. Well, Senator, thank you very much for an ability to comment on that, for an opportunity. That very issue hits at the heart of our number one priority, our people, who are competitive in comparative advantage and who we place a lot of trust and confidence in.

This type of behavior, atypical to the 70,000 plus that are doing the right thing almost every single day, each and every day the majority are absolutely doing that, is first and foremost it disrespects that type of work that our SOCOM enterprise is known for. Second, it certainly, it is not behavior that is welcomed.

I want everybody to know that is not the type of behavior that is welcomed in this formation and is not indicative of an organization in whom the Nation has placed a lot of trust. We hold ourselves to a higher standard.

The Command Sergeant Major and I are—first of all, we are very angry when we get reports like that, and we are deliberately laser like focused on this. In fact, we talk about it as a corrosive.

These are corrosive toward the trust and confidence that this Committee, the Secretary, and certainly the Nation has in us, and we are we are laser focused on eradicating that from SOCOM enterprise. One is too many, but we recognize we are not immune. So, we look at it through a number of lenses.

First, it is a leader issue in preventing this, reinforcing the standards, the behavior of a drug, some type of other untoward illegal, not moral and ethical behavior. Not who we are, not who we want our formation. We asked our whole formation to be on alert and to help point that out for us and let us as leaders start to take action.

Second, it is reinforcement policies that tell folks this in the event they just came into this formation and they didn't know any better, and they are at risk of doing something like that that disrespects decades of successful operations of many, many who came before and those who come after.

Responding. I think a key piece in that one is holding folks accountable. You will see us do that because that sends a very big signal back, when appropriate, Senator, back to the enterprise about this behavior is absolutely not welcomed and not part of the SOCOM enterprise.

You have my commitment on this, Senator. I have been—in about 6 months, it has been a top priority because of what it does, not only to the trust that this Committee and others have in the SOCOM team, but to our overall readiness. That readiness is important because it needs to be a very lethal force each and every time the Secretary puts us on the job.

Senator BUDD. Thank you, and you have our commitment as well. Secretary Maier and also General Fenton, you have talked a little bit about this today, but can you please expand on balancing the need for special operations forces to continue conducting counterterrorism in the Middle East and Africa versus the important role they play in great power competition? Do we have the right mix of forces to accomplish both? We will start with you, Secretary.

Mr. MAIER. Senator, thanks for this point. This is maybe among the most important points that I focus on every day, and I think the answer is somewhat. I think we have a very lethal, very capable counterterrorism force.

What we are working to do is make that force more sustainable over time, because, frankly, many of the threat actors are still out there and we are still having to do this mission.

But being able to make it more sustainable so we can draw on the unique capabilities of the SOF enterprise to bring that to the fight against a potential PRC or Russia, certainly to establish that integrated deterrence we seek, sir.

Senator BUDD. Thank you.

General FENTON. Senator, I would just add that it is a balance, as we look at it across the enterprise with the three missions of the integrated deterrence and counterterrorism crisis response.

As I mentioned before and will reinforce, the capabilities we have in the counterterrorism marine arena transfer as well over into our integrated deterrence approach. But at the same time, we know that very often they are unilaterally asked for.

In this case in Africa, we work with AFRICOM Commander and our Special Operations Command Africa, our TSOC, is a way to address their requirements. Keep the pressure, as I mentioned earlier.

One of the things at SOCOM we look at is the threat has been disrupted, but it persists, and our job is to remain vigilant. When we can set, see, and illuminate, we take action in concert with the Combatant Commanders and certainly under SecDef direction.

Senator BUDD. Thank you all very much. I have some questions for the record, General Nakasone, I will submit for you, but I yield back. Thank you.

Chairman REED. Thank you very much, Senator. Senator Kaine, please.

Senator KAINE. Thank you, Mr. Chairman. Thank you to our witnesses. Secretary Maier, I want to talk to you about a previous job you had that I still think you are very involved in. I understand that you previously led the DOD defeat ISIS task force. Is that correct?

Mr. MAIER. Yes, Senator.

Senator KAINE. And that you continue in your role as Assistant Secretary of SO/LIC to focus on the anti-terrorism mission, including the defeat of ISIS, correct?

General FENTON. Correct, Senator.

Senator KAINE. That task force included international partners. I think there are about 80 international partners, and it is fair to say that in your work on that task force and currently it involved a lot of coordination with Iraqi defense forces, isn't that correct?

Mr. MAIER. It did, yes, Senator.

Senator KAINE. I know that my colleagues might have seen that Secretary Austin has paid an unannounced visit to Iraq. That news of that broke this morning. I just want to read a phrase, a quote from him, the United States forces are ready to remain in Iraq at the invitation of the government of Iraq, he said this following a meeting with Prime Minister Al Sudani.

Further, "the United States will continue to strengthen and broaden our partnership in support of Iraqi security, stability, and sovereignty." Do you think the United States being in partnership with Iraq for their stability and sovereignty, for their own sake and for the region, is an important priority?

Mr. MAIER. Senator, yes, I do, and I think it is critically important to managing a very challenging political situation, too, with obviously the Iranian and proxy threats there as well, sir.

Senator KAINE. Just for my colleagues, we have two war authorizations against the government of Iraq, our strategic partner who Secretary Austin is visiting today. We have 2,500 American troops in Iraq at the Iraqi Government's request. One of the war authorizations was passed in 1991. It is 32 years old.

The other war authorization was passed in the fall of 2002. The invasion of Iraq began on March 19, 2003, 20 years ago next week. I have a proposal that is very bipartisan, 12 Democrats and 12 Republicans have joined together to urge Congress to repeal the two Iraq war authorizations.

This is going to be marked up in the Foreign Relations Committee likely in the next few days, and hopefully will be on the floor for a vote soon, coincident in timing with the 20th anniversary of the Iraq invasion.

I just wanted to bring it to the attention of my colleagues. I urge that we repeal the Iraq war authorizations to recognize reality, an enemy that we were trying to push out of Kuwait in 1991, an enemy whose government we wanted to topple in 2002, is no longer an enemy.

They are a security partner of importance right now. Second, Congress should exercise our Article 1 authority over war, peace, and diplomacy and not allow it to be on autopilot. Third, an authorization that is no longer necessary becomes sort of a zombie author-

ization that can be grabbed and used for mischievous purposes if we are not careful.

Fourth, I even think we send a powerful message not just to allies and strategic partners, we even send a message to adversaries that you may be our adversary today, Iraq once was, but the United States specializes over time in turning adversaries into allies. Look at Japan, look at Germany, look at other nations.

We hold that hope out to everyone that we will defeat you should we need to, but we also hold out an olive branch and look for an opportunity to beat a sword into a plowshare and turn an adversary into a partner.

The proposal that I have, Mr. Chairman, that I hope will be voted on in the floor this month has the support of the Administration, and they have indicated that neither of the two authorizations are necessary for any current U.S. military operation, and thus their repeal will not endanger in any way the security of the United States or Americans anywhere in the world.

I would just urge my colleagues possibly to take a look at this once the Foreign Relations Committee acts, because I believe we will be taking this matter up on the floor very soon. With that, Mr. Chair, I yield back.

Chairman REED. Thank you, Senator Kaine. Senator Mullin, please.

Senator MULLIN. Thank you, Mr. Chairman. General Fenton, can you explain to us, and I know you have been asked this question before, but I just want it for context again, the value of the SOF community.

General FENTON. Senator, I think the value of the SOF community transcends all three mission areas that we have right now. Our integrated deterrence approach, which the previous was strategic competition the days before the tragic events of 9/11, when we were developing partners and allies, competing for relationships, building partners of force—of choice, and in many places with our security cooperation approach, actually strengthening nations across the globe. I think that is called for even more now.

As we come forward with 20 years of hard-earned combat credibility, a technology fluence, and an incredible formation. The SOF formation is a formation that knows the hard skill. It knows technology.

It deploys around the world on a moment's notice, and in that case, all that value transitions over to integrated deterrence. On the counterterrorism side, the center for 20 plus years. In places all over the world, your special operations command team, along with the rest of our military interagency partners, I think brought immense value to this Nation, disrupting degrading terrorist networks globally and figures, the names that many folks know here are no longer and have been removed from the battlefield and are no longer a threat to this Nation.

On crisis response, our ability at SOCOM to, within a very short notice, deploy forces and arrive in a country and either safeguard our U.S. diplomats, citizens, or rescue them if that is indeed the task, and then bring home safely. I think it is all part of this special Operations command value proposition.

I would add a very small investment on the budget that we are very grateful for, and I think a very high return on investment across all those and many more that in the interest of time, I can followup with you in a classified session.

Senator MULLIN. Appreciate it. One last quick question for you, and then if you could be brief on it, I would like to—you just kind of explain the partnerships that we have with our allies in Europe and how that is benefiting us, and I would say in the with Russia's illegal invasion of Ukraine.

General FENTON. Senator, I go back to a very specific part here of the very high value proposition I think your special operations teams bring. It started with a relationship, our ability in small teams to be with Ukrainians in the mid–90's developed a level of trust. Speed of trust is important in these, as you know very well.

Then in 2014 began in earnest a level of training that was about resistance and resilience, and those look like skills of developing a military—Ukrainian special operations that has an NCO corps, that knows about mission command, has initiative, and frankly has been, as I have seen and certainly talk a lot about, very valuable to the Ukrainian military effort writ large. I think we have also had the ability to learn from them.

They have got an incredible way that they take equipment off the battlefield and re-engineer it. That is really great for us because we learn as much from our partners as I hope they do from us.

I think in a very small way, that ability for the Ukrainian SOF and the Ukrainian military to resist, and now absolutely really fight against this aggression, and has paid dividends. Started with a high investment with the special operations team.

Senator MULLIN. Thank you so much. Mr. Chairman, I am going to kind of divvy here a little bit. General Nakasone and I know each other, and I just want to raise a point here.

The General is over a program that is very forward leaning, and I would ask that we would—we would ask the Senate Intel and the House Intel to brief us on a program that General Nakasone is over. It would reflect, in my opinion, his complete incompetence in his ability to lead this program.

I think it is important when we are talking about a budget that he is over, that it is important for us to know that we have leadership there that we can rely on to make sure the dollars are protected and the investment has a return. I think before we can do that, we actually need to know what has happened.

I was involved in a briefing when I was on the Intel Committee that turned into a hearing, and I think it is imperative for us to know the General's risk adverse approach to a program that needs to be extremely proactive.

Chairman REED. Thank you, Senator Mullin. Your comments are noted and we will followup.

Senator MULLIN. Thank you.

Chairman REED. At this point, let me recognize Senator Manchin.

Senator MANCHIN. Thank you, Mr. Chairman. Chairman Nakasone, let me just say I am sorry because I have all the confidence in the world in you and we have been working very close

together, and I am chairman of the Cyber Committee and also along with Mike, Senator Mike Rounds.

We both appreciate your service, and we are looking forward to any hearing you want to have. I can tell you, you have the support of a bipartisan group here, which is very, very deep.

Next of all, General Fenton, I would like to ask you a question, based on the publishing of the 2019 SecDef, DOD, CYBERCOM Operations Forces Memo, which directed the organization of the DOD Cyber Operation Forces, there has been substantial appropriation development of CYBERCOM organization and capabilities.

The question is what is the status of the current Special Operations Forces program developed within SOCOM, and what effort is needed in—to keep pace with CYBERCOM?

General FENTON. Senator. I will start by, we have got a very close relationship with General Nakasone and CYBERCOM, and it has progressed into an area that we now call a capability of SOF space, cyber triad.

At its heart, it is the ability to converge those capabilities, the SOF placement access, the cyber work, and certainly the space work in places for integrated deterrence effects that we would otherwise not get if we were doing it individually, and bring certainly a bigger sum back to not only the mission but to any partner we are working with.

That has been an incredible effort alongside General Nakasone's team. We are very grateful for that, and also, in the SPACECOM arena. We are moving that forward with exercises, experimentation, a number of senior leader huddles, and I think that you will see that progress, Senator. We would be happy to talk about the progress.

Senator MANCHIN. My final question is for all three of you, and I will start with Secretary Maier, General Nakasone, and then General Fenton, what can we do to help as Congress? What would be the greatest help we could be to you, all of us in the Senate and our Congress—or our cohorts over on the side, the other side of the House. That would be the greatest—and I think, if I am asking, the having a budget done on time, what does that mean for you?

Mr. MAIER. Senator, thanks for the question. I think we will probably all say that having a budget that is consistent, predictable, and——

Senator MANCHIN. Does it save you time? Does it save your money?

Mr. MAIER. It saves this time. It saves us money. It adds predictability. It allows us to put things on contract. Frankly, for——

Senator MANCHIN. We are talking September 30th.

Mr. MAIER. Yes, sir. I think from the perspective of enterprise and the special operations enterprise, it is going through transition. The ability to modernize is hurt by the fact that the budgets don't come predictably. So that is really where sometimes it comes home to roost, and it is——

Senator MANCHIN. So, a budget on time would be a pretty high priority?

Mr. MAIER. Yes, sir.

Senator MANCHIN. General Nakasone.

General NAKASONE. It is the same thing, Senator. It is on time. It really does——

Senator MANCHIN. Does it reduce your cost?

General NAKASONE. It is predictability. It is being able to actually spend the money when it is actually due as opposed to a shortened period of time. We also have new starts that will not be delayed, would actually be able to get on. So, we would welcome it.

Senator MANCHIN. When was the last time that you had a predictable budget on time?

General NAKASONE. Not since I have been the Commander.

Senator MANCHIN. General Fenton.

General FENTON. Senator, I will start first by, you already help in many ways with a number of the tools that we use at SOCOM, 33, 1202, now 127. But to your point on the budget, I will echo my colleagues here at the table, predictable, reliable, on time, and then I will just add that continuing resolutions (CRs) hurt.

In SOCOM, our priority, number three, is transform, and we think of ourselves as a pathfinder and a trailblazer. We need new capabilities to not only surpass adversaries, but always to be dominant.

That is not possible with new capabilities and new contracts with a CR. It is also we work with a lot of littles, little companies that want business with Special Ops Command because they know we are transformative, and that we are a trailblazer for the Department.

They can't wait forever to get their money, and many of them aren't there anymore as a result of—my sense is a number of CRs from——

Senator MANCHIN. This makes—does this sound reasonable to you all that I have been told by some retired Admirals and Generals that if we did our budget on time now, by the 85 budget, the budget law that we had—the President is supposed to have his budget submitted by the 1st of February, and here we are.

The House and the Senate are supposed to have theirs by April the 1st and reconcile by April the 15th, and then we are supposed to have a budget completed by September 30th. I have been told if all that happened, that the military could have a savings anywhere between 5 to 10 percent on today's cost.

You are talking $40 to $80 billion. Does that sound reasonable? That is, I mean, it is tremendous, and it is that type of effect—I don't know if you all looked at and evaluated it for per area of DOD. Secretary, do you have anything on that, or if you looked at it under those conditions, because the person never hesitated when they told me this.

Mr. MAIER. Senator, I can't account for that exact measure. I can tell you that it is more costly, and as I think my colleagues and I have indicated, there is a risk to it as well. That it is not only financial, it is the ability to execute and operate with some degree of predictability, which of course, the Nation looks at us to do.

Senator MANCHIN. Well, I know that we have many examples that you can look back on and find out when we did do one on time and everything, but if you could and give us an accurate account or close as accurate as you can be, what would be the savings?

Because we are in a position now, we are having debates and discussing, we can do things, we can change this year, change our ways and not commit the sins of the past. I am hoping we can do that.

It has a tremendous effect on our military, which is what we are depending. First of all, thank all of you, and all of you setting there, for your service. I appreciate it more than you know, and again, I want to thank you all. I yield my time back.

Chairman REED. Thank you, Senator Manchin. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. General Fenton, I appreciate the time we had to spend together and talk about some of the threats around the world, and your role and your team's role in combating those threats and getting ahead of those threats. To me, as I mentioned, there is no greater threat than China on the world stage.

In this great powers era that we have been discussing, the alliances in the Indo-Pacific, to me, are critical. You have mentioned it in my meeting with you. We have heard about that today. General Nakasone had mentioned Indonesia and the Philippines. We have talked about the Philippines.

What specifically would you like to see this Committee address as we move forward in this Congress to do everything, we can put ourselves in the best position to continue to cultivate and support those alliances?

General FENTON. Senator, first, thanks for the session with you the other day. I appreciate your time. I know how busy you are. I would comment on the extreme importance in the power of the partners and allies.

You and I spoke quite a bit about it, and in the Indo-Pacific, but certainly globally, as the Secretary has discussed with the Department and in many ways is doing that with NATO's alliance, vis-á-vis the Ukraine, and all the work that has gone into the entire whole-of-government team to make that stronger than ever, is a signal that aggression by adversaries like Russia will not be tolerated.

I think it is just important—just as important as we discussed in the Indo-Pacific. We have got a number of bilateral treaty allies out there. They are extremely important partners, as INDOPACOM goes ahead on its daily and certainly its overall mission.

In particular for the special operations team, we actually like to think that we are a premier partner force. We have longstanding ties throughout the region that we look to continue to strengthen and maintain.

We certainly each and every day don't take them for granted, and we look to reinforce them. I think that is important that that continues to grow. I think it is—as you think about this, Senator, it is about the growth of partners and allies, and the power in that. Not only for the rules-based order, but probably for the vision of where we go the next 3 to 5, even 10 years.

I would just recommend that it is a continue to focus on partners and allies, the power that comes with that, the partnering, the bur-

den sharing, and certainly the capability grows—growth that we have all experienced in that. I could talk certainly more——

Senator SCHMITT. Well, and I don't—listen, I don't want you to—I want to give you the time to be able to get back to my office with this, because this is something that to me is of paramount importance, particularly in the Indo-Pacific theater and will be a long-term commitment on my end.

as you work through—and by the way, you won't be the only one I am asking this question that comes before the Committee of what can we do, because I do think that is just critical, and in doing everything we can to guard against China's global domination ambition, which has been stated.

I want to work with you on that, and I guess, General Nakasone, if I could ask you this, and to the extent that you can share, what you can share with this Committee in the open setting here, just where we are at with China's capabilities, whether it is on cyber or artificial intelligence (AI), our defensive capabilities versus their offensive capabilities. This will be an ongoing discussion. But in the open setting, I certainly wanted to ask you about that.

General NAKASONE. Senator, they are a near, peer threat. They are very good. They have been able over the period of 2 decades to develop not only their military but also their industrial base.

As we look to the future, those capacity and capabilities, whether or not it is in artificial intelligence, machine learning. Whether or not it is looking at the capacity to grow cyber forces, they are very good, but they are not, they are not, first of all, as good as us and second, they are not ten feet tall.

We can get in closed session, more in terms of some thoughts on this, but I did want to make sure I hit that.

Senator SHAHEEN. Well, I will just close with this. I agree with the concerns that have been raised by other Committee Members and you with TikTok. To me, TikTok is a Chinese AI weapon aimed directly at the United States of America, and we better take it seriously, so, among other things. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Schmitt. Senator Duckworth, please.

Senator DUCKWORTH. Thank you, Mr. Chairman. I just have to say, I had a wonderful working relationship with Senator Blunt, who has recently retired. I would have to say, Senator Schmitt, I agree with you with your concerns on the Indo-Pacific region. In fact, my question, gentlemen, is going to followup a little bit on my colleague's line of questioning.

But I did want to start with saying that Mr. Assistant Secretary and General Fenton, your written testimony references the first SOF truth, humans are more important than hardware, and I couldn't agree with this more.

Two weeks ago, I led a Congressional Delegation (CODEL) to Japan and Indonesia. My interactions on that trip reinforced just how important those alliances and partnerships are. We must not forget that human ties are the United States strategic advantage in the Indo-Pacific region, and these human relationships are critical to countering malign Chinese Communist Party (CCP) activity in that region.

General Fenton, I appreciated our discussion last week. Can you please elaborate furthermore in that questioning line, and on an unclassified level, on how the SOF community fosters close relationships with our allies and partners?

Specifically, how does Special Operations Command's ongoing work with other nations, from the smallest unit operations all the way up through your leadership-to-leadership relationships with military leaders in some of these countries, reinforce our campaign plans in Southeast Asia?

General FENTON. Senator, thank you. I really appreciated our discussion as well, and I appreciate your reference in that. I will start with just emphasizing that partners and allies are absolutely a key focus for the Department, the Secretary, and for your Special Operations Command team.

I put that in contrast to what China's focus may be in terms of clients or customers. We are about partnerships, we are about friendships, we are about the power of many to make us all stronger. I think we see that in the way that we approach, first, your special operations team.

As you mentioned, we start very much from a perspective of, it is in our training and in our schoolhouses to work through these because we recognize it is the speed of trust. It is the speed of a relationships, in many ways with our partners and teammates around the world. You will see us at a very tactical level.

I won't mention any countries, and certainly, Senator, I could talk more in a closed session. You will see us at a tactical level doing events like training, shooting, jumping, driving, and building capabilities that use the tools that this Committee has honored us with.

I think at an organizational level, we will be showing folks how we have grown ourselves in the 20 plus years of combat, what it meant to weave in technology, how we understand our gathering of intelligence, how we understand mission type orders.

I think at the institutional level, what you will see your special operations team doing in any of the COCOMs is work with the COCOMs to ensure that the Nation we have a relationship with understands the special operations forces and what they can do, the types of missions, and if I may be the return on investment and the value that they will bring that nation in a way that I believe we certainly bring to this Nation.

Senator DUCKWORTH. Thank you, General. Turning now to General Nakasone. General, I just want to say I, too, have complete trust in your ability to do your job.

In fact, your forward leaning posture allowed us to keep tabs on the well-being of my constituent, who was held in Haqqani network hands and also in his safe return. So, thank you very much for the work of you and your subordinates in that. I want to talk about the cyber domain.

Of course, it has no boundaries. I included legislation in Fiscal Year 2021 NDAA authorizing DOD to establish a pilot program to enhance the cybersecurity of our allies, and in particular the readiness of military forces of Vietnam, Thailand, and Indonesia. This year I plan to expand that program to include Malaysia and the Philippines.

Could you elaborate on specifically why the cybersecurity of our allies and partners is important for U.S. overall, U.S. national security? If possible, can you comment on the value of direct engagement with our overseas partners to help build their cyber skills, and how that is important for our own national security?

General NAKASONE. Certainly, Senator. I think that there is no better example than Ukraine. We have watched this now for over a year. We are a very capable partner that was able to raise their level of cybersecurity, was able to fend off a much larger foe.

But it is not only that, it is also the ability for us to share information with that partner. We want to be able to share our information in the future. Being able to share information in cyberspace means that you have to have an assurance that the partner can secure your information.

That is a critical piece, and I know that the work that you have done to drive that type of cybersecurity, both in the element of the bar has to go higher for our partners to operate. Also, we have to have the confidence that we share information, that our information is between us and that partner.

Senator DUCKWORTH. Thank you. I yield back, Chairman.

Chairman REED. Thank you very much, Senator Duckworth. Senator Scott, please.

Senator SCOTT. Thank you, Chairman. I want to thank each of you for being here. General Nakasone, first, let's talk about China. The—is there anything that China sells us? We have cranes now at the Port Miami that they are worried that there was the ability for China to surveil what we are doing at our ports.

You look at what some of my colleagues have talked about, the risk of TikTok. Is there anything that China sells in this country that you don't believe creates a potential cybersecurity risk? What would it be, if they could sell us anything that wouldn't?

General NAKASONE. Senator, certainly you point to the challenge of cyber, which is a huge attack surface, right. Whether or not you trade in some type of good or you trade in some type of commodity, there is always an opportunity.

I think this points to the challenge that we have to be able to address, which is supply chain. To make sure that the elements of the supply chain that we operate, particularly within the Department of Defense, are secure.

Senator SCOTT. Do you think that Americans should have—do you think it puts America at risk if Americans have TikTok on their phone?

General NAKASONE. My concern with TikTok, Senator, really is from two pieces. One is the fact that there is tremendous amount of data and understanding where your data is, is critical, I think.

The second piece is the opportunity for influence. This is a means upon which you receive information or don't receive information. That is where I always look at that in terms of being able to measure that risk.

Senator SCOTT. If you were running a, let's say one of our electrical grids in the country, if you were responsible, knowing now what you know in the job that you have now, would you allow—would you buy anything from China?

Would you allow the employees have TikTok? Would you any business? Would you buy DJI drones? Would you do anything knowing what you now know in this job?

General NAKASONE. Senator, very difficult in the scenario that you point to our picture to imagine that you can really do that. I mean, there is so much of what we do is based upon international trade, and China has the corner on some things.

I think what I would do is ensure that the areas that are most sensitive to our operation are well censored, and I have the confidence that what is being utilized there, I understand where that information may be going.

Senator SCOTT. In a world where there was an alternative to every Chinese product and app and service out there, if there was an American alternative or American ally alternative to them, would you, at that point if you running one of these companies, would you guarantee that your company did no business with China if there was a good alternative? Would you think the same thing about our Government, knowing what you know?

General NAKASONE. So again, coming back as a prospective, perhaps future business owner, I would take a very, very hard look of anything that was coming from an adversarial nation and being able to understand that.

Senator SCOTT. General Fenton, can you talk about what other things you are doing to prepare your forces to deal with China, and where are they beating us, and where—and what do we need to do more and better, knowing that China doesn't like our way of life and wants to demolish our way of life?

General FENTON. Senator, I think the very first thing we are doing in Special Operations Command is focus the formation on the adversaries of China and Russia, but in particular China's. Reordering the formation in terms of focus.

There are a number of elements in our formation that understand the PRC and what they have been doing for years pretty well. But there is work that we have got to do to certainly bring in additional portions of the formation along. We do much of that through our education process in our schoolhouses that—all the components, our Army, Navy, Air Force, and Marine components.

Frankly, at our joint Special Operations university, understanding of the PRC and the PRC way of warfare. We knew that very well when we fought the ISIS threat. We understood how they were going to wage war, and now that is the understanding of the PRC.

Second, I would say is being present in any region and trying to understand their malign activities. As I mentioned before, diplomatic pressure from the Chinese—from the PRC, economic coercion from the PRC creates clients and customers. We are out there to build partners and allies.

I think that also allows us to get a sense of what PRC's malign activities are globally, and then on any given transfer, Senator, we are providing ranges of options for the Combatant Commanders and certainly for the Secretary to address either in deterrence, preparing, and if needed to prevail.

You have got the best special operations team in the world to do that, and that same time, we are presenting a lot of dilemmas to the adversary, the PRC.

Senator SCOTT. Thank each of you.

Chairman REED. Thank you, Senator Scott. Senator Rosen, please.

Senator ROSEN. Well, thank you, Chairman Reed. I really appreciate you holding this hearing. I would like to thank each one of the witnesses for being here and, of course, for everyone's service to our Nation. General Nakasone, I have quite a few questions for you on our cyber workforce and Nevada National Guard.

But I am going to get into cyber workforce first because the National Cybersecurity Strategy, which was released just last week, it calls for expanding the national cyber workforce. I know it is critical we continue to invest in innovative, nontraditional cyber capabilities and in talent to support the Department of Defense cyber mission requirements.

In last year's NDAA, as reported out of this Committee, it included my Civilian Cyber Reserve Act, bipartisan legislation I introduced with Senator Blackburn to create a civilian cyber reserve that ensures additional cyber capacity for CYBERCOM in greatest—times of greatest need.

So, this year, of course, I look forward to working with the chairman to ensure this critically important legislation will be included in the final conference. But I was hoping, General, that you could discuss the value of reserve models, including the value of a potential civilian cybersecurity reserve to support your cyberspace operations.

General NAKASONE. Senator, first of all, thank you for your support of U.S. Cyber Command, and in general, the work that we do in cyberspace. It begins with humans.

This idea of being able to have many more analysts, many more operators, many more developers is something that is part and parcel to our success in the future. It is not only with the civilian workforce that you have championed, but it is also this idea of how do you bring a larger base to bear?

How do we bring it from K through 12 that makes people very interested that science, technology, engineering, mathematics is the way of the future, and girls that code all these things that will provide a greater base for us to draw from are really important to us.

Senator ROSEN. Well, you are speaking my language. As a former software developer, now co-founder of the Women in STEM Caucus, and trying to promote STEM education all the time, this is music to my ears.

Of course, in fiscal year 2021, the NDAA required the Department of Defense to submit to Congress an evaluation of the reserve models to support these cyberspace operations, and the report was never submitted.

So could you update me on the status of the report and also the requirement I added in the fiscal year 2023 bill to have DOD enter into an agreement to assess the benefits of such a program. I would really like to see us be able to move forward on this.

General NAKASONE. Senator, if I might take that for the record, just to make sure I can leverage the Department of Defense for that.

Senator ROSEN. That would be perfect. I have some other questions, too, on auspices—excuse me, specifically for Nevada's National Guard. But, the National Cybersecurity Strategy rightly identifies a strengthening our international partner capacity. It is a pillar of our collective cybersecurity, our hunt forward operations in Ukraine in particular.

It really shows us the value of international partnerships. I have advocated for more funding for hunt forward as we identify more vulnerabilities, and so, our Nevada National Guard. We have three partner nations as a National Guard State Partnership Program, Fiji, Tonga, and Samoa.

How is the program promoting cyber partnerships with our allies and partners, and what challenges do you see—are you facing building these and where can we create a better strategy for this command?

General NAKASONE. First of all, I see very, very few—very, very few limitations on what we need to do in the future. The countries that you talk about there in the Southwest Pacific, we have worked very closely with our partners in Australia to look at how do we kind of incorporate all of them as we understand their needs, their requirements, their vulnerabilities, and then be able to assist them. A very, very small amount of money in a very, very small amount of time yields tremendous results, in my opinion.

Senator ROSEN. Yes, I agree. I want to tell you that I am also very excited because Department of Homeland Security recently announced another cyber strategy as it is going to expand the Abraham Accords collaboration among the United States, Israel, UAE, Bahrain, and Morocco to include cybersecurity.

As you work to promote multilateral partnerships between the Abraham Accords countries, how do you think this is going to help you with that?

General NAKASONE. Well, just think about hunt forward operations. We began those in 2018. Since 2018, 47 different missions, 22 countries, 70 different networks.

When we take a look at what has been able to be done—what we have been able to do is the fact that, one, it builds tremendous confidence between nations, right. When the United States deploys a hunt forward team to country x, country x knows that the United States cares, and it is for us being able to work with a partner to understand their requirements, and also build a higher bar of cybersecurity.

Senator ROSEN. Well, thank you for being there. We have heard that from our allies and partners. It means a lot when you are there. You show up and we work in partnership with others to help potentiate what they are doing to protect themselves. Thank you again. My time is up, Mr. Chairman.

Chairman REED. Thank you, Senator Rosen. The open portion of the hearing has concluded. For the benefit of my colleagues who might be listening, we have two votes. One is already underway.

We will adjourn here and convene our closed session, SBC217, immediately following this. I urge my colleagues to vote and then

join us. I would also like to commend the panel for their excellent testimony—our excellent testimony.

Senator Sullivan, please.

Senator SULLIVAN. Thank you, Mr. Chairman. I appreciate it very much. General Fenton and Mr. Maier, I know this has been touched on, but it is an issue that I think is really important.

How is the shift going from your rightful and exceptional focus on CT operations, primarily in the CENTCOM AOR, to the INDOPACOM region as our pacing threat? What is the kind of orientation of the strategy in that region? What I mean by that is, the CT, SOCOM focus post 9/11 was very kinetic, which our guys did an incredible job at. But the INDOPACOM strategy and focus is not kinetic, at least not now. We all hope it is never going to be kinetic.

It is a very different mission set. I don't know if that impacts morale. It is not as—well, I would like both of you to talk about that, because I have been concerned that it has been hard. You have done such a good job in that AOR, and that AOR is still important.

The issue of making sure that violent extremist organizations (VEOs) do not threaten our Nation, particularly with weapons of mass destruction, is still critical. But the pacing threat is China. Every day we see something.

You saw the foreign minister of China yesterday publicly saying, hey, we are on a collision course toward war. We don't want that, but we better well be ready for it. Your operators are the best in the world.

There are no Chinese forces that can hold a candle to the United States Special Operations enterprise, not even close. So, it is a giant strategic advantage we have over them. I want them to fear the hell out of it. So, what are we doing and how is that shift going?

Mr. MAIER. Senator, thanks for the question. Maybe I will start and then General Fenton can address some of the issues that are core to his force here.

I would say that the shift is very much underway, but I think it is a question of how do we maintain the counterterrorism capabilities, because if you look at the maps, sir, of course, many of the areas that were problems continue to be problems.

We are we are having to manage that risk. At the same time, we are doing, as you correctly said, sir, a different mission in the Indo-Pacific. I think the idea that we are not very kinetic or not kinetic at all in the Indo-Pacific is not necessarily something that means that the same kind of SOF skills are not relevant.

As we think of things like placement and access, and really relying on partners sometimes for that placement and access, but also the ability to work unilaterally go to places, that last tactical mile that at times only U.S. Special Operations can do, that is still relevant in the Indo-Pacific, even if the finish is not a kinetic or lethal finish.

I think, second Senator, I would highlight the by with and through approach, really working through partners, that has really been the hallmark of the counterterrorism efforts, especially the last decade or so, is very, very relevant again in the Indo-Pacific because we want our partners to be in the lead.

But we have demonstrated in places like Ukraine we can do that from a distance. So, it doesn't have to be the hand on the shoulder that we are always—we have been familiar with in the past.

I think these fundamental tools and the approaches we have used are still very relevant in the Indo-Pacific, sir.

Senator SULLIVAN. General Fenton, how is the reorientation of the INDOPACOM theater going?

General FENTON. Senator, I am going to start by agreeing with you that your special operations formation is the best, the very best in the history of mankind.

Senator SULLIVAN. Chinese don't have anything remotely close to it, and they know that. We know that.

General FENTON. I agree with that, and the same thing with Russia and any other adversary out there. That's right. The other part is that we exist and included with the entirety of the U.S. military, and the CYBERCOM team is exactly the best, and we have all that. I think, and I would want everybody that wishes this Nation harm, and if there is an adversary out there, China——

Senator SULLIVAN. I just want INDOPACOM theater to know that we are out there too, right.

General FENTON. Yes, sir.

Senator SULLIVAN. I sure I want the Chinese to wake up thinking they got Navy SEALs all over them, every day.

General FENTON. Yes, sir, and your special operations team is out there and in a very sustainable, durable way, in a concert with Admiral Aquilino's requirements. I would tell you that we can handle these challenges.

I will start by saying special operations really never left strategic competition and great deterrence. You and I talked about this a Senator, I think last year where I was the special ops commander responsible in the Pacific for the special operations forces that both did counterterrorism with one partner that we can I can talk more in a closed session about but competed with the PRC all day long by building partnerships, relationships, and capability.

That continues. At the same time, we will not take our eye off the persistent threat of global terrorism, and so, we will still handle the CT mission. There will be a number of forces that have the CT mission each and everyday hunting anybody that wishes harm to this Nation but can slide over to present some level of dilemma to an adversary in an integrated deterrence arena.

I would just add much of our counterterrorism experience is desired by these partners and nations as we go forward to train and becomes a key part of the partnership. So, Senator, I would just end with, your SOCOM team is absolutely ready to handle that challenge. I think there is a large portion of our force that is excited about this. They want to do what the Nation needs.

Right now, the Nation needs us to get very involved, and we are, and deter PRC, and certainly to address aggression by the Russians. They want to be knee deep in it. You know, your special operations team will, and at the same time handle the counterterrorism mission and any crisis response mission where a U.S. citizen or a diplomat needed to be safeguarded or rescued.

Senator SULLIVAN. Thank you. Thank you, Mr. Chairman, and I just want to say to General Nakasone, no question. I just think you

are—publicly because a lot of what you do is not public. I think you and your team are doing an exceptional job, General. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Sullivan. The open session has concluded again. We have two votes. I would urge my colleagues to go to the first vote. We will resume immediately in SVBC17 for the closed session, and to each of you gentlemen, thank you for your testimony.

General Fenton, Secretary Maier, General Nakasone, let me tell you, all have been extremely diligent, dedicated and offered superb service to this Nation over many years, and we are in your debt. Thank you all very much for that. I will adjourn the open hearing.

[Whereupon, at 11:55 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

INFORMATION OPERATIONS

1. Senator SHAHEEN. General Fenton and General Nakasone, Russia conducts malicious information operations around the world and particularly in the context of the war in Ukraine. As the Department of Defense works across the interagency to counter Russian information operations, how can the United States improve its response time to malign information operations?

General FENTON. The U.S. requires a unified strategic communication plan to protect United States, Allies, and Partners, while globally engaging against Russian malign influence operations. Additionally, the Department will require investment in artificial intelligence and machine learning capabilities to detect Russian malign influence messaging, and conduct rapid counter-messaging. We need to increase our investments in Information Operations Forces to include Psychological Operations, Cyber, Space, Electronic Warfare, Civil Affairs, Public Affairs, and others to provide the Joint Force the right personnel and capabilities at the right levels to engage against this and other National Defense Strategy (NDS) challenges.

General NAKASONE. USCYBERCOM, by executing its operational approach of persistent engagement, aims to anticipate and preclude malign activity rather than responding after the fact. By actively campaigning, our cyberspace forces persistently counter malicious activity to include malign influence operations. Operating continuously below armed conflict denies initiative to adversaries; generates insight, opportunities, and options that preclude adversary freedom of maneuver; and defends DOD information networks, the defense industrial base and indirectly other elements of U.S. critical infrastructure.

2. Senator SHAHEEN. General Fenton and General Nakasone, what risks does a delayed response time to malign information operations pose to U.S. national security?

General FENTON. As we faced Violent Extremist Organizations (VEO) threats over the past 20 years, the U.S. Government had a unified plan against VEO malign information operations. The risk of a disjointed, delayed, or nascent response cedes the information space to our adversary. A proactive stance under a unified strategic communication plan which empowers the various departments to take timely action is required to reduce our adversary's ability to own the narrative. This is the most effective way to reduce United States risk, while undercutting Russian malign information and influence operations.

General NAKASONE. USCYBERCOM conducts military cyberspace operations and presents options to the Secretary of Defense and the President. The timing of a possible response is a decision for U.S. policy/decisionmakers.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

3. Senator WARREN. General Fenton and Nakasone, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

General FENTON. Yes, I agree, and the Command's most critical requirements are resourced in the Command's Fiscal Year 2024 President's Budget Request. USSOCOM's fiscal year 2024 budget request allows Special Operations Forces (SOF) to remain fully capable of accomplishing USSOCOM's missions, while exceeding the Nation's expectations. However, sustaining, campaigning, and modernizing SOF forces must be balanced with an appreciation of both near-and long-term readiness risk to force and mission. This balancing act means some requirements cannot be fully resourced within available funding, and are subsequently deferred to a future year in lieu of near-term higher priority needs.

General NAKASONE. USCYBERCOM follows congressional and DOD's budgetary processes.

4. Senator WARREN. General Fenton and Nakasone, historically, have previous UPL items been included in the following year's base budget? Have UPL items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

General FENTON. Yes, if funded by Congress from USSOCOM's fiscal year 2023 C-UPL and not a one-time requirement. Examples from USSOCOM's fiscal year 2023 list include:

i. Counter Unmanned Systems Procurement Acceleration, $65.2 million, Anduril Industries

ii. Advana Authoritative Data Management and Analytics, $8.0 million, Booz Allen Hamilton

iii. Enterprise Data Stewardship Program, $18 million, Indefinite Delivery, Indefinite Quantity Contract (e.g., multiple vendors)

iv. Identity and Signature Management Modernization, $20.9 million, GDIT/ARMA, CACI/AFC, Thompson-Reuters Special Services, and others based on mission requirements

v. CV–22 & MC–130J Link–16 TacNet Tactical Receiver, $5.7 million, Lockheed Martin. Data Link Systems, Sierra Nevada Corporation, and VIASAT

Some requirements resourced via the UPL are one-time damage refurbishments or aircraft loss replacements that occurred after the close of the Program/Budget Review, and were subsequently added to the UPL. USSOCOM's Combatant Craft Medium Loss Refurbishment for $4.3 million was one such requirement funded in fiscal year 2023.

General NAKASONE. The first UPL request for which USCYBERCOM received funding was in fiscal year 2022. USCYBERCOM was unable to include the item in its fiscal year 2023 base budget, so another UPL was requested for fiscal year 2023. All of the USCYBERCOM fiscal year 2023 UPL items which received partial funding in fiscal year 2023 have been included in USCYBERCOM's Fiscal Year 2024 Presidents Budget (PB) request as appropriate.

Fiscal Year 2023 UPL ITEM	Amount Requested ($ millions)	Congressional Add ($ millions)	Vendor(s)
Cyber Mission Force Operational Support	167.9	66.0	NSA; FFRDC/UARCs; Booz Allen Hamilton; Accenture; SANS; other vendors TBD.
JCWA Integration	56.4	41.4	ManTech; other vendors TBD.

5. Senator WARREN. General Fenton and Nakasone, do you agree that Federal agencies should be required to work within the confines of base budget process?

General FENTON. Yes. The base budget process affords the Command and the Department the opportunity to ensure the most critical strategic requirements are resourced within the President's Budget Request. The C-UPL supplements provide an avenue for Combatant Commanders and Service Chiefs to communicate emerging requirements directly to Congress that would have been resourced if the requirement had been identified before the close of the budget process months earlier. Also, C-UPLs represent requirements we would have funded within the base budget if additional funds had been available for addressing "fact of life" changes. fiscal year 2024 examples in the latter category include acceleration of transformational investments in modern capabilities such as un-crewed platforms, autonomous capabilities, artificial intelligence, machine learning, and natural language processing capabilities.

General NAKASONE. USCYBERCOM follows congressional and DOD's budgetary processes.

INFORMATION ON UPLS

6. Senator WARREN. General Fenton and Nasakone, what was the cost of putting together this UPL list?

General FENTON. UPL compilation is a byproduct of building annual President's Budget Requests.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

7. Senator WARREN. General Fenton and Nasakone, please provide a detailed description of this UPL?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

8. Senator WARREN. General Fenton and Nasakone, what does the UPL purchase?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

9. Senator WARREN. General Fenton and Nasakone, please include detail on all end items with quantities, contractor FTEs, etc.

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

10. Senator WARREN. General Fenton and Nasakone, what specific capability will the UPL provide?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

11. Senator WARREN. General Fenton and Nasakone, what gap will this fill that is not in the base budget?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

12. Senator WARREN. General Fenton and Nasakone, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

13. Senator WARREN. General Fenton and Nasakone, what is the operational requirement? How does this UPL support current or future operations?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

14. Senator WARREN. General Fenton and Nasakone, what is the operational impact if this UPL is not funded in fiscal year 2024?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

15. Senator WARREN. General Fenton and Nasakone, are there plans to include this item in the fiscal year 2025 base budget?

General FENTON. Responses have been retained in Committee files.

General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

16. Senator WARREN. General Fenton and Nasakone, why was this UPL not included in the fiscal year 2024 President's Budget submission?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

17. Senator WARREN. General Fenton and Nasakone, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

18. Senator WARREN. General Fenton and Nasakone, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

19. Senator WARREN. General Fenton and Nasakone, what is your history with this vendor? Please detail when the relationship began, the number of contracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

20. Senator WARREN. General Fenton and Nasakone, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

21. Senator WARREN. General Fenton and Nasakone, in which city/State will the UPL be executed?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

22. Senator WARREN. General Fenton and Nasakone, is this requirement on an existing contract? If so, with who? What is the history of the contract?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

23. Senator WARREN. General Fenton and Nasakone, what is the anticipated contract award date if the UPL receives funding?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

24. Senator WARREN. General Fenton and Nasakone, what funding lines are associated with this UPL?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

25. Senator WARREN. General Fenton and Nasakone, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

26. Senator WARREN. General Fenton and Nasakone, how much was enacted and obligated (or expended for RDT&E) in fiscal year 2022–23 for this requirement?

General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

27. Senator WARREN. General Fenton and Nasakone, how much was requested in fiscal year 2024 for this requirement?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

28. Senator WARREN. General Fenton and Nasakone, is there a tail associated with this UPL?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

29. Senator WARREN. General Fenton and Nasakone, is any tail funded in the future years defense plan?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

30. Senator WARREN. General Fenton and Nasakone, please describe how much the requirement will cost per year for the next 5 years.
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

31. Senator WARREN. General Fenton and Nasakone, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or UPL.
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

32. Senator WARREN. General Fenton and Nasakone, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

33. Senator WARREN. General Fenton and Nasakone, please provide photos of this requirement for visual aid.
General FENTON. Responses have been retained in Committee files.
General NAKASONE. USCYBERCOM did not submit an Unfunded Priorities List for fiscal year 2024.

QUESTIONS SUBMITTED BY SENATOR GARY PETERS

C-UAS

34. Senator PETERS. General Fenton, with SOCOM's designation as the lead for defeating UAS prior to launch, home and abroad. What recommendations can you offer DOD and the Army's Joint Counter-UAS office to increase collaboration between DHS and other interagency partners for illuminating and countering threats to homeland, and where does the lead coordinating authority fit into the process?
General FENTON. In our role as the DOD's global coordinator to counter the UAS threat prior to launch, we strive to ensure effective collaboration occurs within the DOD daily, between the Army's Joint C-UAS office, DHS, interagency partners and others.
In our coordinating role, we use an approach similar to the one we use for the Counter-VEO fight in the Combatant Command Areas of Responsibility (AORs)—protecting the homeland by disrupting the adversary primarily outside the U.S. (i.e., the Away Game). In order to execute this role, the Department engages with Law

Enforcement and interagency partners (including but not limited to, Department of Commerce, U.S. Customs and Border Protection, the Federal Bureau of Investigations, DHS, Treasury, and State), as well as coordinating with USNORTHCOM, the Joint Counter small Unmanned Aircraft Systems (sUAS) Office (JCO), and the National Intelligence Manager for Aviation to identify threats, priorities, and coordinate opportunities to counter risks to the Homeland.

To ensure domestic challenges are addressed, we continue to work by, with, and through USNORTHCOM and the Office of the Director of National Intelligence, National Intelligence Manager-Aviation partners, and we are in close coordination with JCO to ensure no seams exist between the mutually supportive "Right of Launch" and "Prior to Launch" efforts.

INTERNET OPERATIONS MANAGEMENT PROGRAM

35. Senator PETERS. General Nasakone, in your role, you are responsible for securing the sprawling ".mil" digital enterprise that our warfighters depend upon. Over the last several years, progress has been made to implement an Internet Operations Management Program that continuously monitors DOD's cyber infrastructure through the eyes of the adversary, identifies vulnerabilities, and empowers network operators to quickly remediate those issues before adversaries like Russia or China can exploit them. Despite some progress, this critical capability has yet to be deployed across the entire DOD Information Network. Over half of the Department's 45 Areas of Operation within the DODIN have yet to receive this capability. Can we expect full DOD-wide deployment of the Internet Management Operations Management capability in fiscal year 2023?

IF NOT, Today's threat environment seems misaligned to picking winners and losers across the DOD Information Network for proven capability. What do you need from us to push this critical effort across the finish line?

General NAKASONE. USCYBERCOM developed a phased implementation of the Internet Operations Management (IOM) capability based on operational focus and intelligence needs. So far in fiscal year 2023, the Department has expanded this capability to 27 of the 45 DODIN Areas of Operation (DAOs).

- Phase I included 18 DAOs that each completed a 60-day onboarding, ensuring success through live/recorded training sessions and concluding with a tabletop exercise to certify DODIN Areas of Operation initial operating capability meets operational direction.
- Phase 2 began on March 30 and will grant access to 9 more DODIN Areas of Operation who will complete the same 60-day onboarding cycle.

Full deployment of IOM capability to all 45 DAO's is planned for fiscal year 2024.

QUESTIONS SUBMITTED BY SENATOR KELLY

ARMED OVERWATCH

36. Senator KELLY. General Fenton, what is the development status of the of the AT–802U Sky Warden, to be designated OA–1K?

General FENTON. The Armed Overwatch OA–1K Program is integrating mature mission system technologies to include weapons, defensive systems, and secure communications onto the commercial AT–802U aircraft. This approach leverages proven technologies requiring little development. Presently, USSOCOM is working with L3Harris and the Federal Aviation Administration to certify the airworthiness of the AT–802U modifications that comprise the OA–1K. The first lot of seven aircraft is now in low-rate initial production with aircraft being modified at the L3Harris facility in Tulsa, okay.

37. Senator KELLY. General Fenton, when will you take delivery of the first aircraft?

General FENTON. We are scheduled to take delivery of the first aircraft by the end of October of this year.

38. Senator KELLY. General Fenton, is SOCOM working to identify training locations? What are the main considerations?

General FENTON. Yes, the training location is currently being coordinated by AFSOC through the Secretary of the Air Force's Strategic Basing Process. There are two main criteria for consideration: locations with existing similar-sized aircraft training, maintenance, and support infrastructure and training airspace for Armed Overwatch mission with air-to-ground range availability and accessibility.

39. Senator KELLY. General Fenton, how will SOCOM select basing locations for the anticipated 4 squadrons of these aircraft?

General FENTON. The OA–1K will be based with USSOCOM's Air Force Service Component. AFSOC is leading the effort to qualify candidate OA–1K bases through the Secretary of the Air Force's Strategic Basing Process. Once approved, the Secretary of the Air Force will notify Congress of the decision.

40. Senator KELLY. General Fenton, how can this Committee better support you in continuing to do the Armed Overwatch mission?

General FENTON. We appreciate the continued support we have received from the Committee as we maintain an aggressive schedule to field the Armed Overwatch aircraft. However, there are no additional steps the Committee can take at this time to accelerate the program.

41. Senator KELLY. General Fenton, are there steps Congress can take to accelerate progress through program milestones?

General FENTON. We appreciate the continued support we have received from Congress as we maintain an aggressive schedule to field the Armed Overwatch aircraft as quickly as possible. However, there are no additional steps Congress can take at this time to accelerate the program.

OA–1K OPERATIONAL IMPACT

42. Senator KELLY. General Fenton, armed ISR capabilities have played a pivotal role in the fight against global extremist threats worldwide. It's also critical to have a platform capable of doing Close Air Support missions and supporting our troops on the ground at a moment's notice. What specific capabilities will the new, dedicated light attack aircraft to be known as OA–1K provide?

General FENTON. The OA–1K will provide two high-definition, electro-optical/infrared full motion video (FMV) sensors for overwatch in support of troops on the ground. The aircraft will have encrypted line of sight (LOS) voice communications, as well as LOS FMV downlink to exchange real time voice and video imagery with a supported ground element. Additionally, the OA–1K will have Link 16 and Beyond Line-of-Sight full motion video capabilities to exchange battlespace awareness information with other aircraft and operations centers. For delivering kinetic effects against a target, the OA–1K will be armed with 2.75" laser-guided rockets (AGR–20 Advanced Precision Kill Weapon System (APKWS)) and AGM–114 Hellfire missiles. The OA–1K will have a 3.5 hour loiter time plus 30 minutes weapons delivery at a range of 225 nautical miles. Finally, the OA–1K is equipped with an external, podded modular multiple-sensor station and open mission system architecture to enable tailoring of platform capability to support force needs.

43. Senator KELLY. General Fenton, how do you anticipate using the OA–1K to support SOCOM operations?

General FENTON. Armed Overwatch will provide a cost-effective, multi-role, rapidly deployable, Irregular Warfare (IW) platform capable of austere operations in direct support of globally deployed, geographically isolated SOF units, and remains central to our Precision Effects modernization efforts, as it will provide responsive and available situational awareness, protection and fires to our ground forces executing C-VEO missions in permissive environments.

44. Senator KELLY. General Fenton, how will these aircraft impact the support SOCOM is able to provide to our Combatant Commanders around the world?

General FENTON. Combatant Commanders' requirements differ based on their missions, threats, and national policy in those regions. The OA–1K will conduct cost-effective IW missions, as well as enable other USSOCOM assets to pivot toward other priority mission sets. The Armed Overwatch primary focus is on the C-VEO mission by supporting combined ground teams for operations that require a low footprint, higher endurance, and austere capable aircraft.

QUESTIONS SUBMITTED BY SENATOR ROGER WICKER

DUAL-HAT ARRANGEMENT

45. Senator WICKER. General Nakasone, could you please comment on how your dual-hatted role at CYBERCOM and the NSA enhances U.S. national security and helps both agencies achieve success in their individual missions? If the dual-hat arrangement were to go away, how do you think it would impact cyber coordination

efforts between CYBERCOM and the NSA, and the execution of their individual missions?

General NAKASONE. [Deleted.]

CYBER WORKFORCE READINESS

46. Senator WICKER. General Nakasone, does CYBERCOM have the manpower it needs to fully execute its mission? Would personnel management tools such as extended tour lengths, geographic assignment stability, and increased special duty pay help in recruiting and retaining the cyber workforce the Department needs?

General NAKASONE. [Deleted.]

CYBER PARTNERSHIPS

47. Senator WICKER. General Nakasone, please comment on how CYBERCOM is leveraging partnerships with United States' international allies to strengthen our defenses against common threats and adversaries?

General NAKASONE. USCYBERCOM has increased its focus and engagement with international partners globally. These partnerships build resilience in partners' ability to harden their government and military networks and weapons systems, enhance interoperability in coordinating and executing cyberspace operations, and enhance partners' posture to confront cyber threats across the spectrum of competition and conflict.

Further information is in classified responses.

48. Senator WICKER. General Nasakone, the defense industrial base is often our first line of defense for cyberattacks in the United States. General Nakasone, how is CYBERCOM collaborating with the private sector to ensure that the private sector has the information and tools it needs to detect and respond to cyberattacks?

General NAKASONE. Cyberspace is a global domain. Adversaries often penetrate privately owned networks and devices, using sophisticated capabilities to disrupt operations or gain advantage via activities such as intellectual property theft, targeting of personal information and installation of ransomware. The collaboration and sharing of insights with the private sector provides mutual benefits. An example is the UNDERADVISEMENT program, which links cybersecurity expertise across industry and government, leading to several operational successes as well as collaborating with system owners in order to eradicate threats themselves.

ARTIFICIAL INTELLIGENCE AND CYBERSECURITY

49. Senator WICKER. General Nakasone, how is artificial intelligence (AI) changing warfare in the cyber domain, and what can we be doing to leverage AI to enhance our offensive and defensive cyber capabilities?

General NAKASONE. [Deleted.]

CYBER CAPABILITIES TO SECURE THE U.S. SOUTHERN BORDER

50. Senator WICKER. General Nakasone, I recently traveled to the U.S. southern border where we have a serious crisis. The border is clearly controlled by the cartels, which are trafficking humans, fatal drugs, and weapons. To what extent are the Mexican cartels using cyber capabilities to control the southern border, and what can you share about CYBERCOM's efforts to counter the cartels' cyber capabilities?

General NAKASONE. [Deleted.]

JOINT CYBER WARFIGHTING ARCHITECTURE

51. Senator WICKER. General Nakasone, please provide a status update on the migration of Joint Cyber Warfighting Architecture components from the Services to CYBERCOM.

General NAKASONE. USCYBERCOM is conducting the initial stages of the migration of the Joint Cyber Warfighting Architecture (JCWA) components from the Services to USCYBERCOM by working to define Service/USCYBERCOM roles and responsibilities, governance and authorities.

USCYBERCOM is drafting Memoranda of Understanding (MOU) with the Services outlining relationships and responsibilities. In addition, USCYBERCOM is working with the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) to define Commander USCYBERCOM's authorities for Systems Engineering and Integration (SE&I), enabling cross-JCWA enterprise interoperability functions for all JCWA program offices. USCYBERCOM expects to use

enhanced budget control (EBC) and SE&I authorities to manage JCWA programs at an enterprise level in fiscal year 2024.

USCYBERCOM is preparing to establish a Program Executive Office as directed in the fiscal year 2023 NDAA, Section 1509.

COMPETITION

52. Senator WICKER. General Nakasone, does the DOD have a strategy to ensure that no single vendor has a broad enough enterprise license agreement that it locks out "best of breed" cybersecurity solutions and thereby increases cyber risk? If so, recognizing that there are many components to a comprehensive cybersecurity solution, such as Endpoint Detection and Response, Vulnerability Management, Identity and Access Management, and Security Information and Event Management, what is your strategy to ensure that the Department incorporates the best of each component to reduce cyber risk?

General NAKASONE. I defer this question to the Department of Defense.

53. Senator WICKER. General Nakasone, does the DOD plan to issue a new department-wide acquisition strategy to meet Zero Trust requirements that includes a competitive process for multiple cybersecurity vendors?

General NAKASONE. I defer this question to the Department of Defense.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

IRREGULAR WARFARE

54. Senator ERNST. Secretary Maier and General Fenton, in your personal opinion, would enabling partner forces that are responding to hostilities enhance SOF's irregular warfare contribution to great power competition?

Secretary MAIER. Irregular warfare operations and activities increase pressure on adversaries that seek to compete with the United States by shaping the environment to prevent or deter hostilities, enhancing our allies' and partners' ability to respond to hostilities, and setting favorable conditions for potential future U.S. operations. Through these operations and activities, the U.S. can positively influence outcomes for partner defense forces and degrade adversarial resources and capabilities without overtly/openly escalating hostilities. This contributes to strategic competition by bolstering U.S. legitimacy as a dedicated and invested partner while simultaneously signaling to other adversaries the consequences of challenging a U.S. partner.

General FENTON. As evidenced by recent and ongoing events around the globe, competition between world powers spans the operational continuum, including armed conflict. U.S. SOF must be prepared to execute IW activities in support of Combatant Command requirements on both ends of the spectrum equally, especially as it relates to our interactions with foreign partners. Following through is critical to the sustainment and implementation of operational capabilities that were developed prior to hostilities. Perhaps more importantly, the demonstration of U.S. resolve enhances our credibility, which is crucial to the sustainment of relationships with current partners and to fostering future relationships. Our ability to enable like-minded partners through resourcing, training, and advising across the operational continuum is the key to achieving strategic effects designed to prevent—prepare—and ultimately prevail over a mutual adversary. Conversely, failure to follow through will result in outsized negative impacts to ongoing and future IW campaigns.

55. Senator ERNST. Secretary Maier and General Fenton, in your personal opinion, do you agree that extending this authority indefinitely and increasing its budget authorization would improve SOF's irregular warfare capability?

Secretary MAIER. Yes, codifying section 1202 of the fiscal year 2018 NDAA as a permanent authority and increasing its budget authorization will enable SOF to fund and plan long-term operations necessary to build resilient and capable partners and to compete successfully with adversaries. Section 1202 programs enable SOF to conduct activities below the threshold of armed conflict that develop and enable partners to counter our adversaries' malign interests around the globe. A temporary, or periodically renewed 1202 authority communicates to our partners and adversaries that U.S. support is bound by a timeline and that our support has an expiration.

General FENTON. Codifying and expanding the budget authorization for 1202 broadens the aperture and increases U.S. SOF's value proposition for Combatant

Commanders that are deterred from using 1202 by the current uncertain program lifespan and relatively low budget cap. Enhanced Combatant Command confidence in the efficacy of the 1202 program would result in increased opportunities and greater flexibility for U.S. SOF to enable and leverage foreign partners to achieve specific effects in support of our mutual IW objectives.

56. Senator ERNST. Secretary Maier and General Fenton, in your personal opinion, are there other modifications to this authority that could improve SOF ability to compete with great powers?

Secretary MAIER. We continuously evaluate existing authorities in coordination with USSOCOM to ensure SOF has the authorities it needs to effectively contribute to strategic competition.

General FENTON. We are currently assessing the benefit of combining the attributes of 127e (support of Special Operations to Combat Terrorism) and 1202 (support of Special Operations for Irregular Warfare) into a single fiscal authority that would allow for the provision of support to foreign partners to achieve effects when and where counter-VEO operations and integrated deterrence campaigning are complementary. This is an initiative that—if we determine it has merit—would be worked through the Department's legislative proposal/review process.

TRAINING

57. Senator ERNST. General Fenton, we need realistic training to build readiness for GPC. How has SOF adapted its training programs for GPC?

General FENTON. USSOCOM is executing an aggressive plan of reorienting SOF to address the global challenges that are impacting new strategies for campaigning throughout multiple regions and across all domains. Realistic training is key to building enduring advantage and critical to enhancing SOF's and our partners' capabilities against near peer challengers. USSOCOM continues to support and participate in Service, Joint, and multinational exercises synchronizing these activities through our Theater Special Operations Commands and the Combatant Commands to provide deterrent effects to our competitors whenever possible. USSOCOM continues to explore new training capabilities, live and virtual, in multiple domains to enhance our warfighting and crisis response capabilities.

58. Senator ERNST. General Fenton, does SOF have the resource it needs to adapted its training programs for GPC?

General FENTON. It is important to sustain funding for experimentation, training, and exercises for the entire Joint Force to build capabilities, readiness, and deter our competitors. Ensuring SOF is integrated with our joint and combined partners is accomplished through maintaining and enhancing our joint and combined exercises programs, especially with the Interagency, to address current strategic challenges and anticipate future challenges.

COUNTER NARCOTICS

59. Senator ERNST. Secretary Maier, how is SOF using existing authorities to conduct its counter-narcotics responsibility?

Secretary MAIER. In support of DOD's broader counternarcotics and countertransnational organized crime efforts, SOF leverage existing authorities to conduct exercises and training alongside foreign partners with responsibilities for disrupting drug trafficking and associated forms of transnational organized crime.

U.S. law and longstanding policy prohibits direct DOD participation in law enforcement activities such as searches, seizures, or arrests of civilians. In peacetime, U.S. law enforcement agencies, often in collaboration with their foreign counterparts, appropriately lead drug interdiction efforts, but DOD intelligence, training, and logistical support are often critical to successful law enforcement actions, including arrests, seizures, designations, etc. SOF's global presence and ability to support interagency, non-governmental, and foreign military partners enhances the development of holistic options to degrade transnational criminal organization networks. As the designated global coordinator for the Department's counter threat finance operations, USSOCOM provides essential support to U.S. Government efforts to identify and disrupt sources of illicit revenue that supports terrorist or other transnational criminal organizations.

60. Senator ERNST. Secretary Maier, are the SOF authorities to conduct its counter-narcotics responsibility sufficient at this time?

Secretary MAIER. I appreciate the serious threat that drug trafficking poses to our society, especially from fentanyl, which according to DEA kills nearly 200 Americans every day. In addition to the clear human and economic costs, illicit drugs provide financial support to violent extremist organizations and other threat networks that contribute to global instability.

SOF play an important role within DOD's broader counter-narcotics efforts, which are conducted through a broad range of authorities, both in support of U.S. and foreign law enforcement operations and by building the capacity of foreign partners to disrupt drug trafficking and associated forms of transnational organized crime. While current authorities have been essential to DOD's efforts in support of our law enforcement partners, the Department is seeking to amend 10 USC 284 to authorize planning support for counterdrug operations conducted by U.S. law enforcement agencies and to increase the cap on small-scale construction for bases of operations or training facilities in support of foreign law enforcement agencies. The Department is also seeking to codify Section 1022 of the Fiscal Year 2004 NDAA, which authorizes the use of counterdrug funds to enable joint task forces that support law enforcement agencies conducting counter-drug activities to also provide support to law enforcement agencies conducting counter-terrorism or counter-transnational organized crime activities, including the trafficking of people, weapons, money, and natural resources and wildlife.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

SOF IN THE ARCTIC

61. Senator SULLIVAN. General Fenton, Assistant Secretary of Defense Maier, in your prepared remarks you noted that "[s]trategic competitors—specifically Russia—threaten established international rules in the Arctic and pose increasing challenges to North American security. SOF play a role in bolstering domain awareness and integrated deterrence in the Arctic as part of the Joint Force. Over the past year, SOF strengthened capabilities to operate and prevail in the austere Arctic environment. Large-scale, joint exercises and operations, such as Arctic Edge and Polar Dagger, provided venues for more than 500 U.S. and multinational SOF to experiment and operate in the North American Arctic region." Can you elaborate on how SOCNORTH is expanding SOCOM's role in the Arctic to deter China and Russia and defend the Homeland?

General FENTON. USSOCOM supports the Combatant Commands and their Arctic Strategies. SOCNORTH has expanded and continues to strengthen USSOCOM's role as part of USNORTHCOM's Campaign to deter and defend against the People's Republic of China (PRC) and Russian malign influence in the Arctic. The key Operations, Activities, Exercises, and Investments (OAEIs) SOF brings, combined with our strong relationships with numerous Allied and Partner nations in the Arctic, strengthens our capabilities, increases Joint Force domain awareness and enhances integrated deterrence.

SOCNORTH-led OAEIs across the challenging pan-Arctic environment and problem-set is increasing in support of integrated deterrence and Homeland Defense. Specific examples include:

- SOCNORTH deployment of a Special Operations Command Forward (SOCFWD) to both execute and provide Command and Control (C2) of USSOF military free-fall and combat-dive operations in extreme Arctic conditions during USNORTHCOM's Exercise VIGILANT SHIELD (April 2021) at Deadhorse, AK.
- Operation SPARTAN SENTRY (October 2021), which provided SOCNORTH an additional opportunity to extend its operational reach to plan, execute and assess Special Operations on a larger scale at Shemya Island, AK, as part of USNORTHCOM's Operation NOBLE DEFENDER.
- SOCNORTH further advanced SOF campaigning in the Arctic during Exercise ARCTIC EDGE 22 (February 2022) by establishing a forward-deployed Joint Force Special Operations Component Command to C2 subordinate Special Operations Task Forces (SOTFs) in the execution of multi-domain Special Operations with more than 500 U.S. and multinational SOF (the largest ever deployment of SOF to the North American Arctic).
- Operation POLAR DAGGER 1.0 (September 2022) during which SOCNORTH demonstrated U.S. SOF capability to operate in the Arctic on St. Lawrence—located 36 nautical miles off Russia's eastern coastline / military district. This exercise sent a clear deterrent message during parallel Russian strategic exercises in the Pacific region.

- Follow-on OAEIs (e.g., Exercise ARCTIC EDGE 23, Operation POLAR DAGGER 2.0, etc.) will provide opportunities for SOCNORTH to learn, experiment, develop, and evolve USSOF capabilities as part of the Joint Force, integrate with inter-organizational partners, and potentially message to adversaries that we can and will "win" against any threat in the Arctic in competition and conflict.
- SOCNORTH continues to focus on strengthening key partnerships with numerous Allied and Partner Nations that share security interests and equities across the pan-Arctic region. Specific examples include:
- In support of CDRUSNORTHCOM's Globally Integrated Layered Defense (GILD), and USNORTHCOM's designation in the UCP as the DOD Arctic Advocate for Arctic Requirements, SOCNORTH is collaborating directly with SOCPAC and SOCEUR to close operational seams across the transregional, pan-Arctic problem-set.
- SOCNORTH is also partnering with Joint Force Command Norfolk (JFC-NF) to assist NATO with planning for campaigning and contingencies in the High North and the trans-Atlantic approaches to the Homeland.
- In October 2022, SOCNORTH hosted the first "Special Operations in the Arctic Symposium," attended by more than 200 participants from more than 70 joint, interagency, intergovernmental, and multinational organizations to include the Ted Stevens Center (the Alaska-based DOD Regional Security Center focused on the Arctic), helped to build shared understanding, better define pan-Arctic challenges and share lessons learned across the Enterprise.

SOF is innovating and improving in order to fight and win in this challenging environment, through the execution of these OAEIs and building focused relationships.

Secretary MAIER. Special Operations Command North (SOCNORTH) plays a key role in the first Pillar of our Arctic Strategy, centered on security and developing capabilities for expanded Arctic activity. As an Arctic nation, and as an ally to Arctic nations, we have a responsibility to operate across our own gaps and seams and to strengthen partnerships. Special operations forces have always excelled at both. SOCNORTH works closely with Special Operations Command Europe (SOCEUR) and Special Operations Command Pacific (SOCPAC), finding opportunities to deepen cooperation with allies and partners to improve our understanding of the environment, and to ensure each combatant command is prepared to operate with our allies in the Arctic. One example is the Senior Leader Dialogue we recently held with leaders from Norway's defense ministry and special operations command. The commanders of SOCEUR and SOCNORTH outlined important ways for us to maximize our unity of effort through our key bilateral relationships, exercise presence, share awareness, and deepen our interoperability with allies like Norway. The Arctic is a challenging environment to operate in, and SOF leads the way, finding opportunities to address those challenges and further develop our own capabilities.

OCOM GLOBAL FORCE POSTURE

62. Senator SULLIVAN. General Fenton, Assistant Secretary of Defense Maier, the 2022 NDS establishes a clear hierarchy of threats, with the People's Republic of China at the top, followed by Russia. The focus on Great Power Competition involves a different mission than the counter-terrorism fight most SOCOM entities have conducted for the past 20 years. It also requires different capabilities. Can you explain, with examples, how SOCOM's global force posture has changed to reflect the shift from CT operations to deterring Chinese and Russian aggression?

General FENTON. USSOCOM has increased deployments of CONUS-based United States SOF to the Indo-Pacific and Europe to supplement forward-based forces normally available to United States Indo-Pacific Command (USINDOPACOM) and United States European Command (USEUCOM). These forces work with and assure regional allies and partners, set conditions in theater, and effectively enable U.S. SOF to integrate with and support the Joint Force during crisis. Even as we re-align SOF to the USINDOPACOM AOR—our SOF in other AORs such as U.S. Central Command—executes persistent deployments and engagements to deter, disrupt, and degrade Russian and Chinese influence and access. In USEUCOM, U.S. SOF along with Allied SOF, have rekindled traditional relationships with volunteer and territorial defense forces, which dramatically increase the resiliency of their nations. In addition, the Global SOF Posture Plan (GSPP) has been developed with a focus on supporting the integrated deterrence of Chinese and Russian aggression. The GSPP shifts posture focus from counter terrorism to integrated deterrence. An example is the U.S. Air Force Special Operations Command's development of Theater Air Operations Squadrons and their Non-Standard Aviation Growth, which were validated

by USSOCOM in 2022, and are currently being staffed for implementation into two key theaters. These units represent the first developed and validated to meet the NDS objectives.

Secretary MAIER. SOF are present in more than 70 countries at any one time. We have always deployed to address the needs of the Nation alongside our Allies and partners. Consistent with the 2022 NDS direction to address the People's Republic of China as our pacing threat, and Russia as an acute threat, we are focusing on establishing the access, placement, and relationships needed to counter these threats and prepare for conflict if required. A great example of these efforts is in the Philippines, where Exercise Balikatan 2023 will include forces from the 27th Special Operations Wing working alongside our Allies to enhance interoperability and demonstrate resolve in the critical Indo-Pacific theater. While we have not taken our eye off the counterterrorism fight, we are purposefully deploying and leveraging SOF to provide asymmetric advantages for the Joint Force and the Nation.

63. Senator SULLIVAN. General Fenton, Assistant Secretary of Defense Maier, do you think SOCOM is now properly aligned to execute the 2022 NDS or does more work remain to be done?

General FENTON. Yes. The men and women of USSOCOM stand ready to execute and support the requirements in our NDS; anytime and anywhere our Nation requires us. We have always changed shape to meet the requirements of the Nation and the SOF Enterprise's focus on "People, Win, and Transform" will continue to guide USSOCOM to support the NDS. SOF is laser-focused on the PRC as the pacing threat, while we continue C-VEO and ensure the readiness of our no-fail CR mission. We will continuously evaluate the enterprise moving forward to ensure we support the joint force through integrated deterrence, and are prepared to accomplish the most challenging missions at a time of high risk. All of this requires calibration and nuance to defend the Nation and build stronger relationships with our allies and partners.

Additionally, USSOCOM is accelerating its wide-ranging modernization efforts and leveraging its acquisition authorities with an emphasis on surface and subsurface maritime platforms; C-UAS; next-generation Intelligence, Surveillance, and Reconnaissance; mission command systems; and collaborative and autonomous unmanned systems. USSOCOM continues to build enduring advantages through investments in our people, technology, and organizations in support of the NDS.

Secretary MAIER. The SOF enterprise is aligned with the guidance set forth by the 2022 National Defense Strategy and continues work to implement the NDS. We are on the pathway to achieve NDS-defined strategic objectives through the programming, planning, and allocation of SOF resources to execute global SOF operations, activities, and investments. The guidance and direction that CDRUSSOCOM and I have published in our SOF Vision and Strategy and the fiscal year 2025 SOF Capabilities and Programming Guidance reflects SOF's alignment with the 2022 NDS. In addition, our co-authored future operating concept we are developing further aligns how SOF will operate in the future to the strategic direction outlined in the 2022 NDS. Together, these documents lay out the plan for aligning SOF with NDS priority initiatives, and we are providing regular progress updates to the Secretary.

USCYBERCOM SUPPORT OF INDOPACOM OBJECTIVES

64. Senator SULLIVAN. General Nakasone, in your prepared remarks you identified USCYBERCOM's fourth line of effort as "developing options for full-spectrum cyberspace operations to assist Combatant Commanders . . . to achieve their objectives." You also noted that China was "building capabilities far in excess of its defense needs." Deterring, and if necessary defeating, a Chinese invasion of Taiwan is certainly one of INDOPACOM's objectives. A key Chinese capability to conduct such an invasion is the PLAN (People's Liberation Army Navy). The Secretary of the Navy has acknowledged we cannot match the output of Chinese shipyards and the PLAN is already numerically larger than the United States Navy. The PLAN also uses civilian RO-ROs (Roll on/ Roll Off) ferry vessels to practice the same type of amphibious operations it needs to conduct to invade Taiwan. What capabilities does CYBERCOM bring to the fight to help INDOPACOM achieve its objectives, specifically deterring and defeating a PLA amphibious invasion of Taiwan?

General NAKASONE. Last year, I created a combined USCYBERCOM-NSA China Outcomes Group to oversee this shift. The China Outcomes Group aligns components in USCYBERCOM and NSA, enhances intelligence insights, improves cybersecurity and delivers operational outcomes for the Nation. Resources are prioritized

and focused on deterring and countering the People's Republic of China's (PRC's) aggressive behavior.

Further information is in classified responses.

QUESTIONS SUBMITTED BY SENATOR TED BUDD

INTERNET OPERATIONS MANAGEMENT PROGRAM

65. Senator BUDD. General Nakasone, how large is the total attack surface that CYBERCOM is responsible for defending across the DOD Information Network?

General NAKASONE. The DODIN attack surface being actively tracked and monitored by Internet Operations Management (IOM) consists of roughly 300 million Internet Protocol addresses for which USCYBERCOM is responsible for defending.

66. Senator BUDD. General Nakasone, how is CYBERCOM incorporating industry solutions, including automated monitoring through the eyes of the adversary, to help better defend that attack surface?

General NAKASONE. The Internet Operations Management (IOM) capability is the industry solution USCYBERCOM has been using since 2019 that performs monitoring through the eyes of the adversary. IOM has been leveraged to continuously discover, inventory, manage and monitor all commercial-facing DODIN cyberspace assets, both on-premises and in the cloud; to aggregate all DODIN commercial-facing asset data in a centralized location; and to streamline command and control of DODIN defensive cyberspace operations.

67. Senator BUDD. General Nakasone, reportedly over half of the Department's 45 Areas of Operation within the DODIN have yet to implement continuous monitoring and vulnerability identification through the Internet Operations Management Program. Do you expect Department-wide deployment of that capability this year? If not, when can we expect it?

General NAKASONE. USCYBERCOM developed a phased implementation of the Internet Operations Management (IOM) capability based on operational focus and intelligence needs. So far in fiscal year 2023, the Department has expanded this capability to 27 of the 45 DODIN Areas of Operation (DAOs).

- Phase 1 included 18 DAOs that each completed a 60-day onboarding, ensuring success through live/recorded training sessions and concluding with a tabletop exercise to certify DODIN Areas of Operation initial operating capability meets operational direction.
- Phase 2 began on March 30 and will grant access to 9 more DODIN Areas of Operation who will complete the same 60-day onboarding cycle.

Full deployment of IOM capability to all 45 DAO's is planned for fiscal year 2024.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MARCH 9, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

UNITED STATES STRATEGIC COMMAND AND UNITED STATES SPACE COMMAND

The Committee met, pursuant to notice, at 9:30 a.m., in room G–50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, King, Warren, Peters, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Let me call the hearing to order. Good morning. The Committee meets today to receive testimony from General Anthony Cotton, Commander of U.S. Strategic Command, or STRATCOM, and General James Dickinson, Commander of U.S. Space Command, or SPACECOM.

Gentlemen, thank you for your service to the Nation, and please extend my thanks, and thanks of all the Members of the Committee, to the men and women serving under your command. General Dickinson, I understand this is likely your last hearing before the Committee as Commander SPACECOM.

I want to thank you for your extraordinary leadership, and particularly to the first years of this command as you establish the norms that are carried forward. Thank you very much, sir. As in the past, we have asked the Commanders of STRATCOM and SPACECOM to testify together.

Until 2019, Space Command was a part of Strategic Command. Now, as SPACECOM stands up as an independent command, it is important to identify any gaps or seams that have emerged during the transition.

On the global stage, Russia's illegal war in Ukraine has introduced risks to the nuclear stability we have maintained for the better part of a century. Vladimir Putin's behavior has been dangerously reckless. In February, he suspended Russia's participation

in the New START [Strategic Arms Reduction Treaty], the last remaining strategic stability agreement between our two countries.

General Cotton, it is important to the Committee to understand how this affects your planning, and I hope to hear more about it in the classified session. Further, Putin and his associates have made a series of nuclear saber-rattling statements to try to make the United States and our allies reconsider our support for Ukraine.

That strategy has failed. The United States nuclear deterrent, the bedrock of our national defense, is being relied upon more than ever, and our extended deterrence for our allies has proven effective. This has made Russia think twice about escalating hostilities against NATO [North Atlantic Treaty Organization]. We must be mindful, however, that as Putin's conventional arsenal grows weaker, he may rely more on his nuclear arsenal.

I would welcome our witnesses' thoughts on how we can best manage this extremely complicated dynamic. Our other near-peer competitor, China, continues to advance its ballistic missile capabilities. In addition to expanding its field of hardened missile silos, the PLA [People's Liberation Army] is building new air and sea nuclear delivery platforms.

General Cotton, you recently sent a letter to Congress reporting that while China has fewer warheads than the United States, it now has more launch platforms than we do. I would like to know the implications of this assessment.

Beijing's new land-based silos, along with the completion of its nuclear triad, and nuclear command and control and communications, or NC3, fundamentally changed the nature of its nuclear doctrine. This shift may have significant impacts on stability in the Indo-Pacific region and should inform how we design our own nuclear strategy to protect the Nation and maintain our extended deterrence and our commitment to our allies.

The United States is well under way in its cycle of nuclear modernization, a once in a generation effort to renew the aging legs of our nuclear triad. Each leg is a major defense acquisition program, and I understand that the Air Force and Navy are encountering workforce and supply chain problems similar to other Department programs. General Cotton, I would like to know how these delays could impact your planning efforts.

Further, I would ask for your views on the efforts of the National Nuclear Security Administration, or NNSA, to meet Defense Department requirements. In prior modernization cycles, the NNSA could rely on existing infrastructure, particularly with respect to uranium and plutonium, to meet these requirements.

That is not the case today, as the NNSA has to recapitalize the very production facilities needed to provide finished nuclear parts. It is essential that we understand what impacts this may have on your operations.

In the space domain, we are quickly gaining a clearer picture of the threats we face. With respect to Ukraine, we have learned a number of important lessons. For example, GPS [Global Positioning System] jamming is now commonplace and commercial space systems are regarded as enemy combatants by Russia. There are en-

tire regions of Ukraine that are GPS denied, and the conflict is creating unexpected consequences for commercial space operations.

General Dickinson, I hope you will share your perspective on using commercial space assets in a conflict as our current policy is ambiguous. Space Command's ability to want Strategic Command, Northern Command, and U.S. senior leadership of a missile attack on the Homeland remains critically important.

The Committee would appreciate an update on the progress SPACECOM has made in assuming control of the missile warning and NC3 functions it inherited from STRATCOM. Are there gaps in and how can these gaps be addressed? Finally, SPACECOM is responsible for integrating both ground and space sensors to achieve better space situational awareness, essentially becoming the Defense Department's sensor command.

General Dickinson, I ask that you share your vision for how to integrate this constellation of sensors which ranges from ground and sea radars to satellite sensors so that it provides the best support to the Force.

Thank you again to our witnesses for appearing today. I look forward to your testimonies. I would note for my colleagues that there will be a classified hearing immediately following this session in SVC–217 to continue our discussion. With that, let me recognize the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Chairman Reed, and thank you to our witnesses. I can think of no issue that demands the Committee's attention more than the nuclear threat posed by China and Russia. Despite its significant setbacks in Ukraine, Russia remains a major nuclear threat to the United States.

Moscow possesses a larger and more modern nuclear arsenal than we do. It can also build new and numerous additional nuclear weapons in short order. Russia has developed new nuclear weapons unlike anything in the United States inventory, including nuclear powered transoceanic, autonomous torpedoes and intercontinental cruise missiles.

These are weapons for which we have no defense. The story out of China is also very troubling. Beijing is modernizing and expanding its nuclear force at breakneck speed. It will likely outpace the United States in the early 2030's. The past 18-month period has given us a good idea of China's remarkable growth.

Over that time, China's nuclear arsenal has doubled in size. The Chinese have blown a missile that can drop nuclear warheads from orbit anywhere on earth with virtually no notice. China has become the third country to develop a strategic triad of nuclear missiles, bombers, and submarines.

General Cotton recently notified Congress that China now possesses more ICBM [intercontinental ballistic missiles] launchers than the United States. Just last week, news reports exposed Beijing's purchase of 28 tons of Russian uranium, which could be used to further its weapons production. In the space domain, China and Russia are openly developing and testing counterspace capabilities.

Each country has dangerously taken out satellite]s in orbit, creating thousands of pieces of debris and space junk, endangering

hundreds of other satellites, and frankly, those brazen and irresponsible acts of aggression only scratch the surface of their real capabilities.

Given these great threat conditions, one would expect a sense of urgency on the part of our Government, a fundamental reassessment of our assumptions and realignment of our resources. Instead, the Departments of Defense and Energy repeatedly delay programs to modernize our nuclear deterrence and restore the basic industrial capabilities we use to produce nuclear weapons.

The Administration downplays the reality that space is a war fighting domain. Space contains real threats and adversaries, and it needs military solutions. Refusing to acknowledge and prepare affects our country's ability to be ready for a future war that would extend into space.

This Administration needs plans and postures to account for the worsening security system. If we are to prevail in long term competition with China and Russia, we need to commit today to a program of sustained innovation and investment. This morning, we will begin to receive budget summaries, including the President's Budget Request.

This request once again is likely not to keep pace with inflation, and we already know of several significant shortfalls in naval shipbuilding, munitions, the key investments in the Western Pacific for example, to name a few.

I would look forward to working with my colleagues here in Congress on both sides of the aisle to build a bipartisan, adequate, strategy-based budget for the coming year. About the sense of urgency, I would like to hear from our witnesses about how this Committee can help create a sense of urgency to act, to accelerate the modernization of our strategic arsenal and adapt our forces. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker. General Cotton, please.

STATEMENT OF GENERAL ANTHONY J. COTTON, USAF
COMMANDER, UNITED STATES STRATEGIC COMMAND

General COTTON. Good morning, Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee.

I appreciate this opportunity to testify next to General Dickinson, and I thank the Committee and Congress for its support to national defense. First, I along with my Command Senior Enlisted Leader, Sergeant Major Howard Kramer, want to assure you and the American people that the United States Strategic Command is ready today.

Ready to defend our Nation, defend our allies, and respond decisively if called upon. The men and women of United States Strategic Command are the foundation for the capabilities that underpin our Nation's strategic deterrence. They do this in an environment that continues to grow complex and challenging.

Russia's invasion of a sovereign Ukraine is an attempt to undermine the rules based international order by conventional forces backed with nuclear saber rattling. How this conflict unfolds and eventually ends will shape the strategic environment for decades to come.

We see the People's Republic of China (PRC) continuing to rapidly expand its nuclear capabilities. The PRC's actions are wholly inconsistent with the long-professed policy of minimal deterrence. I did report to Congress in January that the number of land-based intercontinental ballistic missile launchers in the PRC now exceeds those that we have in the United States.

Along with its significant modernization and expansion of conventional capabilities, the PRC is also investing heavily in lower yield precision systems with theater ranges, a new generation of mobile missiles, and hypersonic glide vehicles with fractional over bombardment systems.

The PRC nuclear modernization, provided with an alarming number of offensive options that can negatively shape the environment before and during a crisis or conflict. North Korea continues to be a rogue actor and poses a threat to the United States and our allies. North Korea conducted an unprecedented number of missile launches in 2022, and its new intercontinental ballistic missile, referred to as the KN–28, highlight that the security challenge continues to grow.

We are meeting today's challenges with integrated deterrence. It is the cornerstone of the National Defense Strategy (NDS). Our unmatched network of allies is a key component of integrated deterrence, and these relationships are underpinned by our extended deterrence commitments. These commitments are enabled by a safe, secure, effective, and credible nuclear deterrent.

The credibility of our extended deterrent commitments is not only part of the Nation's iron-clad commitment to our allies but is also essential in limiting proliferation of nuclear weapons. The nation's nuclear forces underpin integrated deterrence and enables the U.S., our allies, and our partners to confront aggressive and coercive behavior.

To ensure our continue ability to serve as the bedrock of integrated deterrence, we are recapitalizing every leg of the nuclear triad and the nuclear command, control, and communication systems. We are also addressing electromagnetic spectrum operations holistically and developing concepts to deploy conventional hypersonic strike capabilities.

We will need to continue partnering with industry to ensure flexibility, responsiveness, and capacity during recapitalization and modernization to ensure we can sustain our current systems while the new ones are being delivered.

Finally, I will end as I started, our people are the foundation of every capability that enables strategic deterrence. I am proud to serve alongside the soldiers, sailors, airmen, marines, and guardians, and civilians that make up U.S. Strategic Command. Thank you again for this honor, and I look forward to your questions.

[The prepared statement of General Anthony J. Cotton follows:]

PREPARED STATEMENT BY GENERAL ANTHONY J. COTTON

INTRODUCTION

United States Strategic Command (USSTRATCOM) is a global warfighting combatant command (CCMD). Our mission is to deter strategic attack and employ forces, as directed, to guarantee the security of our Nation and our Allies. Our people are the greatest enablers of this security, and it is my privilege to lead the sol-

diers, sailors, marines, airmen, guardians, and civilians who dedicate themselves to this mission 24 hours a day, 365 days a year. I want to thank the President, Secretary of Defense, and Chairman of the Joint Chiefs for their confidence in me to lead this command. I also thank Congress for your continued support to ensure that USSTRATCOM has the resources necessary to meet our critically important mission. We remain ready to face the complex deterrence challenges of today's global security environment while positioning the command for the future.

USSTRATCOM is responsible for strategic deterrence; nuclear operations; nuclear command, control, and communications (NC3) enterprise operations; joint electromagnetic spectrum (EMS) operations (JEMSO); global strike; missile defense; analysis and targeting; and missile threat assessment. These responsibilities will grow in prominence as we face the challenges identified in the National Defense Strategy (NDS): strategic competition with the People's Republic of China (PRC), Russia as an acute threat, threats to the United States Homeland, and complex escalation dynamics.

To meet these rapidly evolving challenges, the United States must provide a combat ready force able to deter any adversary, and if necessary, fight and win. While the command stands ready to execute its mission today, we need consistent, stable, and on-time congressional funding to sustain and modernize the nuclear enterprise. This will ensure our ability to pace current and future threats by providing capabilities to deter through the spectrum of conflict. Over the past decade, a cycle of continuing resolutions and late appropriations has hindered the Department's acquisitions, operations, and maintenance. As both the Chief of Staff of the Air Force and Chief of Naval Operations testified in 2022, continuing resolutions and late appropriations cost us time and money, causing potential delays in modernizing the nuclear enterprise and Joint Force.

The nuclear triad is the foundation of U.S. national security, and I thank Congress for fully funding our modernization programs: Sentinel intercontinental ballistic missile (ICBM), *Columbia*-class submarine, D5 submarine launched ballistic missile (SLBM) second life extension and modernization (D5 LE2), B–21 Raider bomber, and Long Range Standoff (LRSO) cruise missile. In addition to these systems, the U.S. must continue investment in sustainment of current systems and critical capabilities that support and complement the nuclear triad. These include nuclear weapons infrastructure overseen by the National Nuclear Security Administration (NNSA), NC3, nuclear security, and long-range conventional strike capabilities such as hypersonic weapons (HSWs). Alongside capability is capacity. We must expand our critical munitions stockpiles while working with manufacturers to make the defense industrial base as responsive as possible.

OUR PEOPLE

The greatest strength of USSTRATCOM is its people. Like the rest of the Department, our workforce is aging out and we are in a fierce competition for talent. My goal is to help personnel currently assigned to the command maximize their potential while continuing to attract capable individuals. USSTRATCOM is committed to deliberate development opportunities and career broadening. These opportunities include strategic deterrence education programs, and a strategic leader fellowship program. Additionally, we are committed to maintaining an inclusive environment where people are valued as well as fostering quality of life improvements for the military and civilian workforce. Finally, the need to fully recapitalize our nuclear enterprise has an important people component—as our systems continue to age, their increasing maintenance requirements fall squarely on our dedicated team of servicemembers and civilians.

We have an amazing team serving both in and out of uniform to protect our country. Investing in people yields dividends for national security. There are serious challenges with the production capacity of the defense industrial base, and to help mitigate this I encourage Congress to look at ways to increase the number of STEM (science, technology, engineering, and mathematics) and skilled trade workers throughout the U.S. workforce.

GLOBAL SECURITY ENVIRONMENT

For the first time in our country's history, the United States faces two major nuclear powers, the PRC and the Russian Federation, which have the capability to employ nuclear coercion as a way to achieve their national objectives. Russia presents a growing nuclear deterrence challenge centered on its potential perception that the threshold for regional nuclear employment is lower with low-yield systems. The PRC is also developing capabilities that would present a similar deterrence challenge, and it is unconstrained by any nuclear arms control treaty limitations. Additionally,

the activities of the Democratic People's Republic of Korea (DPRK) are regionally destabilizing and have global implications.

In the longer term, emerging technologies—including HSWs, fractional orbital bombardment (FOB) capabilities, anti-satellite capabilities, artificial intelligence (AI), autonomous systems, advanced computing, quantum information sciences, biotechnology, and advanced materials and manufacturing—pose a growing challenge to our national defense.

Meeting these near-term and longer-term threats requires a globally focused national strategy and commitment that spans decades.

People's Republic of China

As the NDS states, the PRC is our most consequential strategic competitor and pacing challenge; its significant nuclear force expansion reflects an increasing assertiveness and the capability to employ nuclear coercion. The PRC's rapid qualitative and quantitative expansion of military capabilities enables a shift in its strategy and requires the Department of Defense (DOD) to make immediate and significant alterations to plans and capabilities. The PRC is aggressively pursuing their global ambitions through a national strategy of "Military-Civil Fusion"—a comprehensive focus on advancing civilian research to develop and then apply new technologies toward military and defense innovations. For example, the PRC's development and construction of fast breeder reactors and reprocessing facilities allows the swift expansion of its warhead manufacturing capacity. The PRC believes that its robust nuclear weapons program is essential to counter the U.S. in the near future in order to achieve what its leaders have deemed "great power status."

Correspondingly, the PRC seeks to match, or in some areas surpass, quantitative and qualitative parity with the United States in terms of nuclear weapons. The PRC's nuclear capabilities already exceed those needed for its long-professed policy of "minimum deterrence," but PRC capabilities continue to grow at an alarming rate. Additionally, the PRC is making substantial investments to expand its inventory of land-, sea-, and air-based nuclear delivery platforms and is constructing the infrastructure necessary to support the significant expansion of its nuclear forces. Notably, the PRC is developing capabilities inconsistent with its historical minimum deterrence posture.

Within the past 3 years, the PRC has built hundreds of new ICBM silos, further indicating a move away from a minimum deterrence posture. The PRC's three new missile fields collectively provide it with more than 300 silos. Each of these silos can be equipped with the CSS–10 Mod 2 ICBM, which is capable of ranging the continental United States (CONUS) with multiple independently targetable reentry vehicles (MIRVs). Additionally, the PRC maintains other ICBMs, some of which are road-mobile. Unconstrained by arms control treaty limitations, the PRC is fielding a new generation of mobile missiles, with MIRV and penetration aid capabilities. The PRC's most modern road-mobile and MIRV-capable ICBM advanced from concept to deployed system in only a few years. The PRC is now projected to have over 1,000 warheads by the end of this decade. In accordance with statutory requirements, I recently reported to Congress that the number of land-based fixed and mobile ICBM launchers in the PRC now exceeds the number of ICBM launchers in the U.S.

Just like the ground leg, the air and sea legs of the PRC's nuclear triad are now armed with newly developed weapon systems. The air-refuelable H–6N bomber is armed with new nuclear-capable cruise missiles and air-launched ballistic missiles that may be nuclear capable, and the PRC is building a new stealth strategic bomber with global reach. The PRC's six JIN-class ballistic missile submarines (SSBNs) are now being equipped with the new third-generation JL–3 SLBM capable of ranging CONUS. PRC strategists also highlight their country's perceived need for lower-yield nuclear weapons. Significantly, the PRC's investment in lower-yield, precision systems with theater ranges points to investment in asymmetric capabilities that could be employed coercively during an escalation crisis, similar to Russia's irresponsible nuclear saber-rattling during its war against Ukraine. This presents the United States with a deterrence challenge that must be addressed with a range of U.S. capabilities, both conventional and nuclear. The PRC currently has an arsenal of approximately 1,000 medium- and intermediate-range ballistic missiles, many of which are dual capable (i.e., able to be armed by either conventional or nuclear warheads) and able to inflict significant damage to United States, Allied, and partner forces in the Indo-Pacific.

The PRC's 2021 test of a hypersonic glide vehicle (HGV) with FOB capability exemplifies its pursuit of weapons systems with implications for strategic stability. FOB systems use a low earth orbit to deliver a warhead most of the way to its target destination, deorbiting just before reaching its target. These systems represent

a more challenging threat because their non-ballistic trajectories complicate missile detection and tracking, and degrade the target country's ability to characterize the scale of an attack.

The trajectory of the PRC's nuclear advancements points to a large, diverse nuclear arsenal with a first-strike offensive capability and a high degree of survivability, reliability, and effectiveness. When considered in the context of its heavy investment in NC3, as well as increased readiness, the PRC's nuclear modernization highlights emergent capabilities that could provide it with a spectrum of first-strike offensive options before and during a crisis or conventional conflict. The PRC may believe that nuclear weapons represent a key component of its counter-intervention strategy and could use these weapons coercively against our Nation, Allies, or partners.

Russian Federation

Russia's brutal invasion of Ukraine is a violent attempt at territorial seizure that aims to undermine the rules-based international order with conventional force backed by nuclear coercion. Russia's nuclear rhetoric is underpinned by its nuclear arsenal, which is the largest and most diverse in the world. Russia continues to flight test its new heavy ICBM, the SS-X–29 Sarmat, with plans to begin fielding it in 2023 and eventually replace the legacy SS–18 heavy ICBM. With Sarmat, Russia joins the PRC in developing ICBMs that use at least partial orbital trajectories. Russia also continues to field new *Dolgorukiy*-class SSBNs, armed with the new SS-N–32 Bulava SLBM, and *Severodvinsk*-class nuclear-powered cruise missile submarines.

Russia's significant investment in launch platforms and systems not subject to the New START Treaty (NST) provides it with increasingly diverse and flexible nuclear deterrence options. Russia now fields nuclear-capable hypersonic systems such as the Avangard HGV, the Tsirkon land-attack cruise missile, and the Kinzhal air-launched ballistic missile, the last of which Russia has employed in Ukraine with conventional warheads. Russia also has a stockpile of approximately 2,000 theater nuclear weapons that does not fall under the limits established by the NST.

The continued degradation of Russian conventional capability in Ukraine will likely increase Russia's reliance on its nuclear arsenal. This phenomenon, along with the PRC's rapid breakout and development of capabilities that present a similar deterrence challenge, underscores the increased perceived utility of nuclear weapons in the contemporary environment. The United States faces a complex, multipolar nuclear world that requires concerted U.S. effort to address these deterrence challenges, strengthen assurance to our allies and partners, and prevent proliferation.

Democratic People's Republic of Korea

The DPRK, an increasing security challenge to the United States and our allies, is capable of striking regional allies with nuclear weapons and is an emerging threat to CONUS. The DPRK's advancing missile and nuclear programs are destabilizing and highlight the critical role of USSTRATCOM's deterrence and assurance mission.

The DPRK's nuclear-capable ballistic missile research and development has continued with an unprecedented number of missile launches in 2022. The DPRK's continued development of ICBMs, SLBMs, and Intermediate Range Ballistic Missiles demonstrates its intention to bolster its nuclear delivery capability. The DPRK is also developing new capabilities such as HSWs and MIRVs, and its new Hwasong–17 ICBM has the potential to reach CONUS. The DPRK is also diversifying launch platforms, and has tested rail, submarine, and ground-mobile missiles. These advancing nuclear capabilities place pressure on allied faith in our extended deterrence commitments. The DPRK illustrates that nuclear and weapons of mass destruction threats to the United States and our allies are not limited to the PRC and Russia.

INTEGRATED DETERRENCE

We are addressing these threats through integrated deterrence. As the NDS articulates, integrated deterrence spans all domains and capabilities and is backstopped by a safe, secure, and effective nuclear deterrent. USSTRATCOM's role, however, is not limited to nuclear plans and operations. USSTRATCOM's mission, to deter strategic attack—not just nuclear attack—against our Nation and allies, includes many components. Correspondingly, our new concepts and plans must account for nuclear, long-range conventional, space, electromagnetic spectrum, and cyberspace capabilities. Crucially, DOD's plans must integrate all capabilities across the spectrum of conflict.

USSTRATCOM also plays a vital role in assuring allies and partners. The North Atlantic Treaty Organization (NATO) calls the strategic forces of the Alliance, particularly those provided by the U.S., "the supreme guarantee of the Alliance's security." In the Indo-Pacific, our allies similarly acknowledge the importance of our strategic deterrent. Examples of operations and activities include U.S. bomber operations with allies, SSBN port visits, and exercises such as Steadfast Noon, NATO's annual nuclear exercise.

The war in Ukraine, combined with the PRC's rapid nuclear arsenal expansion and the DPRK's growing nuclear capabilities, will likely make longstanding United States nonproliferation goals more challenging. For 70 years, U.S. extended deterrence commitments have functioned as one of the most important factors limiting the proliferation of nuclear weapons. In the current environment, the credibility of U.S. extended deterrence commitments is even more vital to nuclear nonproliferation goals. Critically, there must be no perception of a threshold below which an adversary may believe it could employ nuclear weapons, such as non-treaty accountable, lower-yield, theater weapons, to obtain a benefit.

WHAT USSTRATCOM NEEDS TO ACCOMPLISH ITS MISSION

I urge Congress, the Department, and the services to sustain their decades-long support for critical national security capabilities, including the infrastructure needed to support these programs. The recapitalization of our triad is a once in every-other-generation event that will ensure we have capable forces into the 2080's to defend the U.S. Homeland and deter strategic attack globally. I am closely monitoring the transition of our major programs: *Ohio* to *Columbia,* D5 LE to D5 LE2, Minuteman III to Sentinel, B–2 to B–21, Air Launched Cruise Missile (ALCM) to LRSO, and modernization of NC3 capabilities. It is essential to sustain our current platforms until new systems are at full operational capability. Correspondingly, we are coordinating with the services on efforts to mitigate operational impacts should delays occur in the delivery timeline for new capabilities.

NUCLEAR COMMAND, CONTROL, AND COMMUNICATIONS (NC3)

The NC3 enterprise is essential to the President's ability to command and control the Nation's nuclear forces. Acknowledgement of this vital mission and the unique challenges facing NC3 modernization were the impetus behind the Secretary of Defense's establishment of my role as the DOD NC3 Enterprise Lead in 2018. With these responsibilities and authorities, we are taking a holistic enterprise approach to develop and deliver the next generation of NC3—a flexible, resilient, and assured architecture spanning all domains and enhancing strategic deterrence.

NC3 Next Generation / Modernization

The modernization of the NC3 enterprise underpins the nuclear triad and sustains assured command and control capabilities in the evolving threat environment. We are partnering with NC3 stakeholders in the Office of the Secretary of Defense and levying requirements on the services to modernize all NC3 capability areas, integrating global nuclear forces with the means to provide strategic deterrence.

In the next 5 years, we will transition from Milstar to the Advanced Extremely High Frequency satellite constellation, gaining greater capacity, survivable worldwide NC3 reach, and the ability to provide direction to our forces in degraded environments. Our national leadership conferencing, currently using a voice-only legacy technology, will transition to voice and video displays. In our warning layer, we are moving away from the Defense Support Program and toward the Space Based Infrared System to maximize warning time. Efforts are already underway on our submarines, E–6B aircraft, and bombers to replace previous generation radios with improved systems that are more resilient to jamming and other electromagnetic effects.

In the next 10 years, the launch and use of Next Generation Overhead Persistent Infrared geosynchronous and polar satellites will replace legacy systems with a space-based missile warning constellation to detect and track threats around the globe. The Space Development Agency's Proliferated Warfighting Space Architecture is aimed at building a constellation of satellites in low and medium earth orbit that can monitor maneuvering hypersonic missiles flying below the range of today's ballistic missile detection satellites and above the radar of terminal-phase targeting systems. These satellites will complement other efforts to detect and track maneuvering hypersonic missiles that are difficult targets for current missile warning capabilities. Finally, we will use polar satellite communications capability with the Enhanced Polar System Recapitalization program to provide message relay. Our submarines, E–6B aircraft, bombers, and missile fields will receive communication

systems that increase survivability of weapon systems in a crisis situation. We are focused on achieving our vision—a modernized NC3 enterprise that remains resilient, reliable, and available at all times and under the worst conditions.

NC3 Cybersecurity and Technological Improvements

We have confidence in our ability to protect, defend, and execute the nuclear deterrent mission. The resilience and redundancies of the systems comprising the Nuclear Command and Control System, combined with ongoing cybersecurity enhancements, ensure our ability to respond under adverse cyber conditions.

E–4B Nightwatch

The E–4B Nightwatch aircraft serves as the National Airborne Operations Center and is a key component of the National Military Command System for the President, Secretary of Defense, and Joint Chiefs of Staff. The E–4B recapitalization program—the Survivable Airborne Operations Center—will serve as the next generation airborne command center platform. In case of national emergency or destruction of ground command and control centers, the aircraft provides a highly survivable command, control and communications center to direct U.S. forces, execute emergency war orders and coordinate actions by civil authorities. For these reasons, we must continue to develop and deliver this platform on time to prevent any capability gaps associated with this important national asset.

E–6B Mercury

The E–6B Mercury accomplishes two missions: Emergency Action Message (EAM) relay to all legs of the nuclear triad (Take Charge and Move Out/TACAMO) and an alternate USSTRATCOM command center providing EAM origination and ICBM secondary launch capability (Looking Glass). E-XX is the follow-on platform to the E–6B airframe and will execute the TACAMO mission only. In coordination with the Office of the Undersecretary of Defense for Acquisition and Sustainment and the Joint Staff, USSTRATCOM and the NC3 Enterprise Center are conducting an evaluation of alternatives (EOA) to consider all missions and platforms to deliver the Looking Glass capabilities currently performed by the E–6B. Recommendations from the EOA should be available by mid-summer. We must complete recapitalization by the E–6B's projected end of service life in fiscal year 2038.

LAND-BASED TRIAD COMPONENT]

The ICBM remains our country's most responsive option for strategic deterrence. The Minuteman III (MMIII) force provides a responsive, highly reliable deterrent capability, supported by a secure command and control system. Geographically dispersed ICBMs deny potential adversaries the possibility of a successful first strike.

MMIII's weapon system replacement, the LGM–35A Sentinel ICBM, will deliver MMIII's key attributes while enhancing platform security, streamlining maintenance processes, and delivering greater operational capability needed for the evolving threat environment. Sentinel's program scope and scale cannot be overstated—our first fully integrated ICBM platform includes the flight system, weapon system, C2, ground launch systems, and facilities. The Sentinel program is pursuing mature, low-risk technologies, design modularity, and an open system architecture using state-of-the-art model-based systems engineering. Sentinel will meet our current needs, while allowing affordable future technology insertion to address emerging threats. USSTRATCOM is actively supporting the Sentinel engineering and manufacturing development process and looks forward to the first Sentinel developmental flight test. Sentinel will deploy with numerous advantages over MMIII and will provide a credible deterrent late into this century. Sentinel fielding is a whole-of-government endeavor. We appreciate continued congressional support, both for Sentinel and sustainment of MMIII.

SEA-BASED TRIAD COMPONENT

The Navy's *Ohio*-class SSBN fleet, equipped with the Trident II D5 SLBM, patrols the world's oceans undetected, providing an assured second strike capability in any scenario. Our SSBN fleet continues to provide a resilient, reliable, and survivable deterrent. However, the life of the *Ohio*-class SSBN fleet has been extended from a planned 30 years to an unprecedented 42 years. The average age of the SSBN fleet is now 32 years. As the hulls continue to age, the *Ohio*-class will face sustainment and readiness challenges until it is replaced by the *Columbia*-class. Similar to Minuteman III, we must maintain *Ohio*-class hulls until the *Columbia* is available. The Navy has already invested in the Integrated Enterprise Plan to shorten construction timelines for *Columbia* hulls two through 12 to meet

USSTRATCOM at-sea requirements. Continued investment in revitalizing our shipbuilding industry is a national security imperative.

The first *Columbia*-class submarine must achieve its initial strategic deterrent patrol in fiscal year 2031 with an initial loadout of D5 LE missiles and a steady transition to the D5 LE2. The program of record delivers at least 12 SSBNs—the absolute minimum required to meet sustainment requirements. A life-of-hull reactor and shorter planned major maintenance periods are intended to deliver greater operational availability. *Columbia* will deliver improved tactical and sonar systems, electric propulsion drive, and advanced hull coating to maintain U.S. undersea dominance.

The Trident II D5 LE2 program will field a modern, reliable, flexible, and effective missile capable of adapting to emerging threats and is required to meet *Columbia*-class SLBM loadout requirements. Stable funding for D5LE2 is vital to maintaining program benchmarks and ensuring a viable SSBN deterrent through the 2080's. *Columbia's* ultimate success depends on a missile that is both capable and flexible.

Additionally, shore infrastructure readiness is fundamental to supporting current *Ohio*-class SSBN and future *Columbia*-class SSBN operations. Provision of military construction and operation & maintenance funding facilitates the Navy's modernization of shore infrastructure supporting the nuclear deterrence mission. One immediate example is the modernization and expansion of the SSBN training and maintenance facilities in Kings Bay. These facilities are critical for maximizing the combat readiness of SSBNs and their crews daily, requiring a commitment to multiple years of funding.

Anti-Submarine Warfare

Anti-submarine warfare threats continue to evolve. The Navy's Integrated Undersea Surveillance System (IUSS) provides vital information concerning adversary submarine and surface ship operations, enabling U.S. forces to maintain favorable tactical and strategic positions while supporting deterrent patrol operations. Surveillance performed by IUSS also provides the theater undersea warfare commander situational awareness required for maritime defense of the Homeland. Advances in adversary submarine stealth underscore the importance of IUSS recapitalization.

Our submarines are formidable weapon systems; however, we must address potential adversaries' anti-submarine warfare advances to maintain an effective and viable SSBN fleet well into the future. Adversary investments in submarine quieting, acoustic arrays, and processing capabilities may challenge our acoustic superiority in the future and consequently, SSBN survivability. Development and employment of advanced sonar sensors, advanced materials science and coatings, and other efforts within the Navy's Acoustic Superiority Program are vital to maintain our undersea advantage.

AIR-BASED TRIAD COMPONENT

The bomber fleet is our most flexible and visible leg of the triad. We are the only country with the capability to provide long-range bombers in support of our allies and partners, enabling the U.S. to signal resolve while providing a flexible option to de-escalate a conflict or crisis. In a force employment model known as the Bomber Task Force (BTF), USSTRATCOM supports global deterrence and assurance objectives. BTFs allow dynamic employment of the Joint Force and clear messaging as potential adversaries watch these missions closely. As bombers conduct missions throughout the globe, they enhance national objectives by demonstrating unity with allies and partners, and testing interoperability. As a complement to the Air Force's Agile Combat Employment (ACE) concept, we must consider increasing forward-based maintenance capability to support persistent, episodic global presence while retaining the ability to increase nuclear readiness posture as needed. As we sustain legacy systems and field new capabilities, it will be important to invest in bomber support forces and infrastructure to adequately sustain flexibility and effective nuclear deterrence posture.

B–52H Sustainment

The B–52H continues on as the workhorse of our bomber fleet. The B–52's longevity is a testament to its engineers and maintenance professionals, but it must be modernized to remain in service into the 2050s. Essential B–52 upgrades include the Commercial Engine Replacement Program (CERP), Radar Modernization Plan, global positioning system military code signal integration, and survivable NC3 communications equipment. These improvements will keep the B–52 flying and able to pace the evolving threat. CERP will replace the B–52's 1960's-era TF–33 engines, which will enable longer unrefueled range, reduce emissions, and address supply chain issues afflicting the legacy engines. The B–52's very low frequency and ad-

vanced extremely high frequency modernization programs will provide mission critical, beyond-line-of-sight connectivity.

B–2 Sustainment

The B–2 fleet remains the world's only low-observable bomber, able to penetrate denied environments while employing a wide variety of munitions against high-value strategic targets. The DOD must protect this unique operational advantage as the Air Force transitions from the B–2 to the B–21 fleet. Successful transition requires full funding for B–2 sustainment and modernization programs until the B–21 completes development and certification for both conventional and nuclear missions, and is fielded in sufficient numbers to preclude any capability gap.

B–21

The B–21 Raider will provide both a conventional and nuclear-capable bomber supporting the triad with strategic and operational flexibility across a wide range of military objectives. The program is on track to meet USSTRATCOM operational requirements, and continues to successfully execute within cost, schedule, and performance goals. The B–21 will be the backbone of our future bomber force, providing a penetrating platform with the range, access, and payload to go anywhere needed in the world. Consistent funding of the Air Force's B–21 program is required to prevent operational shortfalls in the bomber force and ensure delivery of this critical combat capability.

Air-Delivered Weapons

The air-delivered weapons portfolio consists of the ALCM, the B83–1 gravity bomb, and the B61 family of weapons, providing a mix of standoff and direct attack munitions to meet near-term operational requirements. The ALCM provides current stand-off capability to the strategic bomber force, but is reaching its end-of-life. LRSO will replace the ALCM as our country's sole air-delivered standoff nuclear capability. It will provide the President with flexible and scalable options, and is capable of penetrating and surviving against advanced air defenses—a key attribute and important component in USSTRATCOM operational plans. The LRSO is complementary to the ICBM and SSBN recapitalization programs and an important contribution to strategic stability. The B61–12 will soon replace most previous versions of the B61, providing a modernized weapon with greater accuracy and increased flexibility. Finally, USSTRATCOM is actively supporting the National Defense Authorization Act requirement to conduct a study on options to hold at risk hard and deeply buried targets.

Tanker Support

A robust tanker fleet is essential to sustaining global reach for all USSTRATCOM missions. The 65 year-old KC–135 is the backbone of the Air Force's air refueling force but is facing increasing maintenance and sustainment issues. Limited air-refueling aircraft increases bomber response timing and constrains bomber deterrence posture agility. Concurrent mission demands between strategic, theater, and homeland defense require continued tanker modernization and expansion efforts. USSTRATCOM fully endorses and supports the Air Force's effort to modernize and sustain the tanker fleet, including certification of the KC–46 to support the nuclear mission. A conflict with a peer adversary would put previously unseen demands on the tanker force.

WEAPONS INFRASTRUCTURE AND NUCLEAR SECURITY ENTERPRISE (NSE)

Today's nuclear weapon stockpile remains safe, secure, and effective. However, our country has not conducted a large-scale weapons modernization in over 2 decades. Stockpile and infrastructure modernization must ensure our systems are capable of pacing and negating adversary threats to our Nation, Allies, and partners. Over the past 5 years we have made significant investments in the NSE, but most programs take a decade or longer to field a meaningful capability.

The NNSA, as part of and informed by the Nuclear Weapons Council (NWC), has developed a comprehensive plan to put these identified capacities and capabilities in-place. When realized, it will enable our country to sustain and modernize the nuclear weapons stockpile to meet strategic deterrence needs. In the interim, I look forward to working with NNSA and other NWC partners to find the best solutions to mitigate operational risks. I commend Congress for its support of the NNSA's budget for weapons activities for fiscal year 2023. Stockpile and NSE programs can take a decade or more to deliver and will require consistent, uninterrupted funding to provide the needed capacities and capabilities on time to sustain and modernize

the strategic deterrent force. We must continue to look for ways to accelerate our stockpile and NSE modernization and recapitalization programs.

As we shift focus beyond life extension to modernizing existing weapons and fielding new systems, we must overcome challenges that delay program execution. There are many NSE programs with just-in-time schedules or that are late-to-need, including pit production, uranium processing, and radiation case manufacturing. Failure to execute and deliver timely NSE modernization programs results in accumulation of operational risk by requiring the retention of aging weapons and components in the stockpile decades longer than intended. In fiscal year 2022, the NSE took action on a number of issues impacting the readiness and modernization of the nuclear deterrent force. Some areas—for example, the W93, B61–12, and W88 Alt 370—saw progress, while others such as the W80–4 and W87–1 stockpile modernization programs are experiencing milestone delays and increased schedule risk. I look forward to working with NNSA and other NWC partners to improve our rates of success in these latter areas.

Production of essential components is a critical issue. NNSA has identified critical capability gaps affecting components essential for stockpile modernization. It is also vital that the NSE re-establishes a plutonium pit manufacturing capability of no less than 80 pits per year as close to 2030 as possible. Weapon production is a multi-decade task that must address current enterprise limitations as we simultaneously modernize the stockpile, infrastructure, and platforms while sustaining the current force until it can be replaced.

For over a decade, our adversaries have dedicated significant resources to modernizing and expanding their nuclear capabilities. As our systems continue to age, funding a modern stockpile, supporting infrastructure, and a robust science, technology, and engineering base is essential.

NUCLEAR SECURITY

Nuclear security continues to be one of my top priorities; we will commit the resources required to protect our fielded weapons, weapon platforms, and personnel. Adhering to the Nuclear Weapon Security Standard ensures denial of unauthorized access to nuclear weapons and prevents loss of custody. A defense-in-depth strategy starts at every nuclear weapon and builds outward with a cohesive design to deter, detect, delay, deny, and defeat security threats.

MH–139A Grey Wolf Replacement Helicopter

The Joint Force achieved a significant ICBM security milestone with the Air Force's award of a contract to replace the UH–1N helicopter fleet with the new MH–139A "Grey Wolf." The MH–139A offers enhanced speed, range, endurance, payload, and survivability versus the UH–1N. We will continue to work with the Services to deliver this capability.

Countering Small Unmanned Systems

The rapid proliferation and growing technological sophistication of small unmanned systems is an increasing threat to the nuclear enterprise. To counter the threat, the Department continues to field Counter-small Unmanned Aircraft Systems (C-sUAS) capabilities and is refining tactics, techniques, and procedures. Similarly, the advancement of unmanned surface and underwater vehicles may soon emerge as a threat to our SSBNs and supporting infrastructure, requiring a comprehensive force protection system to defend both pier-side and in-transit SSBNs.

Weapon Generation Facility (WGF)

As we modernize nuclear weapons and platforms, the Air Force will replace aging weapon storage areas with new WGFs which are vital to security, sustainment, and fielding of the Sentinel, B–21, and LRSO triad modernization programs, and their associated weapons. The Air Force will conduct weapon maintenance, storage operations, and (as required) weapons generation activities in a single reinforced WGF facility at each strategic base. This will further increase security, recapitalize aging infrastructure, and enhance efficiency throughout the mission. The WGFs are a critical part of the larger nuclear modernization effort and must be fully funded to deliver on time in support of each program of record delivery schedule.

JOINT ELECTROMAGNETIC SPECTRUM OPERATIONS (JEMSO)

Per the Unified Command Plan (UCP), CDRUSSTRATCOM is responsible for advocating for JEMSO and electromagnetic warfare capabilities, providing contingency electronic warfare support to other CCMDs, and supporting CCMD joint training and planning related to controlling the EMS. Potential adversaries understand our dependency upon the EMS and have developed technology to effectively contest our

use of it. Additionally, increased civil and commercial use of spectrum bandwidth significantly congests the EMS and constrains DOD use. Multiple USSTRATCOM assessments have identified JEMSO readiness shortfalls, which are growing. Our adversaries have dramatically increased their offensive and defensive capabilities in recent years; the DOD must similarly improve our ability to operate in a degraded electromagnetic warfare environment.

We must continue to pursue a DOD-wide effort to achieve EMS superiority and mission success. To support the goals of the DOD EMS Superiority Strategy, USSTRATCOM is executing 12 assigned tasks, including establishing an organization, led by a 2-star, called the Joint Electromagnetic Spectrum Operations Center (JEC). The JEC will lead execution of the 11 other USSTRATCOM assigned DOD EMS Superiority Strategy tasks. Additionally, USSTRATCOM has led development of JEMSO cells at other CCMDs to enable these functions. We are also working with the DOD Chief Information Officer to develop a software system for use by CCMD JEMSO cells in planning, coordinating, and controlling the EMS. Following multiple assessments from Northern Edge—USINDOPACOM's tier 1 exercise—USSTRATCOM is pursuing accreditation authorities for Joint Force EMSO readiness that will help close capability gaps. USSTRATCOM is also establishing an EMSO training and education capability to coordinate DOD EMS joint training, streamline training processes, and promote standardization.

MISSILE DEFENSE

Missile defense capabilities are a key part of integrated deterrence to deny our potential adversaries coercive abilities or the benefit of attacks against the Homeland, Allies, and partners. The proliferation of missile technology and employment techniques designed to circumvent missile defenses demands a Department-wide missile defeat approach with continued investment in systems integration and collaboration with Allies and partners. This comprehensive approach uses the entire range of available activities to counter the development, acquisition, proliferation, and use of adversary offensive missiles of all types, as well as limiting damage from such use. An important element of this approach is integration of space-and terrestrial-based sensors for warning, attribution, and tracking of ballistic, maneuvering, hypersonic, cruise missile, and UAS threats to optimize the effectiveness of our limited inventory of kinetic interceptors. A comprehensive sensor architecture that gives commanders and civilian leaders situational awareness over all threats and incursions to our air and space domains is imperative.

Cruise missiles continue to offer adversaries ways to generate strategic effects. USSTRATCOM is working closely with NORAD/USNORTHCOM, USINDOPACOM, and USSPACECOM to explore capabilities to enhance homeland defense and deter attack. Additionally, the Missile Defense Agency, Services, and CCMDs continue to develop and field defenses that protect the Homeland and deployed forces while reassuring and defending our Allies and partners. We are committed to improving the Ground-based Midcourse Defense system and developing the Next-Generation Interceptor to augment and potentially replace the Ground Based Interceptor.

HYPERSONIC WEAPONS

Long-range conventional hypersonic weapons will provide senior leadership additional strike options to hold distant and/or defended high-value, time-sensitive targets at risk without crossing the nuclear threshold. Conventional HSWs ensure long-range power projection in contested environments and enables more efficient and effective application of the nuclear force. While HSWs are not a replacement for nuclear weapons, these systems show promise as the conventional complement that the nuclear force needs to expand integrated deterrence options.

The ability to quickly strike defended targets at long range is an important capability that the Joint Force and multiple CCMDs require. Rapid development and fielding of conventional HSWs is a top USSTRATCOM priority. The goal of fielding the first offensive hypersonic strike system is on the horizon with the Army scheduled to field a Long-Range Hypersonic Weapon battery in late 2023, followed by the Navy Conventional Prompt Strike program beginning in the mid–2020s. The Air Force has demonstrated successes in the Air-launched Rapid Response Weapon program and hypersonic cruise missile technology pathfinder efforts. A robust scientific and industrial base is vital to ensure that HSWs are fielded in sufficient quantities. Additionally, a program for continuous technological improvement is important to meet the evolving security environment over the coming decades.

USSTRATCOM is committed to ensuring HSWs are ready to employ on day one of fielding as these weapons directly contribute to USSTRATCOM's UCP-assigned strategic deterrence and global strike responsibilities. To operationalize these new

capabilities in the near term, we are working across the Department to develop a concept of operation for HSW support to integrated deterrence. USSTRATCOM is working through policy, planning, and C2 processes, and—in conjunction with the services and other CCMDs—is testing HSWs through a rigorous exercise program. Hypersonic weapons will have an immediate impact to operational plans by deterring and holding adversaries at risk while providing the Nation with credible, strategic, non-nuclear response options when faced with armed conflict. Additionally, HSW-related agreements with allies will further reinforce collective security, promote interoperability, and facilitate optimal deployment of these capabilities.

WARGAMES AND EXERCISES

Wargames, exercises, and rehearsals of concept continue to refine how we demonstrate joint capacity, capability, interoperability, and integrated deterrence across the globe. Last year, USSTRATCOM conducted over 380 NC3-focused exercises and wargame events focused on coordination with national-level civilian and military leadership, other CCMDs, allies, components, and the interagency. These events integrated advanced weapons, tested new capabilities, and improved interoperability while providing the opportunity to assess application of future force concepts.

DEFENSE INDUSTRIAL BASE

Across America, industries—including but not limited to the defense industry—are grappling with capacity issues stemming from shortages of skilled labor, global supply chain delays, inflation, and a shortage of manufacturing facilities. This, combined with a smaller specialized workforce, transition to offshore supply chains, the need to produce quickly in volume, and costs associated with modern technologies, creates additional program vulnerabilities. These program risks are simple: cost and schedule.

I applaud Congress for its work in attempting to mitigate these challenges with the defense industrial base, both in the near term and longer term. Congress, DOD, and industry must find ways to achieve requirements despite current challenges. As Undersecretary of Defense for Acquisition and Sustainment William LaPlante has said, "production is deterrence." Congress's efforts to on-shore critical components with national security implications, its attention to revitalization of the shipbuilding industry, and investment in infrastructure are all welcome developments. DOD and industry should deepen an already strong partnership. For example, the Department, through its Industrial Base Analysis and Sustainment program, established the National Imperative for Industrial Skills to invest in industrial workforce development needs. We should also design contracts, especially with large programs, to ensure industry accountability for performance, schedule, and cost, with shared risk for both DOD and industry. The B–21 program is an example of effective contract structuring which incentivizes industry to partner with government to identify, incentivize, and mitigate risks early to achieve mutually beneficial outcomes. For items such as critical munitions, we can speed production by taking advantage of new authorities such as multiyear procurement contracts. As Dr. LaPlante has noted, co-production agreements with Allies and partners are part of integrated deterrence. In the longer term, I encourage further work with the services to continue to expand industry's capability, capacity, flexibility, and responsiveness.

CONCLUSION

The cornerstone of our national defense remains deterrence, and we will continue USSTRATCOM's vital work during turbulent times. The post-cold war era is over and a competition is underway among major powers to shape the next chapter. In this environment, USSTRATCOM stands ready to face complex challenges in today's global strategic environment while positioning for the future. I am proud to lead an elite team that stands ready for a new era of strategic competition. Together with our people, capabilities, allies, and partners, there is nothing that we cannot accomplish.

Chairman REED. Thank you, General Cotton. General Dickinson, please.

STATEMENT OF GENERAL JAMES H. DICKINSON, USA COMMANDER, UNITED STATES SPACE COMMAND

General DICKINSON. Thank you, Chairman Reed and Ranking Member Wicker. Good morning, ladies and gentlemen of the Com-

mittee. It remains my distinct honor to represent the 18,000 military servicemen and women, civilians and families of United States Space Command, who are serving our great Nation around the world today.

Thank you for this opportunity to testify before this Committee. I am proud to lead such a talented and patriotic group of joint space professionals. Their expertise, diversity, and creativity underpin our strength and effectiveness. Of all the elements of military space power, our most valued asset is and always will be our great people.

My provisional headquarters achieved initial operational capability in just 2 years and we will reach full operational capability through the disciplined initiative of our great people. Spacepower enables our way of life and is a critical component of our national security.

I thank Congress for its support to advance America's primacy in space. We must maintain our position of advantage in the space domain and ensure it remains sustainable, safe, stable, and secure for all.

The Joint Force relies on space-based capabilities to project and employee power. China and Russia consider this dependency a soft underbelly and seek to exploit it. They intend to limit our access to space during crisis and conflict, and they are fielding capabilities to that effect.

Our strategic competitors' irresponsible actions have transformed space into a highly contested domain. We must prevent today's strategic competition from growing into a conflict in space. We achieve this by deterring aggression, defending national interests, and if necessary, prevailing in any domain.

U.S. Space Command contributes to integrated deterrence by preserving freedom of action in space and by providing critical support to the rest of the Joint Force. Our mission spans the spectrum of conflict and in every domain. For example, we are creating concepts to further integrate space, cyber, and special operations to generate asymmetrical advantages around the world.

Additionally, our Protect and Defend Mission involves all three segments of the space architecture, the ground link and space vehicle, an approach that requires and demands all domain solutions. So, my command's planning horizon is near term. We must be ready to fight today. The threat will not wait.

To this end, we are leveraging the Joint Force, our allies and partners to integrate and maximize the capabilities that we have today. At the same time, we look forward to the capabilities the services are developing for the future fight. As we observe in Ukraine, commercial space assets are a significant force multiplier.

For years, our commercial mission partners have augmented our satellite communications and provide enhancements to our Space Domain Awareness Sensor Network. Commercial integration is absolutely critical to our mission success. Today's hearing will emphasize the United States' resolve to maintain our leadership and position of advantage in the space domain.

But before I address the Committee's questions, I want to reiterate and emphasize to the American people my unwavering pledge

that U.S. Space Command will ensure that there is never a day without space. Thank you.

[The prepared statement of General James H. Dickinson follows:]

PREPARED STATEMENT BY GENERAL JAMES H. DICKINSON

INTRODUCTION

On behalf of the 18,000 men and women of the 11th combatant command, U.S. Space Command, it is my honor and pleasure to testify before the Committee. Our team is operating around the world providing satellite communication, space domain awareness, offensive and defensive space control effects, and positioning, navigation, and timing (PNT) services 24 hours a day, 7 days a week, 365 days per year. Space is fundamental to all joint military operations as outlined in the National Defense Strategy. It is also critical to our way of life enabling modern banking transactions, navigation, communication and so many other capabilities vital to our society and economy. Space touches our lives every day.

As the complexity of this domain grows, we must grow capability to provide the President and Secretary of Defense with options to deliver operational and strategic effects to achieve national objectives. Today, access to space is increasingly contested and congested. U.S. adversaries are developing, testing, demonstrating, and fielding a wide range of counterspace capabilities to degrade or deny the ability for the U.S. military to leverage critical space-based services. As of this year there are 8,225 satellites in low Earth orbit and nearly 1,000 satellites in geosynchronous Earth orbit (GEO).

My Command Strategy focuses on 3 areas to address the contested and congested environment: Strengthening Relationships and Attracting New Partners; Integrating Commercial, Interagency, and Academic Organizations; and, Building and Maintaining Competitive Advantage. The Command's disciplined focus on these areas has built irreversible momentum toward full operational capability and will ensure we deliver on our promise that there will never be a day without space.

CHALLENGES IN SPACE

Challenges to a safe, secure, stable, and sustainable space domain are increasing. Both the People's Republic of China (PRC) and the Russian Federation are fielding capabilities that aim to hold United States, Allied, and partner space assets at risk. North Korea and Iran are in the early stages of developing their space enterprise.

The PRC conducted the first fractional orbital launch of an ICBM with a hypersonic glide vehicle in mid–2021. This system could enable the PRC to rapidly launch weapons that challenge missile warning and missile defense architectures.

Russia's November 15, 2021 destructive anti-satellite (ASAT) missile test and its subsequent acts in connection with its further invasion of Ukraine threaten to foreshadow the future of warfare and national security. Assured space-based assets, commercial space capabilities, and space domain awareness are imperative to global security. Russian interference with space-based capabilities during its invasion of Ukraine and continued threats to carry out "retaliation" against commercial satellite infrastructure demonstrate a willingness to employ counterspace capabilities to gain military advantage. Russia's cyber attacks in late February 2022 against commercial satellite communications networks to disrupt Ukrainian command and control during the invasion and spillover impacts into other European countries—highlighted an important nexus between government and private sector equities in space.

These events exemplify the PRC and Russian commitment to fielding diverse counterspace capabilities across multiple domains including cyberspace, electronic warfare, directed energy, anti-satellite missiles, and potentially even space-to-ground weapons. Current PRC and Russian counterspace capabilities range from temporarily deceiving, disrupting, or denying space services, to permanently degrading or destroying space-based capabilities. All are designed to deter U.S. response to conflict or crisis and ultimately diminish U.S. influence and military effectiveness.

The Pacing Challenge—The People's Republic of China

The PRC aims to displace United States alliances and security partnerships in the Indo-Pacific region, surpass U.S. global influence and power, and revise the international order to advance its authoritarian interests. Beijing views the United States as increasingly determined to contain the PRC as it continues to modernize the People's Liberation Army (PLA) into a "world-class force" by the middle of the

century. PRC military strategy remains fixed on the concept of "active defense" in all domains, including space.

President Xi views space power as a key to "great power status" and a cornerstone of the PRC's economic, political, and military ambitions. China expects its future wars to be fought mostly outside its borders and in the maritime domain. PLA strategy emphasizes the role space-based systems will play in such conflicts. Chinese military doctrine states that space power is the essential "glue" that holds together air, sea, and land control and that "the dominance of space has been inseparable from the outcome of war."

The PRC continues to strengthen its military space capabilities, investing in space-based intelligence, surveillance, and reconnaissance (ISR), satellite communication, and navigation. It is also improving satellite meteorology, human spaceflight, and robotic space exploration.

The PRC employs a robust space-based ISR capability designed to enhance its worldwide situational awareness. Its ISR satellites provide electro-optical and synthetic aperture radar imagery as well as signals intelligence data. They are used for military and civilian remote sensing and mapping, terrestrial and maritime surveillance, and intelligence collection. The PLA owns and operates about half of the world's space-based ISR systems. These capabilities support the PLA's ability to monitor, track, and target United States and allied forces worldwide.

China's BeiDou navigation system, like the United States Global Positioning System (GPS), is operational and provides persistent, all-weather, and high-accuracy PNT services to users globally. The PLA uses BeiDou's PNT to enable force movement and precision-guided munition employment. This system also includes messaging and user-tracking capabilities that provide the PLA enhanced command and control (C2). China's delivery of BeiDou furthered a long-standing goal to reduce reliance on foreign satellite communications and navigation systems and to export its domestic alternative globally as part of its Belt and Road Initiative.

Today, China can hold United States, Allied, and Partner assets at risk in all orbits. The PLA is specifically pursuing capabilities to counter United States space assets to achieve space superiority and enable PLA freedom of maneuver. Chinese military academics advocate for defeating adversaries' PNT, electronic warfare (EW), and ISR to "blind and deafen the enemy." The PLA has an operational ground-based ASAT missile for low Earth orbit satellites, and is pursuing additional anti-satellite weapons capable of destroying satellites up to GEO. The PLA has also tested hypersonic glide vehicles aimed at defeating traditional missile warning systems and ballistic missile defenses.

The PRC developed the Shenlong and Tengyun spaceplanes to explore reusable technology with enhanced maneuverability. The initial prototype, launched in 2020, stayed in orbit for 2 days before returning to Earth. A second Shenlong, launched in August 2022, remains on orbit today. Payloads on operational versions of these spaceplanes could provide enhanced space services that the PLA could integrate into its weapons and C2 systems to erode the information advantage of the United States and our Allies.

China launched its SJ–21 satellite on 24 October 2021 and reported in open press that its mission was "to test and verify space debris mitigation technologies." On 22 January 2022, SJ–21 rendezvoused with a defunct and fuel-depleted BeiDou satellite. By 26 January, SJ–21 had captured the defunct satellite and pulled it several hundred miles into a higher graveyard orbit. The SJ–21 subsequently released the defunct BeiDou satellite and returned to geosynchronous orbit. While removing a defunct satellite to graveyard orbit may be innocuous, the SJ–21 could clearly serve in a counterspace role and hold our geosynchronous satellites at risk.

Russian Use of Space and Counterspace

Russia's use of space and counterspace capabilities during the Ukraine conflict validates the Department of Defense's long-held understanding of Russian doctrine. Russian space capabilities have supported Russian military ground operations and enabled deep precision strikes against Ukrainian infrastructure. Media reported on Russian jamming of radar observationsites and navigation signals (including GPS) serving the region, as well as cyberattacks on Ukrainian and European space-enabled communications.

Russia has developed a suite of counterspace capabilities including EW and directed energy weapons to deny, degrade, disrupt, destroy, and deceive communications, navigation, and space-based ISR. Its directed energy weapons include several ground-based, low-power lasers intended to blind satellites temporarily, and high-power lasers developed to damage other U.S. satellites permanently.

Russian cyber attacks in late February 2022 disabled very small aperture terminals in Ukraine and across Europe. This included tens of thousands of terminals

outside of Ukraine that, among other things, support wind turbines and provide internet services to private citizens. Today, we continue to see cyber actors focusing their efforts on our space architecture, that of our Allies, and of our international and commercial Partners.

Russia conducted a destructive direct-ascent ASAT missile test on 15 November 2021. The resulting explosion generated a debris field that will threaten satellites and crewed space stations for decades. In contrast to Russia's deeply irresponsible test, the United States Government announced in April 2022 that it will commit not to conduct destructive, direct-ascent ASAT missile testing, and that the United States seeks to establish this as a new international norm for responsible behavior in space. In its wake, in December 2022, 155 nations voiced their widespread concern at the United Nations General Assembly about the impact of destructive testing of direct-ascent ASAT missiles on the long-term sustainability of the outer space environment. One hundred and fifty-five countries at the United Nations joined the United States in calling upon all nations to commit not to conduct destructive direct-ascent ASAT missile tests.

The Defense Intelligence Agency's 2022 Challenges to Space Report highlighted that Russia tested a space-based ASAT weapon in 2020. Russia has continued to research and develop sophisticated orbital capabilities that could serve dual-use purposes.

PRC-Russia Cooperation

PRC and Russian cooperation on defense matters has increased in recent years. The PLA participated in Vostok last year—Russia's annual strategic forces exercise. Beijing has provided Moscow political and economic support throughout the full-scale invasion of Ukraine that began last year. In February 2022, the 2 countries announced 16 agreements including one to increase the interoperability of their respective nations' global navigation satellite systems. The new accord will align timing standards of China's BeiDou constellation and the Russian GLONASS architecture. A fully integrated system will provide greater precision, resiliency, and allow for more efficient allocation of service.

Russia possesses deep, decades long, expertise in space operations. Recently, however, its progress has been hampered by shortfalls in funding, a lack of qualified personnel, and other resource inadequacies. Dramatically reduced access to key electronic components from long standing international sanctions has negatively impacted Russia's aerospace industry.

Meanwhile, the PRC has committed considerable economic and technological resources to growing all aspects of its space program. It is operating a space station and is taking on a greater role in lunar and deep space exploration. In 2021, Moscow and Beijing agreed to an International Lunar Research Station and the PRC may attempt to conduct its first crewed landing on the surface of the Moon before 2030.

North Korean and Iranian developments

North Korea has demonstrated non-kinetic counterspace capabilities including GPS and satellite communication (SATCOM) jamming. It likely intends to deny space-based navigation and communications during conflict. North Korea seeks to develop its space capabilities and has placed 2 satellites in orbit. North Korea's space program has provided it with data applicable to its long-range and multi-stage ballistic missile programs. Additionally, North Korea conducted a record number of missile launches last year including intercontinental and submarine-launched ballistic missiles and has continued these activities in 2023.

Iran demonstrated a growing commitment to space with the launch of the Khayyam sensing satellite. This system, developed cooperatively by Iran and Russia, was launched by Russia on behalf of the Iranian government. Similar to North Korea, Iran could apply data from its space program to further the development of long-range missiles.

STRENGTHEN RELATIONSHIPS AND ATTRACT NEW PARTNERS

U.S. Space Command plans and executes space operations in coordination with other combatant commands, the Services, DOD agencies, Allies, and a diverse array of international and commercial Partners to achieve national security objectives. Space Situational Awareness (SSA) Data Sharing Agreements are one avenue that U.S. Space Command currently uses to support the safety of the domain. SSA Data Sharing Agreements provide a mechanism for U.S. Space Command to receive and share unclassified SSA information with agreement partners to enhance the materials maintained in the U.S. Government space awareness catalogue, promote greater transparency in space, and to enhance global space-flight safety. Agreement part-

ners are able to request support from U.S. Space Command in 7 advanced areas. The use of these services demonstrates our partners' desires to promote responsible use of the space domain and safety of space-flight for all satellite operators in the U.S. and around the world. Currently the United States Space Command maintains 169 SSA Data Sharing Agreements with 129 commercial companies, 7 academic institutions, and 33 governments or international organizations.

Moving from a focus on promoting safe and responsible space operations to the imperative of assuring the advantages of space for national security, U.S. Space Command's rapidly expanding network of international military-to-military partnerships provides tremendous strength and resiliency for long-term space security and stability. Together, we contribute to deterring aggression and supporting the security and stability of space that generates prosperity for all. Our Allies and Partners possess complementary capabilities and forces that both cover current U.S. gaps and free U.S. assets for alternate priorities. They also contribute unique perspectives, regional relationships, and information sharing opportunities that improve our understanding of the environment and expand our security cooperation options. U.S. Space Command's growing number of foreign liaison officers and exchange officers—29 in total—are an example of the Command's priority to maintain connectivity with our foreign counterpart commands and better understand their perspectives and priorities.

Interweaving space capabilities into the warfighting functions and domains of our fellow combatant commands contributes an agile, credible, and integrated deterrent. In addition to our longstanding close partnerships with U.S. Indo-Pacific Command, U.S. European Command, U.S. Northern Command, and U.S. Central Command, U.S. Space Command, in collaboration with U.S. Africa Command and U.S. Southern Command, is developing opportunities to increase space capabilities and cooperation in Africa and Latin America. U.S. Space Command's Global Sentinel 2022 exercise included 24 international partner nations in one location participating in a modeling and simulation event based on integrated systems. The exercise focused on space domain awareness to support the protection and defense of shared security interests in outer space. Global Sentinel 2022 provided a significant strategic shaping opportunity to strengthen partnerships while amplifying U.S. Space Command and partner nation deterrence and assurance messaging. Global Sentinel evolved from its inception in 2014 and is an ongoing annual effort, comprising 6 to 8 real-world events and a capstone. Global Sentinel remains the only event of its kind that includes multinational military partners from all major theaters, furthering collaboration focused on SSA and space domain awareness.

U.S. Space Command provides space planning and operations expertise, including integration, coordination, and deconfliction of capabilities to all combatant commands through our Joint Integrated Space Teams. These teams, combined with joint planning and targeting, ensure space capabilities are ready when needed. U.S. Space Command is fully integrated with United States European Command's response to Russian aggression in Ukraine. We are tightly aligned and synchronized with U.S. Indo-Pacific Command to deter, and if necessary, defeat our Nation's pacing threat. U.S. Space Command maintains close coordination with the Military Services as they develop future capabilities and competencies that will add to our decisive advantage.

U.S. Space Command is implementing the Mission Partner Environment (MPE) as our operating framework for communicating with Allies and Partners. The MPE enables C2 and information sharing across a range of military operations and enables information exchange between all participants within a specific partnership or coalition. The MPE supports execution of critical joint warfighting functions: C2, intelligence, fires, movement and maneuver, protection, information, and sustainment. Commanders require common services such as chat, secure voice, and email across the enterprise and expeditionary levels of operation for human-to-human collaboration. The MPE enables the DOD to appropriately share information with mission partners at the speed required for operations.

U.S. Space Command is continually planning to ensure we are prepared to respond to all contingencies. The command has developed the capacity to synchronize effects across combatant commands to achieve integrated operations in campaigning and contingency—a first for the command and the DOD. These efforts ultimately provide space enabled effects to enable and assure effective land, air, and sea operations.

INTEGRATING COMMERCIAL, INTERAGENCY AND ACADEMIA

Mutually beneficial alliances and partnerships provide an asymmetric strategic advantage unmatched by our competition. Our robust and growing team of Partners

includes commercial, interagency, and academic organizations. Together these Partners develop and deliver greater military space power that deters aggression and supports space domain stability. U.S. Space Command has published a Commercial Integration Strategy to enhance the command's overall military space power through the collaboration, integration, and partnership with U.S. commercial industry. The strategy sets priorities and synchronizes commercial integration efforts so that U.S. Space Command can mitigate capability gaps, improve space architecture resiliency, and gain and maintain a technological and operational advantage over adversaries.

Establishment of a New National Space Traffic Management and Coordination Capability

U.S. Space Command continues to develop partnerships with the U.S. Space Force and the Department of Commerce. As directed by the President in Space Policy Directive 3 and the United States Space Priorities Framework, civil and commercial space data sharing responsibilities will be led by the Department of Commerce. We also continue engagements with the broader interagency community and the civil and private sectors. These partnerships will endure and strengthen over time.

When the DOD began providing spaceflight safety data to global satellite operators in 2010, roughly 110 organizations flew a total of 890 satellites amidst a background of 21,000 pieces of trackable debris. Today, U.S. Space Command supports 680 organizations flying 7,500 satellites in all orbits. Two United States commercial companies have produced more than half of those 7,500 satellites currently on orbit. Since U.S. Space Command's inception in 2019, trackable debris has increased 60 percent from roughly 25,000 pieces to more than 40,600 pieces. The transformation of space architectures and economics, and the dramatic short-term increase in debris, highlight that space congestion will be the norm moving forward. Other countries could also grow their space operations, highlighting that a more comprehensive and sustainable approach is required for space operations and spaceflight safety coordination.

Human Space Flight Support Improvements

As the DOD lead for human space flight support, U.S. Space Command has a close and vibrant relationship with the National Aeronautics and Space Administration (NASA). Our most visible effort is the preparation for the terrestrial rescue, recovery, and retrieval of astronauts and spacecraft. U.S. Space Command and NASA also partner on issues such as space domain awareness, in-space and on-orbit applications and manufacturing, planetary defense, and hypersonic technology.

U.S. Space Command is fully committed to NASA's human space flight program. This crucial partnership will deepen as NASA's Artemis operations expand, the U.S. returns to the moon, and exploration and development of cislunar space continues.

National Reconnaissance Office and Commercial Integration Strategy

U.S. Space Command continues our exceptional working relationship with the National Reconnaissance Office (NRO) and other intelligence community (IC) Partners. This relationship improves our ability to gain actionable intelligence, establish priorities, and provide global support to the rest of the Joint Force. We developed a comprehensive operational deconfliction process with the NRO and IC that enables seamless integration while delivering combined space effects for contingency operations.

U.S. Space Command has developed a Commercial Integration Strategy to advance collaboration, synchronize integration, and expand partnerships with U.S. commercial industry. The Combined Joint Commercial Integration Office ties together commercial stakeholders across the spectrum and drives implementation of this strategy.

The Command leverages commercial space domain awareness data through our Joint Task Force-Space Defense Commercial Operations cell (JCO). The JCO provides operationally relevant commercial space domain awareness to the National Space Defense Center. We are rapidly moving toward around-the-clock JCO operations to optimize information sharing between Allies and commercial Mission Partners.

The Command also leverages commercial ISR, space domain awareness, and SATCOM through the Combined Forces Space Component Command's Commercial Integration Cell (CIC). The CIC works with industry through mutually beneficial collaborative partnerships. As the CIC continues to attract commercial Mission Partners, U.S. Space Command can share SSA data with these additional commercial providers across multiple classification domains.

BUILDING AND MAINTAINING COMPETITIVE ADVANTAGE

Our competitors have counterspace capabilities and military doctrines that extend their concept of warfighting to space. Consequently, we must develop and field capabilities to contribute to integrated deterrence in accordance with the National Defense Strategy. U.S. Space Command identified 5 priority requirements to accomplish the responsibilities assigned by the Unified Command Plan (UCP). These include: (1) Integrated Space Fires and Protection, (2) Resilient, Timely Space C2, (3) Enhanced Battlespace Awareness, (4) Space Systems Cyber Defense, and (5) Resilient Satellite C2 Architecture. Additionally, rapid investment in Global Sensor Management, Persistent and Resilient ISR, Operational Intelligence, Modernized and Agile EW Architecture, and Electromagnetic Battle Management will underpin long term success of our protect and defend mission. Relentless pursuit of these key integrated requirements will ensure we remain the dominant force in the space domain.

Integrated Space Fires and Protection Capabilities

Every day, civilians and the Joint Force depend on U.S. space capabilities. To assure the critical services provided by these capabilities, the DOD must have the infrastructure to deter aggression and protect these capabilities from attack. Resiliency is fundamental, but resiliency alone will not deter attacks or provide protection sufficient to assure our space assets. For U.S. Space Command to protect and defend U.S. and, as directed, Allied, Partner, and commercial space assets such as PNT, communications and missile warning/missile tracking, we require Congress' continued investment in joint military space capabilities, resilient architectures, and protection efforts.

Resilient, Timely Space C2

Resilient, timely C2 is key to deterring and defeating hostile action in space and terrestrially. Rapid and robust communication between space activities, space assets, and partner combatant commands enables decisive action. The increasingly dynamic space environment requires a resilient C2 architecture to synchronize space forces and effects for both operations in the contested space environment and as a critical enabler to traditional terrestrial maneuver forces. Congress's investment in the Combined Space Operations Facility addresses that need and will remain critical moving forward.

Enhanced Battlespace Awareness

U.S. Space Command relies on a near-real time, comprehensive understanding of the congested and complex space operational environment. Space domain awareness data, C2 automation, and machine learning allow us to better understand the threat in U.S. Space Command's astrographic area of responsibility (AOR). This critical task requires more accurate, robust, resilient, and timely space domain awareness and operational intelligence data from all interoperable sensors. This will produce highly accurate, rapidly available detection, tracking, and characterization of space objects, regardless of their origin. Current space domain awareness systems are stove piped, disaggregated, and lack the agility necessary for dynamic tasking. U.S. Space Command, the Missile Defense Agency, and the U.S. Space Force are partnering to enhance sensor integration into a C2 program. Congress' funding of programs to enhance battlespace awareness is crucial to ensuring U.S. Space Command can best protect and defend our vital space assets rapidly and dynamically.

Space Systems Cyber Defense

Digital superiority is key to building and maintaining a competitive advantage. The PRC, Russia, and other cyber actors are tirelessly working to infiltrate our cleared defense contractor, academic, and military networks. These adversaries seek to monitor and exfiltrate data, and reduce, degrade, and deny our ability to command, control, and communicate with on-orbit space assets and supporting ground systems.

Loss or compromise of U.S., Allied, or Partner space systems degrades the Command's ability to conduct operations in and through space and support terrestrial operations around the globe. Much of the digital infrastructure for these space mission systems requires modernization. As our adversaries' cyber capabilities are evolving, we need our defensive cyber systems to outpace their growth. We need to be agile and find ways to become more resilient. We continue to collaborate with U.S. Cyber Command, Combat Support Agencies, and other government partners to deploy and integrate defensive cyber systems and tactics to maintain safe, secure, and reliable network operations.

The Command's Joint Cyber Center continues to partner across the DOD and with the Department of Homeland Security to prioritize cyber defense efforts. In-

creased funding for cybersecurity systems, persistent defensive cyber capabilities, and cyber experts is critical to maintaining dominance in the space and cyber domains.

Resilient Satellite C2 Architecture

U.S. Space Command seeks to improve resiliency in our globally dispersed ground terminal architecture and the Satellite Control Network (SCN). The current SCN system and follow-on architecture must be hardened and modernized to be able to fight through a highly contested environment. Mobile assets fielded with emerging technology to augment our global ground C2 centers will increase resiliency and underpin achieving national security objectives. U.S. Space Command has several requirements for the Joint Space Communication Layer (JSCL), which is the space transport layer of the DOD Information Network for SATCOM. For example, it must be scalable to meet the growing military and commercial SATCOM demand and operationally flexible enough to respond to adversary threats. Further, the JSCL must be interoperable with Allied and Partner systems to synchronize communications in a rapidly changing, multi-domain environment.

Force Development

U.S. Space Command's most important asset is our people. We are rapidly onboarding and developing a very talented team of space professionals. Our strategic advantage comes through the diversity of experience and wisdom of our workforce. U.S. Space Command professional development programs boost our military promotion rates and our civilian employees' advancement potential. As our military members rotate out of the command and return to their parent service units, they bring invaluable space expertise back to the broader Joint and Combined Force. We visit colleges and universities to recruit recent graduates for civilian internships and job opportunities. We continue to advocate for hiring efficiencies that allow us to rapidly hire and onboard civilian employees. We recently established a command Academic Engagement Enterprise to partner with universities across the country to enhance workforce professionalization and improve U.S. Space Command's engagement in that critical space. We have full-time civilian advisors dedicated to building workforce resiliency and preventing discrimination, sexual assault, and harassment in the workplace to ensure our workforce remains empowered to reach its full potential.

As of 1 January 2023, we have 62 percent of our authorized military and government civilian end strength in place. If we include our contractor workforce, that number rises to 82 percent, a significant achievement 3 years into the command's 5-year programmed manpower growth plan.

Resilient Space Architecture and Rapid Reconstitution

Over the last 5 years, the threats to our space enterprise systems have increased. We must modernize our space enterprise to ensure resiliency and agility and to preserve freedom of action despite these advancing threats. The ability to rapidly reconstitute requires us to prioritize seamless integration between old and new space capabilities (such as networks, space assets, links, and ground systems). This is essential to optimizing our data collection, processing, exploitation, and dissemination. U.S. Space Command is conducting a series of review efforts to examine the resiliency of the space enterprise. We are identifying strengths and weaknesses of our current architecture, challenges to interoperability, and current policy limitations inhibiting shared space domain awareness. We are examining end-user interfaces, terrestrial systems, and communications links to orbital assets. In collaboration with the U.S. Space Force, our Allies, and Partners, U.S. Space Command is developing the requirements for a modern, integrated space architecture capable of operating in an increasingly contested space environment.

Dynamic Space Operations

Over the last 5 years, explicit and implicit threats to our on-orbit assets have increased. To preserve freedom of action, we must relentlessly pursue a new concept of employment—Dynamic Space Operations (DSO). Maneuvers by our current space systems are constrained by the fixed quantity of consumable resources on-board. This forces space warfighters to balance use of on-board resources to mitigate or counter current threats against the risk of insufficient resources to respond to future challenges.

Dynamic Space Operations includes the ability to restore consumables of on-orbit platforms or rapidly replace the platforms themselves. DSO will enable space operators to quickly respond to adversary operations, support readiness campaigns, and engage in self-defense, with less concern for future use implications. It will enable expanded multi-mission operations with less risk of depleting those limited

consumables and mission capabilities. DSO will dramatically increase our ability to support geographic combatant commanders' operational requirements across the entire spectrum of competition, crisis, and conflict. Programs are underway within the DOD, the national laboratories, and across industry to address the technological challenges associated with DSO. U.S. Space Command is actively engaged with developmental efforts and working groups like the In-space Servicing Assembly and Manufacturing Interagency Working Group. Our near-term DSO objective is to conduct an on-orbit demonstration to restore a satellite's maneuver capability by 2026. Our longer-term objective is to develop the necessary mission requirements and technical standards to ensure most capabilities delivered beyond 2030 will not be limited by consumables. We ask for Congress' support for these vital efforts as we develop and secure these crucial capabilities. Freedom to maneuver in space without concern for limiting future maneuverability will be an important capability for systems that are survivable against threats.

Maintenance and Hardening of Critical Infrastructure

U.S. Space Command's assigned AOR begins at an altitude of 100km—roughly 62 miles—above the surface of the Earth and extends indefinitely. Our operating domain extends around the globe and encompasses all 3 segments of our space systems: on-orbit assets, ground stations, and the cyber links connecting them. Updates to the ground segment are required to ensure our satellites can provide mission-critical information to the Joint Force and national decisionmakers. For example, our missile warning mission relies heavily on ground-based radar systems that require reliable power and cooling systems. Many of the facilities and infrastructure supporting U.S. Space Command exceed 60 years of service. It is increasingly difficult to maintain the necessary infrastructure for our assets to guarantee the resiliency, survivability, and endurability required for our critical space missions. Stop-gap measures are increasingly ineffective due to the lack of replacement parts and the inordinate time required to make repairs. We must modernize our aging infrastructure to keep pace with our competitors. I am grateful for Congress' continued support to ensure these facilities adequately support U.S. Space Command's no-fail missions.

Commercial space systems provide essential capabilities to our national security and civilian life. U.S. Space Command works with interagency and commercial space system stakeholders through the Critical Infrastructure Partnership Advisory Council to improve the security, resilience, and cybersecurity of commercial space systems.

At our provisional headquarters in Colorado Springs, the DOD has invested in existing on-installation facilities and off-installation federally leased buildings to meet U.S. Space Command requirements. Our provisional facilities on Peterson Space Force Bases are 30 years old. We accomplished major building system upgrades and repairs to meet mission requirements (such as power, communication/technology, and cooling). U.S. Space Command's provisional headquarters in Colorado Springs supports 1,230 personnel with the required communication, technology, and capabilities and will support full operational capability.

Exercises

U.S. Space Command executes the Presidentially assigned UCP responsibility for Joint Space Operations Training. As such, the Command is integrating joint and combined space scenarios and training across the Joint Force. We will conduct 2 mission centric exercises in fiscal year 2023 as building blocks to a full-scale Tier 1 exercise in fiscal year 2024 to emphasize the key transitions from competition through crisis and into conflict. This will highlight both the supported and supporting relationships between U.S. Space Command and the other combatant commands that will enable the Joint Force to overcome anti-access, area denial strategies.

Joint Warfighting Requirements

To maintain momentum, U.S. Space Command is developing joint warfighting requirements. We will continue to rely on the Services to contribute solutions that mitigate the capability gaps identified in these requirements.

Joint Space C2

The Joint Space C2 requirement established a set of threat-based requirements defining what the Command requires to comprehensively C2 forces across all mission areas. This includes deploying and connecting worldwide sensors and systems to national decisionmakers and all combatant commanders in near real time.

Space Effects to the Warfighter

To ensure space and space-enabled capabilities are available during conflict, U.S. Space Command is defining how to protect and defend space capabilities to guarantee space effects to the rest of the Joint Force. The Department will respond to hostile acts in space at the time, place, and domain of our choosing.

EW/Offensive Cyberspace Operation

U.S. Space Command is defining the required capabilities to integrate EW and offensive cyberspace operations. Close coordination with U.S. Cyber Command will enable joint fires to protect the space and cyberspace scheme of maneuver and provide the warfighting effects necessary to protect the rest of the Joint Force from adversary hostile uses of space.

Navigation Warfare (NAVWAR)/PNT

This NAVWAR/PNT requirement establishes the requirements that will inform future capability development by the services. This requirement is the initial step to informing the way the Joint Force, Allies, and Partners will keep pace with an advancing adversary threat. It will support the modern warfighter with scalable NAVWAR capabilities, integrate with our partners, and support a redundant and resilient NAVWAR/PNT architecture.

CONCLUSION

U.S. Space Command is rapidly approaching full operational capability. I am exceptionally proud of the progress the Command has made over the last 3-½ years. There is no combatant command, warfighting domain, nor element of national power that is not strengthened by the space capabilities and effects that U.S. Space Command provides or protects. I am grateful to Congress for your support that has enabled our success. I ask for your continued support for the necessary resourcing to ensure we maintain our competitive advantage in the increasingly contested space domain.

We will continue to grow our critical network of Allies and Partners to integrate joint military space power into all-domain global operations to deter aggression, defend national interests, and when necessary, defeat threats. On behalf of the most critical asset in our command, the soldiers, marines, sailors, airmen, guardians, civilians, and families of U.S. Space Command, thank you for your support to our mission.

Chairman REED. Thank you very much, General Dickinson. General Cotton, we are facing a first in the history-of-the-world situation of a trilateral nuclear competition at a serious level.

As you have indicated, in addition to Russia, which has since the late 1940's maintained a robust nuclear arsenal, China is expanding its nuclear capability with additional missile fields, the new Jin-class submarine, and is upgrading its H–6 bomber to carry cruise missiles.

How is STRATCOM adapting to this new trilateral nuclear competition?

General COTTON. Chairman, thank you for the question. It is fundamentally based around our—what we see is a sound strategic model; and that is the triad. The ability for the triad and the systems that we have to be able to cover and understand how to cover and still offer options, flexible deterrent options, to the President is key.

One, the triad is fundamental and foundational for that to happen. Two, I believe that we are going to have to have a conversation in regards to strategy and force posture. I am absolutely in a good place today with our systems and where we stand, and foundational to that is the modernization of our current system.

But to your point, Chairman, 2010 and the basis of which we did our modernization efforts was on a 2010 threat. We are going to have to have that conversation to ensure that the modernization systems, the proportions of the triad, and other effects that can

bring strategic deterrence to bear is right moving forward post-2030.

Chairman REED. Thank you, General Cotton. There is another issue that I would like to touch on with both you and General Dickinson, is that as the lead combatant command for spectrum operations, General Cotton, your standing of a Joint Electromagnetic Spectrum Operations Center (JEC).

There are several questions here. Given the amount of electronic attacks we are seeing in Ukraine as well as operations in the Indo-Pacific, when do you expect the center to become operational? Also, your comments on the proposed sale of the S-Band spectrum that is now being discussed.

General COTTON. Sir, thanks for that question, Chairman. So, as you know, the overall objective of the JEC is to raise overall readiness of the Joint Forces to prevail in that mission space.

We are actually doing really good work and we are in the final steps: working our way through the Deputy Secretary of Defense for her to sign out the memorandum and actions on the tasks that we have to move forward. I look forward to seeing that pretty soon.

In regards to STRATCOM and how do we rely on spectrum, I will say it to you this way: EMS [electromagnetic spectrum] superiority for the employment of our forces to maintain situational awareness, to assure communication through all domains, and assure PNT, position, navigation, and timing, is critically important for not only myself as a combatant command, but for all combatant commanders.

Chairman REED. General Dickinson, again, your perspective on the value of the S-band to the military, and also the knowledge that you and your colleagues in uniform have with respect to what parts can be shared, or what cannot be shared.

General DICKINSON. Thank you, Chairman, for that question. So, I would have to categorize it as foundational. That spectrum piece that you are discussing, you mentioned, is foundational to what U.S. Space Command does, as we have the responsibility of providing space and able capabilities to the Joint Force.

What I mean by that, PNT communications, missile warning, all of those types of capabilities that I am responsible for providing are dependent upon the use of the spectrum. As I look at it, I think it is foundational to it and in everything we do.

Chairman REED. There would be a certain degree of risk aversion that you would bring to disposing with that S-band at this point.

General DICKINSON. Yes.

Chairman REED. That is fair, General?

General COTTON. That is fair, sir.

Chairman REED. Thank you very much. Senator Wicker, please.

General COTTON. Thank you, Mr. Chairman. First, before I begin my questions, I want to thank Senators Fischer and King, and recognize their bipartisan and significant work on the Strategic Forces Subcommittee. They are going to be very busy and we are going to look to them in the future, as we already have, for leadership. General Cotton, we have a nuclear modernization plan, is that correct?

General COTTON. That is correct, sir.

Senator WICKER. When was it written? When was it developed?

General COTTON. Probably in 2010 timeframe is when the modernization effort——

Senator WICKER. Okay. Now, when it was developed, this trilateral threat that the chairman just talked about was not so significant, was it?

General COTTON. China was seen as a nascent threat.

Senator WICKER. So, things are different now from the time the plan was developed?

General COTTON. That is correct.

Senator WICKER. Okay. Is it a fact that since 2010, every Department of Defense and Department of Energy nuclear program has been delayed or reduced in scope?

General COTTON. I don't know if I can go back to the timeframe of 2010, sir——

Senator WICKER. But for the most part, that is a correct statement.

General COTTON. It is——

Senator WICKER. Okay. Well, how are we going to meet the rapidly growing threats from China and Russia with a force that smaller and delivers later than we planned some 13 years ago?

General COTTON. Senator, I think the way I would couch that is: the legacy system that we currently have is a credible system today. The fact that for—since 2016, we have been modernizing that legacy system and are underway with that legacy system. I think what I would tell you is I just want to ensure that the modernization programs that we have today, we can't—we have lost all margin, and we must ensure that those programs are fully funded and executed so I can have replacement and updated systems to the legacy system today. It is still hard.

Senator WICKER. Has it made sense then that these programs, for the most part, have all been delayed or reduced in scope?

General COTTON. Sir, that is a policy question from that position. From my perspective——

Senator WICKER. But we rely on you for expertise and for advice——

General COTTON. We always forward, Ranking Member, we always forward our best military advice, as well as our requirements on what we think and can meet the requirements of executing the objectives that are laid upon us by the President.

Senator WICKER. Okay. Your predecessor testified last year and agreed with nearly every other senior U.S. military officer that we need to provide Presidents with more nuclear options than we have today. Do you agree with that sentiment?

General COTTON. I do agree with that.

Senator WICKER. Okay. Let me ask you then about my, the way I ended my testimony, where I said I would like for you to share your feeling as to whether we should have a sense of urgency and whether we should communicate that to the Commander-in-Chief and also to the American public.

General COTTON. That is a wholehearted "yes." We need to be able to articulate the sense of urgency to ensure that we can modernize the systems that we currently have funded and also look at future posture on what other things throughout the inventory. I would say for affects conventional and nuclear to make sure that

I can meet the objectives that are given to me for strategic deterrence to the President.

Senator WICKER. We should make it clear to the taxpayers and the American citizens that we need to up our game in this regard?

General COTTON. Continuing beating of the drum so folks understand that our legacy systems need to be modernized. Absolutely, sir.

Senator WICKER. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker. Senator Shaheen, please.

Senator SHAHEEN. Thank you. General Cotton, General Dickinson, thank you both for being here this morning and for your service. General Dickinson, I liked your quote, "never a day without space". As you think about the challenges that Space Command is facing, what is your biggest concern with respect to readiness?

General DICKINSON. Thank you, Senator. Let me just kind of paint a picture of where the Command is today. Within 2 years, we achieved initial operational capability—on a very solid path to achieve full operational capability very soon.

Resources, the Department has done a great job giving me the resources that I do need. For example, the infrastructure today, as well as the people, the personnel. The most important part of the Command is our people.

That is our asymmetric advantage, if you will, in the space domain as well, all things space. When I look at what we have done over the last three and a half years in terms of identifying requirements to the Department, it has gone very well. We have deliberately and thoughtfully provided requirements to the Department, and the Department is, in fact, giving us those resources.

As I said earlier the Department kind of works on 5-year terms, if you will, with budgets and POMs [Program Objective Memoranda] and those kinds of things. Combatant Commander, I look to what is happening today, and I am required to do that by the Secretary. When I look at that, to answer your question, I look very hard at space domain awareness. How are we doing that today?

We are taking steps to make sure that we are leveraging sensors around the world, that our U.S., and allies, and partners that traditionally haven't been used for space domain awareness but do have capabilities. We look at those particular assets and understand how we can pull them in and integrate them into a comprehensive architecture.

Then we also look to how do we develop the requirements to improve upon those in future years. That is one way we were doing it, trying to solve that situational awareness or improve the situational awareness issue I have in the space domain.

The second part of that is leveraging commercial companies, commercial companies that want to participate in that with the capabilities that they build themselves and provide that data to us. Through integration of nontraditional sensors, as well as commercial sensors, we are getting better at space domain awareness. But as the congestion in space continues to grow, we will need better capabilities.

Senator SHAHEEN. Well, you mentioned the expertise of the personnel who work at Space Force, and I understand that you have

been successful in hiring a number of civilians to address the milestones that you have set.

That is why I continue to be concerned about the proposed relocation of Space Force to the Redstone Arsenal. When the Missile Defense Agency was relocated to Alabama and they lost 80 percent of their workforce who didn't want to leave and make that move. What would be the impact if you lost a significant portion of the workforce in a move of Space Force?

General DICKINSON. Well, Senator, so today, as I mentioned, the Command itself right now is about 62 percent, if I count military, as well as a Department of the Air Force civilians.

I have got a contractor base, too, in addition to that, that pulls us up a little bit over 80 percent in the total for the Command. There is really no way to know how many of those civilians would move to Huntsville, for example, until that decision is made. Lots of those folks are great civilian workforce.

They have made life choices and that is why they live, for example, in Colorado Springs. The military, you know, we are soldiers, sailors, airmen, marines, and guardians. If told to move, we'll move. But there is really no way of knowing what percentage would actually move.

Senator SHAHEEN. But the report that took a look at the spacing decisionmakes some assumptions about what would happen if there were a move and what the impact of that would be. Is that correct?

General DICKINSON. Yes.

Senator SHAHEEN. Is there a reason why that report is not available to the public?

General DICKINSON. I believe the Department of the Air Force, the Secretary of the Air Force is doing some additional analysis before he makes his final decision.

But to your point, ma'am, I would just offer that whether it is Colorado Springs or Huntsville, I think, you know, both those locations have the talent pool, if you will, of professionals, space professionals that could support the mission of the U.S. Space Command.

So, again, I wouldn't know the percentage, but I do know that the work base, workforce that is available in Huntsville is very good as well.

Senator SHAHEEN. But am I correct that the workforce in Huntsville has not had the same expertise on operating satellites that the workforce in Colorado has had?

General DICKINSON. Well, so the workforce that I have, ma'am, in the headquarters itself, the Combatant Command (COCOM) headquarters, we don't necessarily do that level of technical flying the satellites, if you will. That is resident within subordinate units within U.S. Space Command, and those units are not moving.

Senator SHAHEEN. So, they will stay in Colorado regardless.

General DICKINSON. I am sorry?

Senator SHAHEEN. They will stay in Colorado regardless of what happens with everybody else.

General DICKINSON. So, the only part of that basing decision that is under review right now for the decision to relocate is the headquarters, my headquarters.

Senator SHAHEEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shaheen. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. General Cotton and General Dickinson, before I begin my questions, I want to strongly encourage both of you to make greater use of the unfunded priorities list.

That process helps you to convey your needs to Congress. The Department's budget request is the product of a 2-year long process. Many of the assumptions baked into fiscal year 2024 budget were made in 2021. The geopolitical environment has significantly changed over the last 2 years.

This Committee views unfunded priority list as a valuable tool that allows us to make more responsible resourcing decisions based on the current needs that we have and the operating environments.

So please use that tool. General Cotton, in your recent letter to the Committee, you noted that you have a capability gap that needs to be filled by a low-yield, non-ballistic capability that can respond without generation. Would a nuclear sea-launched cruise missile fill that gap?

General COTTON. Thank you for the question, Senator Fischer. To address the adversaries' perceived advantage on limited nuclear use, when I was here amongst the Committee and was tasked with the question and I said I owed you a response on being able to make that assessment on where we stood. I did a deep dive as soon as I took command.

During that deep dive and review of our capabilities, I, in fact, am in agreement that there is a strategic gap or challenge when it comes to that regime. So, I fully support the fact that—and the support that we have with this Committee in pursuing the opportunities to look at low-yield, non-ballistic, non-generating effects moving forward. Absolutely concur with that.

Senator FISCHER. Thank you, General, and thank you for looking in that and getting back to us. I appreciate that. Sometimes when you take a new command, I know you have a lot put on your shoulders in making sure that you have a full understanding of everything that you are in charge of, and I appreciate you taking the time to get that to us.

Last year, the Administration sought to retire the B–83 nuclear gravity bomb despite having no replacement program in place to address hard and deeply buried targets such as underground facilities in China and North Korea.

What is your best military advice on whether the United States needs to maintain a capability to hold those hard and deeply buried targets at risk?

General COTTON. Thanks for the question, Senator. I will answer that in two parts. Right now, the B–83 is still part of my arsenal, with the NDAA language that limits the reduction of that, so I still have that capacity and capability, pending the results of the hard and deeply buried study that the Department is currently doing, of which we are a part and are giving our inputs to that.

That being said, we are going to have to figure out how we are going to continue to have capability that gets after HDBTs [hard and deeply burried targets] and what effects can actually do that. Whether conventional or nuclear, we are going to have to have a

strategy to figure out how to do that. I look forward to seeing what the study brings us from the Department to make sure that we can close that.

Senator FISCHER. When do you anticipate that study to be completed?

General COTTON. Ma'am, I was told that we should see that in the spring.

Senator FISCHER. Thank you. Could you please keep us updated on that?

General COTTON. I absolutely will.

Senator FISCHER. Thank you, sir. I appreciate the conversation that we had earlier this week on the importance of moving forward quickly with NC3 modernization and building out a road map with clear, achievable, near and long-term goals. Can you tell this Committee more about NC3, the road map that STRATCOM is developing?

General COTTON. Senator, I absolutely look forward to having that conversation, not only in open but in closed session as well.

The conversation that we had was one of the things that—that was the second thing that I did upon taking command was get with the team to understand how we take a conceptual ideas and what might be seen as concepts with all the dollars and support that we are getting from the Congress and turn those into what you had alluded to, a road map that I can, you can, and my bosses in the Pentagon can actually see in phases of what we are doing with an NC3 modernization.

So, what we are doing is we are translating what was once seen as a conceptual piece and talking through the concept. Now we are having 0 to 5, 5 to 10, 10 to 15 year roadmaps where I can describe to you within those phases of time what is actually being done with the taxpayers' money moving forward to modernize the NC3 modernization program.

Senator FISCHER. Thank you. I think it is extremely important to be able to have roadmaps, checklists to stay on time so that we can be prepared for the future. Thank you, sir.

Chairman REED. Thank you, Senator Fischer, and let me also join Senator—in commending you and Senator King for your leadership for the Strategic Forces Subcommittee. With that, let me recognize Senator King.

Senator KING. Thank you. Thank you, Mr. Chairman, and thank you for the recognition. General Cotton, just a brief note.

Sentinel, the replacement of the ICBM system essentially from the—literally from the ground up is one of the most important and also complicated and major development projects in the history of this country in terms of budget and schedule and the necessity of getting this done.

I want you to know that we are watching you because I want the contractors to know that you are watching them. I hope this is a high priority in terms of the management and implementation of that program, which is going to be a massive undertaking.

General COTTON. Senator, thank you, and you are absolutely right. I am watching the contractors and I am watching the Air Force to ensure that we close that gap as well.

Senator KING. Thank you. I want to talk about deterrence, which is really the basis of our entire strategy to defend this country, and we talked about, you talked with Senator Fischer about communications, NC3.

It seems to me that NC3—I believe NC3 should be part of the triad. It should be the quad, because it is really as important. If our communication system isn't credible then our deterrent isn't credible, which is what could lead to a precipitous strike from one of our adversaries.

I hope that you agree with me. I don't want to make you go through all you went through with Senator Fischer. But NC3 security and absolutely zero-defect reliability is critical to the deterrent posture of this country.

General COTTON. Sir, it is the foundation of everything we do when we talk the triad. I often use your slogan of saying that it is a quad, if you will, NC3. One of the things that we are also doing is General Nakasone is interwoven in everything that we are doing in his team in Cyber Command.

I mean he is interwoven in everything we are doing with current NC3, the legacy systems, as well as when we are building out the next generation of NC3. So, security is fundamentally——

Senator KING. We put a lot of our time, effort, and focus on cyber over the last few years. I am a little worried that electronic warfare is sort of over here and cyber is over here. Electronic warfare, the ability of our communication systems, of our satellites to—we will talk about this General, but that is a part of—maintaining that as part of our deterrence strategy. It has to be.

General COTTON. It absolutely is, sir. As you know, I am the lead command in ensuring that we get after the EMS [electromagnetic spectrum] problem and what we saw as an atrophy over the past couple of decades—not with the NC3 systems within the Department.

Senator KING. No, but the whole system, electronic—if there is a conflict, electronic warfare is going to be the first 2 hours or 2 days before anything else happens. Well, let me move from that to General Dickinson.

Are we developing alternatives to space-based resources? For example, the simplest one to think of as GPS [global positioning system]. We have got to be able to have ships and planes and troops, for that matter, and know where they are absent GPS, because I believe GPS will be one of the first targets in a conflict. Yes, I know you are you are not Navy, but I want ships to be able to do celestial navigation.

General DICKINSON. Thanks, Senator. To answer your question—I do believe we will be degraded at some point in the GPS world, position, navigation, and timing. With that, I know there are efforts underway, even in my previous command before you as Space Command, looking to alternative PNT, alternative position, navigation, and timing, and how we can develop those types of capabilities. So that is the kind of the technical side of it. There are programs that are working on that right now.

Senator KING. That is a high priority. That—you know, we could have a $100 million aircraft that gets lost because it can't navigate.

We have got to have a high priority on having alternatives to GPS, it seems to me.

General DICKINSON. Yes, I agree, and the Departments are working on that right now. But what I would also offer to you, Senator, is efforts within the Department and each of the services to kind of go back to how we used to do things. When I was a Second Lieutenant many, many years ago, I had a lensatic compass and a map in my hand. Many people did in this room, I am sure.

We can't lose that skill. We have to continue to train that skill. If you are on a Navy ship, I might get this wrong, you have a sextant that you can use to utilize stars to do your navigation. But I think we all have to prepare for that, and I know, like, for example, in the Army, if you go out to one of the CTCs [combat training center] or training centers, they are actually training in that kind of a degraded environment because we know that we might see that. Of course, we have seen that in Ukraine as well.

Senator KING. Preparing and training are the key words. Thank you very much, General. Thank you both for your service. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator King. Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman. Gentlemen, let me begin by just thanking you and your teams for standing on the front line, and in some cases having to make some very difficult decisions. I appreciate the work that both of you do.

As you know, there is an effort and a significant discussion going on with regard to spectrum and spectrum sharing. It is important as a country because there are lots of people that want 5G. It is critical to our country and to expansion.

But at the same time, 5G means that there are parts of the electromagnetic spectrum which have to be dedicated toward that. At the same time, spectrum is limited, and part of what that limited spectrum is, is being used by the Department of Defense.

Over the years, there has been more and more of a move by folks who want to be able to provide more services to the general public to take parts of the spectrum and that which is used by the Department of Defense.

I am concerned about this, and as you know, right now, there is a discussion about that part of the spectrum that is between 3.1 and 3.45 gigahertz. There is a desire because this is a very desirable part of the spectrum.

Now, on the political side of things, and we don't expect you to get into the politics of it, there is a real push to try to move some of that away from the Department of Defense on a shared basis. At the same time, there is a reason why the Department of Defense uses this part of the spectrum in that it has some very, very special qualities.

I am going to get into the part of this in which we need your professional military advice. I am making it that way because there are folks that clearly understand the value of 5G, who would prefer to have this moved in an expeditious fashion out and away from DOD uses or shared uses, and into the private sector.

I understand their desire to do so, but I believe that the national defense of this country is critical and must be maintained. So, what

I am going to ask in terms of your professional military opinion, is to work our way through this in a discussion with me about the critical needs of this country for parts of the spectrum that could be at risk if we make the wrong political decision.

I am going to begin, General Cotton, within 3.1 to 3.45 and in very close proximity to that, is it true that we have significant radars that we have to maintain?

General COTTON. That is a correct statement.

Senator ROUNDS. Is it true that those radars that we are dependent on protect our country, Alaska, Hawaii and the mainland from the possibility of attack by aggressors, with regard to intercontinental ballistic missiles, short range missiles, drones, all sorts, or I would say almost the vast majority of those types of weapons systems, including aircraft, that may very well be coming at us or directed at our shores.

General COTTON. Senator, that is a true statement.

Senator ROUNDS. If you were to lose part of this spectrum, would it be true, or if they were to look at using part of this spectrum, would it be true that some of those radars that we rely on could be at risk?

General COTTON. They could be at risk, sir.

Senator ROUNDS. Thank you. General Dickinson, space is the name of the game for you, and you not only have satellites and so forth, you are responsible also for early warning in some cases as well. Is that not true?

General DICKINSON. That is true. I have UCP responsibility as the global sensor manager.

Senator ROUNDS. In those sensors, are there critical aspects that include very sensitive parts of the spectrum that are in or near this particular part of the spectrum?

General DICKINSON. Yes.

Senator ROUNDS. What would happen if you were to lose access to those or to be limited to those, in terms of your ability to provide adequate warning should an attack occur?

General DICKINSON. It would be impacted, possibly degraded.

Senator ROUNDS. If you were required to move away from the assets that you currently have in that part of the spectrum, can you give us any kind of an estimate as to the costs involved?

General DICKINSON. Senator, I can't give you an accurate cost estimate. I would say it would be very expensive.

Senator ROUNDS. Thank you. General Cotton, are you familiar with the Aegis?

General COTTON. I am, sir.

Senator ROUNDS. Is it clear that the Aegis system has significant parts of its radar systems within this very sensitive part of the spectrum?

General COTTON. It does, sir.

Senator ROUNDS. Do you have any idea as to what the cost would be to try to move or to try to allocate spectrum away, or in areas other than this, if it is even available for the Aegis system that protects our coasts?

General COTTON. I don't have a cost, but I know it is extremely expensive.

Senator ROUNDS. Thank you. Do you believe that it is very important—I am going to ask this of both of you, and then, Mr. Chairman, my time, I realize, is up, but I would like to have this question.

Do you believe it is important that uniformed officers of the Department of Defense have a say or at least have an opportunity to express to those who make these decisions your professional military opinion about how serious the loss of these particular parts of the spectrum could be if the decision is being made to share or to release that part of the spectrum?

General COTTON. I would at least like to have my best military advice heard.

Senator ROUNDS. Thank you. General Dickinson.

General DICKINSON. As a combatant commander, I would ask—I would say the same thing. I would ask that my best military advice would be considered.

Senator ROUNDS. Thank you. General Cotton, I am just going to finish with this. Have you been able to offer your best professional military advice to anyone on the release of the spectrum to date?

General COTTON. Sir, most of those discussions happened prior to December, so I don't know what the disposition was done, but I haven't had that discussion since the command.

Senator ROUNDS. Thank you very much. Look, I really appreciate this.

This is a difficult situation because there really is going to come a point at which your professional military advice has got to be shared with those individuals that are looking at making this decision and should not be made.

I am just going to finish with this. I believe that it should not be made until after the study, which is being completed by the Department of Defense and the NTIA [National Telecommunications and Information Administration] is completed. Would you agree with me that nothing should be done with this until after that study is completed?

General COTTON. I agree, and we are part of that study.

Senator ROUNDS. Thank you. General, would you agree with that?

General DICKINSON. I would agree, and we are part of that study.

Senator ROUNDS. Do you believe that there should absolutely be an appeals process that we have currently got in law, should that be continued on in its current form? General Cotton?

General COTTON. Yes.

Senator ROUNDS. General Dickinson?

General DICKINSON. Yes.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman, for your patience.

Chairman REED. Thank you, Senator Rounds. Just to make sure we are clear, the S-band is the band that Senator Rounds and I were both talking about. Thank you. Senator Gillibrand, please.

Senator GILLIBRAND. General Cotton, the All-domain Anomaly Resolution Office (AARO) was created to synchronize the Department of Defense efforts to study and assess unidentified aerial phenomenon. How is STRATCOM liaising with AARO to help the office do its job?

General COTTON. So, ma'am, formally UAP [unidentified anomalous phenomenon], so we are part of that along with other combatant commands. So, I have a team, as well as myself and in the senior leadership positions, that liaison with that organization as well as the other COCOM responsible for that responsibility.

Senator GILLIBRAND. Great, and do you foresee that AARO needs additional resources or additional sensors or additional detection to be able to do their job more thoroughly?

General COTTON. I would probably have to defer that to my partner in NORTHCOM [United States Northern Command] to be able to answer that question. So, I don't—with what I know, I don't have a good answer for you in that regard, ma'am.

Senator GILLIBRAND. I will followup for the record on that. While Canada has promised to invest $38 billion over the next 20 years in NORAD updates, our radars in the North Warning System are pretty old and are in known locations. Can you update us, in this setting on how you are modernizing our defenses in Alaska and north of our border?

General COTTON. So, if you are talking NORAD [North American Aerospace Defense Command], NORTHCOM systems, I would have to defer to NORAD NORTHCOM Commander.

Senator GILLIBRAND. Then how is STRATCOM adjusting our missile defense capabilities to respond to the threats you mentioned in your opening statement of hypersonic glide vehicles and hypersonic cruise missiles, to the extent you can answer that in this setting?

General COTTON. I would prefer if we could, ma'am, in a closed setting to be able to address those.

Senator GILLIBRAND. That is fine. General Dickinson, the Space Force is working on a commercial augmentation space reserve, which would give us a civil reserve space fleet if we needed one during a conflict or crisis. How is SPACECOM supporting Space Force's efforts to build this reserve?

General DICKINSON. Thank you, Senator. So that is a great initiative. I think it is—we need that, especially as I described earlier, our leveraging commercial industry to augment, provide additional capabilities to us.

The way we are working with them is, as the combatant command warfighter, we are providing our perspective in terms of requirements for those types of relationships.

In other words, we will have the operational piece in terms of what those contractors could or could not face in the space domain. We participate in that way.

Senator GILLIBRAND. As we plan for peer-on-peer or near-peer conflicts, we have been able to ensure that our forces know how to use our Nation's capabilities, and that they have the opportunity to train with those capabilities.

But most of our space based systems are classified as special access programs. At current classification levels, are lower-level commanders able to understand the full scope of capabilities available to the force and able to conduct military planning with an understanding of space based capabilities and limitations?

General DICKINSON. Thank you, Senator. Over classification is a challenge within the Department right now, but one that we are

aggressively working and looking at refining, to make sure that we can start bringing systems and capabilities to a lower classification level so that we can optimize their employment as well as training of the operators and the forces that they support.

In other words, the classifications, we look across those and are revisiting those documents, those capabilities to see whether or not we can pull them down to a lower classification level. This also allows us to do more integration, better integration with our allies and partners.

Senator GILLIBRAND. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Gillibrand. Senator Ernst, please.

Senator ERNST. Thank you, Mr. Chair, and thank you, gentlemen, very much for being here today. General Cotton, thank you for speaking with me last month regarding your Commander's assessment, including on the SLCM–.

I do appreciate the letter that you responded with to the Chairman and Ranking Member, affirming that SLCM-N offers additional options and supports and integrated deterrence approach. I brought a copy of the letter today. Really appreciate you responding to my colleagues and I. Mr. Chairman, I request that the General's letter be entered into the record.

Chairman REED. Without objection.

[The information referred to follows:]

DEPARTMENT OF DEFENSE
UNITED STATES STRATEGIC COMMAND

Reply To:
USSTRATCOM/J0CC
900 SAC BLVD STE N3.100K
OFFUTT AFB NE 68113-6000

6 Feb 23
SM# 1022-23

Senate Armed Services Committee
United States Senate
Washington DC 20510

Dear Chairman, Ranking Member, and Members:

Thank you for your continued support of United States Strategic Command. During my confirmation, Senators Reed, Inhofe, Hirono, Hawley, Ernst, and Blackburn each asked for my assessment of the Sea Launched Cruise Missile – Nuclear (SLCM-N).

Today's security environment is dynamic and marked by the Russian invasion of Ukraine, Putin's nuclear coercion, and the ongoing nuclear expansion from the People's Republic of China (PRC). For Russia, we have a growing nuclear deterrence challenge centered on Putin's potential perception that the threshold for regional nuclear employment is lower than treaty-limited systems. The PRC is also developing capabilities that would present a similar deterrence challenge, and they are unconstrained by any treaty limitations.

As the Commander of United States Strategic Command, it is my responsibility to advocate for nuclear capabilities and present options to the President that preserve or restore strategic deterrence. Nuclear and conventional capabilities, combined with strategic messaging, are required to demonstrate U.S. stake and resolve to deter, and if deterrence fails impose unacceptable costs and deny benefit the adversary seeks should they employ any nuclear weapon.

A low-yield, non-ballistic nuclear capability to deter, assure, and respond without visible generation (similar to the characteristics of SLCM-N) offers additional options and supports an integrated deterrence approach. It is one of several possible nuclear or conventional capabilities the U.S. could develop to enhance strategic deterrence. I support funding to assess the full range of possible options to address this challenge in a rapidly changing security environment with the backdrop of multiple nuclear adversaries.

Thank you for allowing me the opportunity to provide my view on this deterrence challenge.

Very Respectfully,

ANTHONY J. COTTON
General, USAF
Commander

cc:
House Armed Services Committee
Senate Appropriations Committee, Subcommittee on Defense
House Appropriations Committee, Subcommittee on Defense
The Honorable Lloyd J. Austin, Secretary of Defense
General Mark A. Milley, Chairman of the Joint Chiefs of Staff

Senator ERNST. The President's budget request should reflect this assessment. We feel that that is very, very important, and again, thank you very much for doing your commander's assessment.

General Cotton, the 2022 China Military Power Report estimates that China will field 1,500 nuclear weapons by 2035 and that rivals U.S. deployments under New START. I know we have been hammering down on this.

This is such an important topic for all of us. Do you agree that we must reassess our strategic deterrence requirements given China's nuclear breakout?

General COTTON. Senator Ernst, thanks for the question. Absolutely, I think we need to reassess our strategy or at least take a look at our strategy, our current strategy, and have a force posture conversation.

Senator ERNST. Thank you, and after New START, the U.S. and Russia, and of course China too, might be without strategic arms constraints. Would you agree that the U.S. should prepare to upload its non-deployed nuclear weapons to shore up deterrence?

General COTTON. Senator, I always have flexible deterrence options.

Senator ERNST. Very good. I hope everybody hears that loud and clear. How quickly can we upload each leg of the triad?

General COTTON. Ma'am, I rather have that conversation in the closed setting.

Senator ERNST. Thank you. We look forward to that classified answer, and General Cotton, and I am just going to go into generals here, kind of general answers, because you are Generals. We might need to consider additional measures to ensure the credibility of our deterrent. So, in general, would you agree that placing a por-

tion of the bomber force on day-to-day alert would increase its flexibility?

General COTTON. As a former Joint Forces Air Component Commander, I would like to have that conversation in closed session because I can actually do that without putting them on alert.

Senator ERNST. Okay, and in general, would you agree that moving some of the ICBM force to mobile platforms would increase survivability?

General COTTON. In general.

Senator ERNST. In general. In general, would deploying SLCM-N expand our at sea deterrent?

General COTTON. I think it would address our adversaries' perceive advantage of limited use.

Senator ERNST. Thank you, and in general, would deploying ground-based theater-range nuclear forces bolster our deterrent?

General COTTON. I would like to talk to you about that one in closed session.

Senator ERNST. Okay. Well, I appreciate that. I think that it is important that we continue to have those discussions and understand what our flexibility and options are as we continue to support our nuclear triad.

Thank you very much for that, and General Dickinson, just in the time that I have left. In your efforts with the Combined Space Operations Initiative member nations, I did notice that you had met recently with space leaders from South Korea and Japan. How is this space integration improving with these non-five eyes members?

General DICKINSON. Thank you for the question. That is a great initiative, the Combined Space Operations Initiative board that we have. We just met in New Zealand a few months back, and that is the five eyes plus France and Germany.

But outside of those South Korea and Japan in particular, we are very—working very closely with them. In fact, to the point where we are doing exercises with them, so we have an exercise program called Global Sentinel, which is an unclassified exercise program where we do space domain awareness training.

They are included in that plus 22 other nations as well, and that has been very successful. We also have the Space Force, as well as U.S. Space Command, have personnel serving on the peninsula—now, not large numbers, but small numbers. But we are integrating with the forces, the Korean forces on the ground in Korea as well as in Japan.

Senator ERNST. Thank you. I think it is incredibly important that we continue to work with nations around the globe. Mr. Chairman, I want to associate myself with the comments that Mr. Rounds had as well. I think it is very important that we listen to our military leadership, and based on your best military advice, to make those decisions that are best for the defense of our Nation. Thank you, gentlemen.

General COTTON. Thank you, Senator Ernst. Senator Warren, please.

Senator WARREN. Thank you, Mr. Chairman. So, the Biden administration is requesting $835 billion in the largest, one of the largest Pentagon budgets in history. Despite that gigantic request,

I am expecting that we will receive a torrent of letters from the services and the combatant commands asking for billions more through the so-called unfunded priorities list.

That is the Pentagon's term for it, but I just call them wish lists. The DOD doesn't have to follow the same rules as every other Federal agency, which is other agencies have to balance their must-haves against their nice-to-haves and come up with a budget. Instead, each part of DOD also submits a second list of things that didn't go through the budget process that they still want funded.

In January, I sent a letter to Secretary Austin, along with Senators Braun and Lee and King, telling DOD not to send Congress any wish lists as part of this year's budget process. Last year, some parts of DOD did not put anything on their wish list.

So, my questions today are about whether or not the two of you will choose that route this year. So, General Dickinson, you run Space Command. Will you be submitting additional funding requests on top of the budget that DOD sent to Congress this morning?

General DICKINSON. Thank you, Senator. I will submit a list, and there is a couple of reasons why I will. So being a Combatant Command that is only about three and a half years old, we are continuing to evolve. We are continuing mature. I described a little bit earlier how we are getting more people, our infrastructure is growing, and what we have facing us right now is a very dynamic threat in the space domain, our pacing challenge being China.

With that, we find ourselves in a situation where we try to grow a little bit quicker, and sometimes when we do that because of the threat, it will cost a little more money and money and money that I haven't forecasted because I wasn't able to look at that inside of the budget cycle. That is the first piece of that.

The second piece of it is as I look to round out some of the capabilities that I need. Specifically space domain awareness, we are finding in the commercial market that there are companies that can provide that type of capability to us, and we are taking that capability in our commercial integrations strategy and bringing those partners on board.

Sometimes I don't have that, how much that is going to cost in a contract, inside of a 2-year budget cycle that we are in. So those are some things that I am doing that would be in my UPL [unfunded priorities list]. One would be, how do I grow my command faster to meet the threat? Second, how do I bring on capabilities that I might not have forecasted, that I have come to realize—.

Senator WARREN. So the budget that has just been submitted this morning, you are telling me, is already out of date for your command and that you want to go outside the budget process. You don't want to have to do the 10-year cost estimates. You want to go outside that to just plus up your budget. Is that right?

General DICKINSON. It is. The reason I would submit a UPL is to make sure that I can grow as the threat—.

Senator WARREN. Well, but that is the point of the budget process, is that you go to the Department of Defense, you say, "here is how I need to grow." They give you a number, and then you make the appropriate choices within that number. You are just saying they didn't give you a big enough number, so you want to do an

end run in order to plus up your budget? Is that what you are saying, General?

General DICKINSON. I am saying that the space domain, the characterization of what I see going on in space with the advancements of the threat from the Chinese in space warrent me to be able to account for that—.

Senator WARREN. Well, but that is the point of going through the DOD budgeting process. You have been given a number by DOD and you have just decided to go outside that. I want to also be sure to get to General Cotton. You run our Nation's Strategic Command, responsible for our nuclear weapons arsenal.

Now, during your confirmation, you told me, "as the Commander, my job is to ensure that I can execute my mission with the dollars I have been given." General Cotton, same question to you as General Dickinson. Will you be submitting additional funding requests on top of the budget that DOD sent to Congress this morning?

General COTTON. Thank you, Senator. I think I had that caveat there, too, as far as talking about emerging responsibilities and emerging threats. No different than what General Dickinson said. The 2-year cycle, things change within a 2-year cycle.

I have been asked this morning on how am I going to handle looking at the new emerging threats that we have just seen in probably the last 60 days of what is going on within the strategic threat picture.

So right now, we are going to have to look to see if we are going to submit an UPL to be able to get after some of the threats that we are seeing today. I am responsible for EMS, the spectrum management piece.

We are right there on a 2-year cycle where we didn't do that 2 years ago for the 2024 budget to understand how we are going to be able to set that up, to be able to get after some problems. I stand by what I said as a commander, I will always try to make sure that I get—I can be able to do my job within my means. But I always, as all commanders, we all have emerging threats or needs that might change the calculus on what our previous budget had.

Senator WARREN. Well, I appreciate that, and I am out of time, but I just want to say I think we should be asking DOD to write budgets that reflect their actual priorities, and that they should know as much about these emerging threats as the individual commanders do, and that we should not be doing a dual estimate here of budgets where you have one number and then you just come in and ask for a lot of additional money. I think that is wrong. Thank you, Mr. Chairman.

General COTTON. Thank you, Senator Warren. Senator Scott, please.

Senator SCOTT. Thank you. I sympathize with what Senator Warren is saying. I mean, it is hard to figure out what the budget should be, and so there ought to be a way where we know—we hear everything and then try to make a decision.

Thanks for what you do. Can you just talk about—first off, you watch all the stuff that China is doing. Clearly the public should know, the fentanyl coming across the border, the Chinese spy bal-

loon, the surveillance with DJI drones, they have got TikTok and all that stuff.

So take—what could we do? What could the public do? What should we do on things like that? Is there anything that we could do that would impact and make your jobs and what you are trying to do as part of our defense easier? Both of you. Thanks. Whoever wants to go first.

General COTTON. Senator Scott, thank you. I think public advocation, the advocacy of—for my portfolio, for example, the advocacy of the modernization of the nuclear triad, the modernization of the weapons complex, the modernization of infrastructure. Those are the things that on the surface, I don't know that the American people will truly understand on the effects of not having those things are and the effects to the national security of our Nation for not having those type of things. So, advocacy in the public light from yourself and others to be able to articulate the needs that we have I think makes a big difference for us.

General DICKINSON. I think it is advocacy and education and awareness of how important for my portfolio-space, is to not only military operations, but just our way of American life and really the global economy.

As we watched Artemis I launch here not too long ago, and we see the excitement of going back to the moon and beyond, I think that really has motivated the American public and the world, for that matter, that we are going back to the moon and beyond.

But when you look at that, and you look at what the Chinese are doing today with their own space station on orbit, their own ability to go to the moon. Go to the moon and scoop up some rocks and come back, demonstrating their technology advancements.

We need to understand that that has a military application too, and that the same assets or similar assets that we depend upon in everyday life here in the United States and around the world is dependent upon space.

Space fuels the economy. Space fuels our lifestyles. I think just understanding that space is exciting from a civil commercial piece, we also need to be able to say it could be held at risk. That risk is what I am doing each and every day, is to try to mitigate that risk or reduce that risk.

Senator SCOTT. So how can you or how can we or how can the Biden administration, any of us, take what we watch what China is doing every day that we all get to see, right, to do a better job of explaining what we need to do on nuclear deterrence and what we need to do on space. How can we put those together where the public will get it?

Because you are right, it is going to be—we got to advocate for this stuff. The public doesn't believe in it. It is going to be hard for us to, to get the money to funded, right. Because we represent the people in our State. So how would—what should each of us be doing better?

General DICKINSON. I think talking about what they are doing, in space right now in terms of, you go back to 2007 when they conducted that direct decent ASAT [anti-satellite] test.

That test, we are still tracking more than 2,000 pieces of debris from a test that happened in 2007. That type of messaging and

that type of conversation, where appropriate, I think is very important to do. From my perspective, that is how you get—a constant conversation about how are they improving in space.

Senator SCOTT. Okay.

General COTTON. Senator Scott from my portfolio, I think is actually educating folks to understand that what does it mean when the Department of Defense says that China is a pacing threat? What does that really mean to folks that are in Melbourne, Florida?

Being able to describe that and understand what does that mean when we say that there is a nuclear breakout and then the first time in the history of the United States since the advent of nuclear weapons, that the United States has two nuclear peers. That is the education that needs to happen for our American people.

Senator SCOTT. Right. Thank you. Thank you, Chairman.

Chairman REED. Thank you, Senator Scott. Senator Kelly, please.

Senator KELLY. Thank you, Mr. Chairman. General Dickinson, since we left off with Senator Scott's question about your answer a little bit about commercial space, I want to start there.

In February, the president of SpaceX revealed that the company had taken active steps to prevent Ukrainian forces from using Starlink technology with their drones. SpaceX admitted they had not foreseen the weaponization, their words, of their capabilities. I was personally disappointed to see discontinuation of full services at such a critical time for Ukraine's self-defense.

General, as SPACECOM moves forward in deepening its partnership with industry and foreign partners, how are you approaching the agreements with industry on military use of commercial capabilities?

General DICKINSON. Senator, there is no question that SpaceX's Starlink system has been used extensively by Ukraine in its response to the Russian aggression. I think the use of Starlink has been described in numerous media accounts almost since the beginning of that conflict. I think this demonstrates that commercial space capabilities can play a significant role in our modern high intensity conflicts.

The concerns, I think, SpaceX representatives recently expressed about Ukraine's use of Starlink highlight the importance of shared understanding between commercial service providers and their customers and users. So, these issues, in my mind, bear on contracts in all operational domains, not just specific to space.

Senator KELLY. Do you feel there is a connection between the availability of this capability to our partners, being Ukraine in this conflict, and relationships we have with companies like SpaceX?

General DICKINSON. Yes.

Senator KELLY. How are we going to ensure that DOD and our partners will have all the capabilities available throughout the range of military operations? If you have any specifics about this going forward, I would love to hear them.

General DICKINSON. Yes, there is an initiative that is working right now within the Department, within the Space Force, that is actually looking at what you just described there. How do we make

sure during times of conflict that if we are relying on commercial companies for certain services, that they will be available to us?

There are models like that right now, for example, the craft model that we use in the Department right now, the civilian reserve air fleet. You know, there are—so that may serve as a model as they go forward in their work, and we participate, U.S. Space Command, in that process.

Senator KELLY. General, I am going to have my office followup. If you need assistance there, we are here to help.

General DICKINSON. Thank you.

Senator KELLY. General Cotton, In the years since Russia's unprovoked assault in Ukraine, the United States has been forced to rethink our nuclear posture and how we think about deterrence. Just a few weeks ago, Russia announced that it would suspend its participation in the New START Treaty.

But even prior to that, I mean we all knew that Russia was refusing inspection of nuclear facilities, which was a key condition of the agreement. This behavior, along with increased Chinese aggression and the influence from China, but also North Korea's regular testing of ballistic missiles, and Iran's, I would say, undisputed progress to enrich uranium, it underscores the importance of having a strong deterrence.

The long-range standoff weapon (LRSO), the long range standoff missile system being developed by Raytheon in Tucson, Arizona, is going to play a critical role in the deterrence of our top four adversaries in the future. The ability to forward deploy this missile on U.S. bombers sends a powerful message to our adversaries, but also to our allies. So, General, can you expand on why this is such a critical asset for our Nation?

General COTTON. Senator, thank you for the question. LRSO is a replacement for the air-launch cruise missile, which is the air-launch cruise missile nuclear leg of our triad. That weapon is still a reliable weapon and it is a safe and secure weapon, but it is well past its life as far as capability sustained, so we need to replace it with the LRSO.

You are absolutely right. I am quite pleased with what I have seen with the contractor on the work that they are doing. It is fundamental because that is fundamental to long range standoff for the air leg of the nuclear triad.

Senator KELLY. Well, thank you, and my understanding, without going into anything, you know, classified, that we will get more capability out of this weapon than we had with the prior, I think it was AGM–86, was it?

General COTTON. Yes, and we could talk more about that in closed, if you would like.

Senator KELLY. Thank you, and thank you, Mr. Chairman. I am going to submit another question for the record on traveling wave tubes. Specific capability that we don't have a lot of depth in here, in our industrial base. Thank you.

Chairman REED. Thank you, Senator Kelly. Senator Budd, please.

Senator BUDD. Thank you, Chairman. General Dickinson, General Cotton, thank you both for being here today. You know, last

year, President Biden's defense budget was woefully insufficient to keep pace with China and Russia and also inflation.

I think many of us are concerned with this upcoming budget, particularly when it comes to nuclear modernization. So, General Cotton, other than budgetary constraints, we have talked a lot about that today, what barriers exist to nuclear modernization efforts?

General COTTON. Senator, thanks for the question. I think fundamental to me is ensuring that we don't have any slips in any of the modernization programs that we have as far as timelines in terms of being able to get to completion.

The industrial base and supply chain—we hear many people talk about that. It is a thing, and that is worrisome to me because that is external to even what folks might think our technical challenges, but when you throw that on top of what we are trying to do and what we are seeing, that becomes a challenge.

Senator BUDD. Thank you, and for both of you, to the extent that you can discuss it in this setting, and maybe we will hear more later on, how destabilizing is China's development, of their nuclear capable hypersonic fractional orbital bombardment capability?

I know that is a concept that has been around for decades, but we are seeing with new technology their redevelopment of that. So, are there certain systems? First of all, how destabilizing is that? Is there something that the U.S. should field in response?

General COTTON. It is destabilizing. You are right, it is something that folks have been thinking through for decades, but because of the destabilization, results of what that weapon can bring forth, others decided not to go in that direction. I think for our perspective in Strategic Command, it is about warning.

As my fellow COCOM Commander in NORTHCOM and NORAD would tell you that becomes a problem in being able to understand what your timelines are on when something might be coming into the Homeland.

General DICKINSON. From my perspective as the global sensor manager, being able to see it is the first thing we have to be able to do. As I have mentioned earlier in a previous response, these are emerging type of threats, that we need to be able to address.

We are looking very closely at it in terms of how do we use capabilities that we didn't traditionally use for that type of activity, in this case, the fractional overall bombardment capability.

Do we have things that we can better leverage today to help us maintain custody of it, when it is in flight? So, for me, it is an area that I am aggressively working today with the assets that I have and we are looking to the future to bring on increased capability.

Senator BUDD. Thanks. We will pick up the discussion of that in the other setting. General Dickinson, how would you characterize the current resilience of our military satellite constellations, and what efforts are being made to improve resilience in the near and the short term? The concern is that because these systems are so expensive, we buy less of them, thus making them more vulnerable. So, if you would comment on that, please.

General DICKINSON. Certainly. So, as I look at the architecture that we have today and the resiliency of that architecture, we are

looking at ways today that we hadn't looked at in the past in terms of making them more resilient.

Our ability to develop tactics, techniques, and procedures for our assets that are on orbit in order to make them more resilient. Maybe able to move, maybe point in a different direction, are examples of that, or actually doing—so as I mentioned in my opening comment, that we look at it from a link, ground station, and satellite perspective.

Those are the three segments. In order to increase our resiliency, we look very carefully at how we can harden, not only the satellite vehicle, but the link to the ground, and then the ground station through cyber protection back to wherever the command-and-control facility is.

So, we look at it from that approach. How can we better—how can we increase the resiliency on orbit, as I mentioned earlier, and then those two other links.

Senator BUDD. Is there a scenario where you would have less expensive but so many more of them that we would thus reduce our vulnerability?

General DICKINSON. As we go to the future, the department is looking very closely at doing mega constellation, similar to what we have seen with some of the commercial companies here in the United States where we have thousands of satellites on orbit.

The resiliency there is very good in terms of thousands of satellites not knowing which satellite does necessarily what function or the ability of that network to self-heal itself if you lose two or three or four of them.

This type of resiliency actually causes some of our adversaries to pause because it is very difficult to defeat something like that or even degrade it. So that is where we are going in the future, and that is exactly what we need to be doing.

Senator BUDD. Thank you both. Chair, I yield back.

Chairman REED. Thank you very much, Senator Budd. Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. Thank you, General Cotton and General Dickinson. Hawaii holds a strategic position in the Pacific with many integral Department of Defense equities, which makes the threat of missile attack particularly acute for the people of Hawaii. I have been asking for many years now how DOD will ensure Hawaii is defended from a missile attack.

Recently the cost assessment and program evaluation, CAPE, conducted a study on how best to meet the current and future missile defense needs of Hawaii. I have still not received a brief on the results of that study or the Department's plan for how it intends to protect Hawaii from all types of missile threats, from current and future potential adversaries. Is it fair to say that each of you has roles to play in missile defense?

Yes? I am not hearing anything. Yes, you do. It is fair to say. So, can you just briefly describe what these roles are that you have a missile defense?

General DICKINSON. Thank you, Senator.

Senator HIRONO. General Dickinson.

General DICKINSON. Thank you, Senator. So yes, in U.S. Space Command, I have got a responsibility to provide space enabling ca-

pabilities to the Joint Force, in this case INDOPACOM [United States Indo-Pacific Command]. Those space enabling capabilities are missile warning as well as position, navigation, timing, satellite communications. Those are the pieces that we provide to the missile defense architecture.

Senator HIRONO. General Cotton.

General COTTON. For mine, ma'am—thank you for the question. For us, above all else, it is about providing warning and future architectures and protection of the Homeland. So that is the oversight that we have as far as homeland defense, providing effective protection of U.S. against rogue nations.

Senator HIRONO. So, you both have responsibilities regarding missile warnings. I do have serious concerns that there is not one dedicated person in the Department of Defense with the responsibility to ensure that there is a plan for missile defense of Hawaii, as there are many roles and responsibilities doled out across the Department of Defense for this one issue.

That is why I expressed frustration, because every time I ask about missile defense or Hawaii, I don't get a response. So, as we have seen in the continuing challenges regarding the regional crisis, where there is not one ultimate person ultimately responsible over the planning and execution of an issue as it relates to what needs to happen with Red Hill—and it adds to the lack of trust within the community that the military will get things right with regard to Red Hill.

So, there is room for mishaps to occur. I await someone to tell me how Hawaii will be defended from missile attacks. Moving on, to continue in the line of missile defense, there is robust conversation occurring in Congress to look for ways to more effectively use the microwave spectrum to support developments in wireless telecommunications technologies while protecting national security.

The development of 5G communications will have a great impact on the U.S.'s ability to remain a world leader, in both the commercial and defense spaces. The Department of Defense is currently conducting a study, in conjunction with NTIA, on how it can more effectively and efficiently use the spectrum, and how spectrum sharing would impact current systems.

I believe this analysis will be critical to making an informed decision about this very important national issue, and I believe it is critically important Congress extend the FCC [Federal Communications Commission] spectrum auction authority until September 2023, while the DOD concludes this important study.

As I am sure you are aware, the current auction authority will expire tonight, March 9th, unless Congress agrees to a short-term extension. With negotiations ongoing, we should agree to a 60-day extension, at least in my view, and not let spectrum authority, auction authority lapse.

So, it is critical that DOD and NTIA thoroughly conduct this study contemplating all options, including vacating and sharing the spectrum band. It will be imperative that the study is not only comprehensive but is submitted in a timely matter.

Clearly, I share the concerns expressed by Senator Rounds on this issue. In the meantime, General Dickinson and General Cotton, what types of impacts do you anticipate the study will identify,

and do you see opportunities for greater sharing of the spectrum for civilian usage? My time is up, so perhaps you can be very brief.

General DICKINSON. Yes, Senator. So, we are part of that ongoing study that the Department of Defense is doing. I can't—I won't try to guess what the outcomes will be from that. I know as being part of that study that my concerns and my voice will be heard in that study in terms of how important that part of the inspector spectrum is to my mission every day. My mission every day supports the rest of the Joint Force as well.

General COTTON. Senator, the same with STRATCOM. We are part of that team that is part of that study, so I am awaiting the results of that as well.

Senator HIRONO. It is going to be very important that the study gets done on time because there are other things that are happening with regard to this issue, as you all know. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Hirono. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. I had a question to General Cotton on modernization. Clearly, you know Whiteman Air Force Base in Missouri, we are very proud of that, which I know you are very familiar, and part of the nuclear triad and the B–2 stealth bomber.

I guess you mentioned, one of your focuses is to make sure that as we approach this modernization, that there aren't any there aren't any gaps along the way. I guess the focus of my question would be, what is the level of concern that there might be, and what can we do to make sure that that doesn't happen?

So along the way, as we move forward in this, what are some things to look out for and what can we be doing to help out with that?

General COTTON. Senator, thank you for the question, and yes, the incredible men and women of the 509 there are Whiteman Airforce Base. I think fundamentally, as any—if we start seeing delays in programs and delays on getting to completion of a program, because what I don't want and what I have articulated is I need to make sure, the B–2 is a good example, that I have sufficient forces in play all the time.

Even during the transition, we must ensure that I have the legacy systems in place where I can still present options to the President of the United States. If you start getting slips, then folks start saying, "well, okay, so when can I start. Is there a is there when can I start divesting and do I slow down divestiture? What do I do about divestiture as a component commander, I need to make sure that I have those sources available."

I am constantly watching to make sure that those future roadmaps for your area, the bomber force, for example, for *Columbia,* for example, ICBMS, every portfolio that I own, is being modernized right now. So, as we look to those and make sure that we don't build gaps because of delays in——

Senator SCHMITT. Are you confident there aren't those gaps right now, wherever we are at in that process 0under your command?

General COTTON. Well, as I said earlier, my bigger concern is what we are seeing with the industrial base and what we are seeing with the supply chain.

Senator BUDD. Okay. General Dickinson, I guess my question to you is on the space race. I do feel like whether it was the Chinese spy balloon, whether it is the fentanyl, that has been mentioned. TikTok. The public is becoming much more aware, right now, in real time, the real threat that China poses.

I mean, they are not messing around. They mean business, and I am a new member here, and the briefings that we have had in my 2 months here are sobering in many ways. That is, a big focus of mine and my office: to make sure that we are doing everything we can to be ready to challenge that threat. I guess Senator Scott asked the question about what we can do.

I want to drill down on that a little bit more. Specifically, what are two or three things that you don't think from a space perspective, you don't think the public might be aware of as it relates to China in space that are terrifying?

General DICKINSON. A couple of things. If you just look at the sheer number of launches, space launches that they do in a year—that is a statistic that most people don't know. I will give you a statistic there. In 2022, last year, there were 186 space launches. Of those, 64 were Chinese, United States was 87, the rest before. Just putting things on orbit, whatever they may be.

They have rounded out their equivalent of our GPS satellite network. They call that the BeiDou. They have accurate position, navigation, and timing capabilities worldwide. If you look at the just the sheer number of satellites that are in orbit and what their intended use is everything from ISR [intelligence, surveillance and reconaissance] satellites to communications satellites to PNT [positioning, navigation and timing] satellites.

So, they are moving in a direction where they want to be, peer to us in terms of capabilities in space. They are still—we are still the best in space. But what we need to make sure is that that gap does not close and that we continue to keep the gap or increase it.

Senator BUDD. I guess just a final question. What are a couple of those capabilities, do you think, outside of the launches? A couple of those capabilities that, again, most folks might not be that aware of.

General DICKINSON. Well, it would be ISR satellites, so they can—they have observations in terms of being able to see around all around the globe in a persistent manner. Then the other piece is that position, navigation, and timing. That is, PNT is a critical component of any military operation and quite frankly, any commercial or civilian operation as well. Having accurate PNT is very fundamental to that, and they have that.

Senator SCHMITT. Thank you. Thank you, Chairman. Senator Rosen, please

Senator ROSEN. Well, thank you, Chairman Reed. I really appreciate you holding this hearing. I would like to thank General Cotton and General Dickinson for, of course, your great testimony today and for your service to our country.

Of course, we have the Nevada National Security Site right here in southern Nevada. I want to speak a little bit about the upgrades

that it needs. So, General Cotton, I want to followup on a question I asked at your nomination hearing now that you have taken command. It is an issue I have raced to the Committee several times.

At the Nevada National Security Site, we oversee the Stockpile Stewardship Program, principally the U1a facility—that underground lab where scientists conduct the subcritical experiments to verify the safety and reliability of our nuclear stockpile without explosive testing.

U1a is undergoing major construction. It is a project that will soon house the most capable weapons radiographic system in the world. However, NNSA [National Nuclear Security Administration] currently faces significant infrastructure delays, including at the Nevada National Security Site.

So how will the upgrades to the Stockpile Stewardship Program, like the U1a, affect STRATCOM certification of the nuclear stockpile? How do these infrastructure modernization challenges overall delay your impact to fully fulfill your responsibilities?

General COTTON. Senator, thank you for the question. As I had said earlier to the Committee, making sure that we have the proper funding, the proper insight on the modernization of the weapons complex writ large, to your point, is absolutely critical for us in the modernization of our programs, when we have been talking about the weapons system platforms themselves. So that is going to be critically important.

When we talk about NNSA and the problems that—or the challenges that they are facing in regards to infrastructure, I monitor that daily.

Senator ROSEN. So that is how you are addressing these structural delays, just monitoring? Is there something else you—.

General COTTON. I continue to push—the requirement, ma'am, for pit production for me, for example, has not changed.

Senator ROSEN. Okay. Thank you. I am going to move on to you, General Dickinson, for cyber mission and space, because we know cyber operations, you have been mentioning of course, they play a critical role, well not just in our space capabilities, but honestly, I believe in every aspect of our capabilities.

We see our adversaries increasingly developing their counterspace capabilities that really undermine our interests. So, China, they have emphasized the offensive cyberspace capabilities, that they are critical to their cyber warfare capabilities. Are you concerned about the increasing threat of cyber-attacks from China and how they could jeopardize the United States space operations?

You spoke about doing the constellation mode, some of the other things that you might be doing, you can speak to in an unclassified setting. So, are these some of the best tools you can use against—kind of counter the space cyber aggression, if you will?

General DICKINSON. Thank you, Senator. Cybersecurity is a top priority within the Command because we understand the challenges and the threats, just as you mentioned there. The Command is actively working cybersecurity every day.

So as the Command has matured over the last three and a half years, we have built cyber, cyber protection, in from the very beginning. An example of that, we have a joint cyber center that resides within the Command, now that is that operational capability.

Senator ROSEN. I am sorry to interrupt, are you using machine learning and artificial intelligence to maintain the digital superiority in the new centers?

We use that type of—those types of capabilities to do as I described in terms of our JCC, Joint Cyber Center, as well as the new Space Force Delta 6 that stood up that does cyber protection for our satellites, satellite communications control networks, as well as the integration of General Nakasone's integrated planning element within my command as well.

We participate in the greater cybersecurity and the cyber deterrence process with USCYBERCOM [United States Cyber Command] as well, through their cyber priority effects list. Every day one of my top command priorities is doing—securing the terrain, doing digital superiority. Part of that is making sure that we are hard in terms of cyber defense.

Senator ROSEN. Thank you. I am going to in the really quickly and I will probably take the answer off the record because I ask everybody this. STEM [science, technology, engineering, and mathematics] outreach programs, how are we going to reach these goals if we don't have the workforce, the pipeline folks coming in or being trained?

So, I will take it off the record is my time is expiring, but I want to know about your STEM outreach efforts, particularly in cyber. How do you plan to grow them? How do you plan to retain good people because it really is—it is critical. So, thank you, Mr. Chair. I will take that off the record. Thank you.

Chairman REED. Thank you very much, Senator Rosen. Senator Tuberville, please.

Senator TUBERVILLE. Thank you, Chairman Reed. Generals, thanks for being here, and service for all of you here in this room today. General Dickinson, I know you talked about Starlink a little bit in Ukraine. Give your personal assessment really how that has worked for Ukraine and for all of us in the future.

General DICKINSON. Thank you, Senator. So I think the lessons that I take from watching that capability, the Starlink capability, is I think it demonstrates what those large constellations can provide in terms of thousands of satellites providing a service or a capability to a certain entity, in this particular case, Ukraine, I think, shows: one, is the maturation of our commercial space industry enabled to build something as technically sophisticated as that on scale, and put it on orbit, and maintain it. I think that is a big lesson learned or takeaway for me from the Ukraine-Russia conflict.

Senator TUBERVILLE. Thank you. General Cotton, a lot of people talk about tactical nuclear weapons but don't know what that really means. If Putin were to use a tactical weapon in Kyiv, what damage would that do and what would be the fallout?

General COTTON. Sir, so when we talk about non-strategic nuclear weapons, just for a definition, non-strategic nuclear weapons are any weapons that are currently not under the New START treaty. So, for Russia, that is approximately 2,000 weapons. For the effects, I would like to hold off and have that answer to you during a closed session, if we could.

Senator TUBERVILLE. Okay. Thank you very much. General Dickinson, it probably wouldn't be—it would be unfitting for me not to ask you about Space Command in your last hearing here, since the Senator from Colorado, I mean New Hampshire brought it up a little bit.

We have heard a lot about in the last few years about basing decision of the command headquarters. I didn't want to get back into this back and forth, but when my colleagues bring it up, I want to make sure the facts are correct.

General, in 2019, the Air Force identified six suitable locations for Space Command, is that correct? In 2020, when the Secretary of Defense, Mark Esper, testified before this Committee, he instructed the Air Force to allow for communities to self-nominate. That resulted in the Air Force examining 66 communities across any 26 states, correct?

General DICKINSON. As best I can recall.

Senator TUBERVILLE. It was an exhaustive selection process that weighed 21 different factors and involved site visits, interviews, input from up and down the chain of command. That process took 8 months, correct?

General DICKINSON. As best I can recall.

Senator TUBERVILLE. Thank you. Which community ranked number one in your—in that analysis at the end of the day?

General DICKINSON. I don't recall exactly which one.

Senator TUBERVILLE. Well, I will refresh your memory, Huntsville. Do you recall which base ranked second?

General DICKINSON. I don't recall.

Senator TUBERVILLE. Offutt Air Force Base in Nebraska. You recall third? You probably don't—which was the Joint Base in San Antonio. Commander-in-Chief selected the location that the Air Force ranked number one.

Yet since the President selected Huntsville, the location, the Air Force study ranked number one in January 2021, we have had 2 years of delay and the world is on fire right now. We need to catch up. The Colorado delegation asked for an investigative report and the GAO [Government Accountability Office] reported on the process.

Ironic, Colorado wasn't in second or third, but they asked for a report. So, when the GAO examined this process, they said, I am going to quote here, "the Redstone Arsenal ranked as the highest scoring location in the evaluation phase, the highest ranked location in the selection phase, and the location with the most advantages in the decision matrix.

Air Force official stated that the decision to identify Redstone Arsenal as a preferred location stemmed from Air Force analysis showing it was the strongest candidate location." We are going back and forth with this, and I know Secretary Kendall is going back and forth and hopefully we get this done.

Hopefully we get it done before your term is up. I know that we have got commercial people that are involved in this. I know commercial people are going to be hugely involved in our—in Space Command in years and years to come, and we look forward to all of that coming together in one location in the very near future, and hopefully that is Huntsville.

So, General, thank you for your service, really. Thank you for your service. What you have done for Space Command. You have been the only one there. You brought it from infancy. You have done a great job. Thank you.

General DICKINSON. Thank you.

Senator TUBERVILLE. Thank you.

Chairman REED. Thank you, Senator Tuberville. Senator Cramer, please.

Senator CRAMER. Thank you, Mr. Chairman. Thank you to both Generals for your service and for being here. I want to start, maybe start and end with you, General Cotton. I want to ask you, your predecessors had some luxuries you don't have.

Of course, they had six B–52 bases in the Northern tier capable of taking off and landing that great big legacy machine, six of them between Michigan and Montana. There are only two that remain that have the cement, and one, of course, in Minot, which you are more than a little bit familiar with.

The other being Grand Forks. The base in Grand Forks has narrowed the 300-foot-wide runway to 150 by moving the lights in but all the concrete remains. As you look forward—and I was interested in one of your previous answers about LRSO, the importance of LRSO in the legacy systems, particularly in the context of a potential gap.

But when it comes to bomber combat employment base that we have talked about a few times, how useful would more runway space be for the disbursement of those B–52s and maybe other large aircraft, especially while we still have some of them intact that could be prepared quickly.

General COTTON. Senator Cramer, thank you for the question, and our baby the buff, the B–52, I just recently looked at an article that was published on the Air and Space Forces Magazine that showing the testing that is underway for the re-engineering of the B–52. So I am knocking on wood that everything is going well in regards of serving the commercial and your replacement program for that venerable, incredible machine.

To your point, you are absolutely right. We used to have numerous airfields throughout the United States of America that could act as dispersal sites for a lot of our strategic forces and weapons. Not permanent locations, but the places where you can disperse.

Over the decades that has eroded. Many communities will look and see and say, I don't understand why I have an 11,000-foot runway at my regional airport, and then it is no longer a 11,000 foot runway. So, we are looking into it. I am actually having the Commander of Air Force Global Strike take a look at dispersal locations again, because now, once again, as we have been discussing, we have two near peers.

First time in the history of what STRATCOM has had to deal with. So we are looking into that right now, sir, so to answer your question.

Senator CRAMER. No, I appreciate that, and as you know, the folks up in Grand Forks are capable of moving a lot of snow fast so that 300-foot runways ready to be deployed. With regard to those two near-peer adversaries or threats.

China's capabilities, of course, are growing at an unprecedented pace, as you guys have already referenced. Russia, of course, becomes more unpredictable and dangerous all of the time. Some of the programs that we are relying to maintain that deterrence were created with different threats in mind, obviously, or at least different scales of those threats.

I often joke with Senator King that the reason I accepted the ranking position on the Seapower Subcommittee was so I could get my hands on the third leg of the triad. But do you think, are 12 *Columbia*-class submarines enough? I guess that is the bottom line. I know we have a lot of challenges, but given this threat, particularly from China, are 12 enough?

General COTTON. Senator, thank you for that question. I think it goes back to the original statement that I made in regards to I think we have to have a conversation and look at force posture. Force posture is all three legs of the triad to ensure that we have what we need moving forward into the 2030's, 2040's, 2050's.

Senator CRAMER. Since I have about half a minute left, I do want to ask both of you a really basic question that I know requires just a simple answer. It is really in response to Senator Warren's line of questioning regarding the budget and unfunded priorities. Do you consider national security as a like to have or a must have in today's threats? General Cotton first, and then. General Dickinson.

General COTTON. It is a must have.

Senator CRAMER. General Dickinson.

General DICKINSON. It is a must have.

Senator CRAMER. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Cramer. Senator Sullivan, please.

Senator SULLIVAN. Thank you, Mr. Chairman. Gentlemen, good to see you. General Cotton, thanks again for coming to the Alaska Day event. Native people in my State were very honored by your presence, and I think it was a really good event, so thank you very much on that.

I want to ask you about the recently conducted CSIS [Center for Strategic and International Studies] Taiwan scenario war game that I am sure you are familiar with. It recommended that the B–1s not be retired until the full complement of B–21s and modernized B–52s are fully on hand. Did you see that, and do you agree with that assessment?

General COTTON. So I haven't seen the assessment that articulates B–1 perspective.

Senator SULLIVAN. What do you think about that general statement? I am sure it is not the first time you have heard something along those lines. We need to look at mitigating the risk of B–21 delivery time going to the right——

General COTTON. Senator, I absolutely agree that—and what I want to ensure is that we have enough of the bomber force available that is a legacy until we have a fair amount of B–21 brand new modernized systems. So I don't see a huge dip in my capability and capacity moving forward.

Senator SULLIVAN. Okay. Let me ask another issue. I had a very senior U.S. Air Force officer when he was on his way out retiring and he was talking about force posture for some of the strategic

forces. Mentioned, and I wasn't pushing it, but he mentioned that with regard to looking at where the B–21 should be placed, that one place that would certainly get our adversaries' attention, particularly China and Russia, is having a certain element of those homeported in Alaska, given our strategic location.

As you know, Billy Mitchell called Alaska the most strategic place in the world. With B–21s in our closeness to Russia, and Japan, and Korea, and the Taiwan Strait, this was a recommendation that he thought made sense.

A lot of the INDOPACOM theater generals and admirals always talk about West to the international dateline. I try to encourage them to not use that. It is kind of a lazy term. A lot of what is further North is actually closer to key theaters of engagement, whether or not you are West or East of the international dateline, it's all about miles.

If you are North, our times are closer. For example, forces in Alaska are closer, for the most part, the key theater areas than Darwin, Australia. A lot of people don't know that. A lot of four star generals and admirals don't know that. So what is your thought about something like that in terms of force posture, especially as it relates to near-peer—it is not even near-peer competition. It is clearly peer competition, in my view, no?

General COTTON. Senator, thank you for that. We actually had a discussion about that in my last role as a Commander of Global Strike Command in regards to, I think from the location of where the forces are postured, I look to my JFACC, my Joint Forces Air Component Commander to figure out where they can best maximize where that would be.

As you know, we would always consider and have considered and do use the bases in Alaska for dispersal locations for our bomber forces even today when we are doing our bomber task forces.

So, that is a conversation that I think should continue, that we should continue to have. But it would be with the Air Force in regards to location.

Senator SULLIVAN. Thank you. My final question, I am going to ask for both of you. I think the Chinese spy balloon has raised a lot of issues. But one of the issues that I know that General VanHerck is looking at, and to his credit, he has been really pressing for a couple of years now, is domain awareness.

Domain awareness, particularly as it relates to hypersonics, to cruise missiles, and even to slow moving objects. A lot of our detection devices—in as you know, Alaska, again, is key here because anything coming into the lower 48 to strike Chicago or New York City is going to come through the airspace in Alaska.

But we have traditionally been focused on ballistic missiles tracking and in bombers. So how do we get on the whole issue of domain awareness as it relates to hypersonics, cruise missiles, and then even slow-moving entities like balloons, spy balloons?

General DICKINSON. Senator, in my portfolio in terms of space domain awareness, that is a critical capability that we continue to look at, continue to develop requirements, and also continue to leverage assets that we haven't necessarily used in the past to do that very function. Of course, Senator, you know, you have got two great sensors that are in your home State.

We are looking forward to the LRDR coming on here soon. That will be obviously a big asset in addition to our architecture itself. But I think as we look at the evolving threats that we are seeing now, our approach has to be a layered approach in terms not only particularly with missile defense, but also in sensing.

So, one sensor doesn't do it all, so we have got to figure out and we are figuring out where those gaps are, where those seams are, and how to get better at understanding the threat.

Senator SULLIVAN. Great. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Sullivan. Senator Cotton, please.

Senator COTTON. Thank you, gentlemen. Welcome back. General Cotton, I can't remember if we have addressed this before at your confirmation hearing, but I have addressed with a lot of your predecessor, so I want to raise with you again.

Sometimes we hear criticism about our nuclear forces along the lines of that we shouldn't spend so much money on weapons that we never use. I sometimes point out that we don't actually spend that much money on our nuclear forces in the grand scheme of our defense budget.

We do happen to be going through a somewhat expensive modernization right now, but in general it is in the low single percentiles. I also point out that we actually do use our nuclear weapons.

We have used them every single day since August 1945 to deter the kind of war that we had from 1939 to 1945. Would you agree with that assessment?

General COTTON. I would agree with that, Senator.

Senator COTTON. That every single day our nuclear weapons deter our adversaries not just from nuclear warfare, but from the kind of conventional warfare that we saw so often in the first half, even in some cases, at a lower intensity level, the second half of the 20th century.

General COTTON. I do agree.

Senator COTTON. So, we have to have a credible nuclear deterrent to achieve those continued effects. Right now we have one nuclear arms control treaty, in effect, the New START treaty. However, Russia has recently suspended its cooperation with that treaty. Is that right?

General COTTON. They have suspended, yes, sir.

Senator COTTON. What do you think are the prospects for Russia returning into compliance with that treaty, given their history of cheating on other treaties like the Intermediate Nuclear Forces Treaty and the Open Skies Treaty?

General COTTON. I would hope that they would come back and try to get in compliance, but hope is not a plan.

Senator COTTON. Right. So over time, there is really no way to know if they are actually complying with the limits on warheads or delivery systems under that treaty.

General COTTON. That is correct.

Senator COTTON. I just want to talk a little bit about Russia's nuclear forces that are sometimes known as tactical nukes or strategic nukes or low yield nukes, whatever you want to call it. To put it simply, smaller nuclear warheads, maybe something akin to

what we used to in World War II as opposed to four megaton city killers. Is that a fair characterization?

General COTTON. That is correct, and to define it, non-nuclear strategic weapons are defined as any weapon that is not under the New START treaty. It is about 2,000 weapons.

Senator COTTON. So all these, all these weapons, whatever their yield, were not covered by the New START Treaty and therefore not covered by any treaty, correct?

General COTTON. That is correct.

Senator COTTON. Do you want to say how many of those kinds of weapons we have? If you don't want to in this setting, that is fine.

General COTTON. We can talk about that in a closed session, sir.

Senator COTTON. I think we have a little bit fewer than 2,000 is the way I would put it. You might say, well, we have, you know, four megaton city killers. Why do we need it?

So the logic here is that if all you have are giant city killers and your adversary has thousands of smaller nuclear weapons, they might believe that they can detonate one of the smaller weapons and you won't retaliate because you are not going to trade a four megaton city killer with a nuclear weapon that took an artillery battalion off the battlefield, is that right?

General COTTON. There is a potential for that, exactly.

Senator COTTON. Yes. Totally unconstrained—and Russia is totally unconstrained in building this and using them if they choose under arms control treaties. How many arms control treaties do we have with communist China?

General COTTON. Zero.

Senator COTTON. Zero. So China is not constrained at all in building every kind of nuclear weapon it wants. In fact, it is on a crash course, especially in building missile fields in China. Is that correct?

General COTTON. That is correct.

Senator COTTON. What do you think China's appetite is to enter some nuclear arms control agreement, say, like the New START treaty?

General COTTON. I would hope they would want to come to the table, but my first comment stands.

Senator COTTON. They haven't. Yes, so hope is not a strategy and they haven't manifested much desire to come to the table. Even if they did, do you think China would ever accept an arms control agreement that left them with fewer warheads and delivery systems than either Russia or the United States had?

General COTTON. No, that I couldn't answer.

Senator COTTON. I mean, if I were the leader of China, I don't think I would accept that, and if you did assume that let's say China accepted some constraint like the New START treaty, that would mean by definition that China and Russia together had significant overmatch against the United States in warheads and delivery systems.

So I just think that the idea that we are restraining ourself from building the nuclear forces that we need to deter both Russia and China is the height of folly. I know you are not responsible for that,

but I think your question—your answers here have illuminated. General Dickinson, I want to turn to you.

I have a question about the commercial integration cell. I think as the security environment has grown more complex, it is necessary for our military to work with partner to share information—partners in industry to share information and collaborate on new capabilities.

You have led the way with your commercial integration cell. Could you just discuss the status of that cell, and the successes you have had, and the lessons you have learned that we might buildupon, especially in the other combatant commands.

General DICKINSON. Senator, that is a bright spot within the command. Over the last three and a half years, we have taken our relationships with commercial industry and have expanded it.

We have actually had such a bow wave, of commercial companies wanting to come participate with us and be part of the team. We actually had to rewrite our strategy so we would have the appropriate framework in order to onboard commercial companies that want to be part of the Command. They perform two primary functions within the Command from a commercial perspective.

One is satellite communications, and the other one is space domain awareness. So currently we have got ten partners, commercial partners out at Vandenberg Space Force Base, traditional satcom type of capabilities that they provide to us. In Colorado Springs, we have what we call the Joint Task Force Space Defense commercial operation cell.

They are a group of contractors that provide space domain awareness, telescopes, radars that can look deep into space and report back to us what they see. That has actually been a very promising enterprise there as we continue to grow that. That is actually where we have actually had a lot of growth with our allies and partners.

So, our allies and partners around the world want to participate in that particular space domain awareness function. What is good about that particular capability is it is unclassified. So, our obstacles to classification barriers, etcetera, we don't see that with that particular cell.

It is growing. We are getting more and more partners, and allies and partners as well as commercial companies. We actually exercise that capability during an exercise we call Global Sentinel, which actually has 24 of our partners and allies around the world that participate in that.

We go through various scenarios on space debris mitigation, but it is growing and we have got interest in the allies and partners to participate and contribute more to it.

Senator COTTON. Okay. Thank you. Gentlemen, thank you both for your service, and thanks to you and all the troops who serve in your commands. What you do is deadly serious business.

Chairman REED. Thank you very much, Senator Cotton. We will adjourn the open hearing and reconvene in SVC–217, and let's say in 15 minutes, so give everybody a chance to rest and recuperate. Also, we have to vote. With that, the open portion of the hearing is adjourned.

[Whereupon, at 11:37 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

NUCLEAR MODERNIZATION

1. Senator SHAHEEN. General Cotton, a January 2023 GAO report expressed concerns with the lack of a scheduled risk analysis for the Navy's *Columbia*-class ballistic missile submarine (SSBN) program. Is it your understanding that this analysis will be performed and what role would STRATCOM's equities be represented in addition to the Navy's?

General COTTON. Defer to the Navy for specific *Columbia* programmatic schedule risk issues. United States Strategic Command (USSTRATCOM) is following the *Columbia's* construction status very closely, and routinely engages the Navy on risk mitigation efforts and challenges to meeting *Columbia's* delivery schedule. If *Columbia* experiences a delay, there is a moderate risk the Navy will be unable to meet USSTRATCOM's SSBN at-sea requirements for a period of time during the *Ohio* to *Columbia* transition in the 2030's.

2. Senator SHAHEEN. General Cotton, can you provide an update on the expected timeline for the *Columbia*-class ballistic missile submarine program?

General COTTON. Defer to the Navy for specific programmatic timeline issues. As I understand, the Navy is pursuing an accelerated 78-month hull construction schedule. Current construction progress, while behind this 78-month accelerated schedule, is still ahead of the 84-month threshold schedule. I anticipate the Navy will meet *Columbia's* first operational deployment of calendar year 2031.

3. Senator SHAHEEN. General Cotton, if delays to the program are anticipated, what do you understand are the causes of the delays and how is USSTRATCOM prepared to address the delay to maintain a reliable nuclear deterrent?

General COTTON. Defer to the Navy for specific programmatic issues. I have established a Nuclear Recapitalization and Transition Cross-Functional Team to assess and identify options to reduce the risks associated with the Triad and nuclear command, control, and communications (NC3) modernization transition. USSTRATCOM will continue to work with the Services to mitigate operational impacts resulting from possible timeline delays. Potential mitigation measures include multiple independently targetable re-entry vehicles on intercontinental ballistic missiles (ICBMs) and/or extending select *Ohio*-class submarines for an additional 36 months through Pre-Inactivation Restricted Availabilities (PIRAs). PIRA should be seen as an opportunity to extend select candidate *Ohio*-class hulls if there are delays in *Columbia* fielding.

USSPACECOM BASING

4. Senator SHAHEEN. General Dickinson, has USSPACECOM been successfully achieving hiring milestones for the command's civilian hiring process?

General DICKINSON. U.S. Space Command (USSPACECOM) headquarters grew from 137 funded civilian positions in fiscal year 2021 to 681 funded civilian positions in fiscal year 2023. Currently, 417 civilian positions in the headquarters are filled, or 61 percent. We have 103 hiring actions in work that will be completed in the next 6 weeks, yielding 520 in place (76 percent) with 4 months left in the current fiscal year. The lack of a final basing decision has caused some individuals to turn down job offers, and the command has a 5 percent civilian attrition rate over the last 12 months due to people leaving for other positions in the Colorado Springs area.

5. Senator SHAHEEN. General Dickinson, do you expect a USSPACECOM Headquarters basing move from Colorado Springs, Colorado to Huntsville, Alabama to pose a challenge to USSPACECOM's ability to effectively meet civilian workforce hiring needs?

General DICKINSON. Once a final decision is made, I anticipate no shortage of qualified civilian or contractor employees wherever the headquarters is based. If the decision is to relocate, then we will be smart and deliberate about the process to avoid the potential and/or mitigate the impact of an involuntary separation of civilian personnel.

6. Senator SHAHEEN. General Dickinson, does the existing workforce in Huntsville have capabilities needed to support a basing Headquarters move?

General DICKINSON. I believe it does. Given the large science, technology, engineering, and math (STEM) base in Huntsville, I anticipate no shortage of qualified civilian or contractor employees in Huntsville.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH A. WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

7. Senator WARREN. General Cotton and Dickinson, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

General COTTON. Yes. USSTRATCOM works with the Department of Defense (DOD) to identify priorities for inclusion into the annual budget process.

General DICKINSON. The President's Budget represents the highest Department of Defense (DOD) priorities and includes many of my own priorities. However, the need to fund critical investments in other domains meant several space priorities fell below the cutline, and it is my duty to communicate what space capabilities are delayed or at risk due to insufficient resourcing. Space currently represents a small fraction of the defense budget—easily overshadowed by the budgets of the other services, but all the services, our Allies, partners, and the civilian sector rely on space. This dependency is irreversible, and our adversaries are fully aware of this reliance on space. Space is critical to operations globally, demonstrated by the strong overlap with ADM Aquilino's U.S. Indo-Pacific Command UPL. These investments in space will also benefit our partners in Europe, Africa, the Middle East, and the Americas.

8. Senator WARREN. General Cotton and Dickinson, historically, have previous UPL items been included in the following year's base budget? Have UPL items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

General COTTON. USSTRATCOM did not submit a specific UPL item for fiscal year 2023.

General DICKINSON. USSPACECOM's fiscal year 2023 UPL requests were included in the fiscal year 2024 base budget.

Fiscal year 2023 UPL items included in fiscal year 2024 budget (executing vendors TBD): National Space Defense Center Service Responsibilities:

FISCAL YEAR 2023 UPL ITEMS INCLUDED IN FISCAL YEAR 2024 BUDGET (EXECUTING VENDORS TBD):

National Space Defense Center Service Responsibilities:

APPN ($ K)	Fiscal Year 2023 UPL	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Fiscal Year 2028	FYDP
O&M	$36,900	$14,872	$15,385	$15,897	$16,410	$17,436	$80,000

Consolidated Space Operation Facility Fit-out:

APPN ($ K)	Fiscal Year 2023 UPL	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Fiscal Year 2028	FYDP
O&M	$19,200	$12,964	$12,610	$11,761	$11,136	$17,635	$66,106
Proc	$9,400	$26,994	$79,529	$28,017	$7,530	$2,547	$144,617

9. Senator WARREN. General Cotton and Dickinson, do you agree that Federal agencies have to make tough decisions in regards to their priorities and budget?

General COTTON. Yes. However, changes in the strategic environment may drive emerging requirements outside of the normal budget cycle. In this case, the DOD would need to assess the requirement and determine if additional funding is required.

General DICKINSON. My ability to conduct operations in space are directly linked to the readiness of forces presented to USSPACECOM by the Service Chiefs and

other agencies. We acknowledge Service and Agency Chiefs must balance manpower, facilities, and weapon systems readiness with fiscal responsibility. I commit to being a good steward of the forces presented to me and will execute my responsibilities in the space domain.

INFORMATION ON UPLS

10. Senator WARREN. General Cotton and Dickinson, what was the cost of putting together this wish list?

General COTTON. The estimated cost of this report for the DOD is approximately $6,400 in DOD labor. The USSTRATCOM UPL was developed and submitted in accordance with existing law, and the anticipated workload is planned as part of our normal business operations and program prioritization process.

General DICKINSON. There were no additional costs to complete the USSPACECOM UPL beyond the personnel time devoted to this effort.

For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

11. Senator WARREN. General Cotton and Dickinson, what is the description of this UPL?

General COTTON. USSTRATCOM submitted two unfunded priority items for fiscal year 2024 related to NC3: Enhanced Polar System—Recapitalization (EPS-R) Strategic Capability and a classified program. Please see classified response for additional information.

General DICKINSON. [Deleted.]

12. Senator WARREN. General Cotton and Dickinson, what does the UPL purchase? (Include all end items with quantities, contractor FTEs, etc.)

General COTTON. [Deleted.]

General DICKINSON. [Deleted.]

13. Senator WARREN. General Cotton and Dickinson, what specific capability will the UPL provide?

General COTTON. [Deleted.]

General DICKINSON. [Deleted.]

14. Senator WARREN. General Cotton and Dickinson, what gap will this fill that is not in the base budget?

General COTTON. [Deleted.]

General DICKINSON. [Deleted.]

15. Senator WARREN. General Cotton and Dickinson, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

General COTTON. If funded, both USSTRATCOM UPL items will support NC3 modernization, which enhances strategic deterrence.

General DICKINSON. [Deleted.]

16. Senator WARREN. General Cotton and Dickinson, what is the operational requirement? How does this UPL support current or future operations?

General COTTON. The operational requirement is to provide assured command, control, and communications to nuclear forces. Both capabilities expand and modernize our ability to execute, terminate, and recall nuclear forces.

General DICKINSON. [Deleted.]

17. Senator WARREN. General Cotton and Dickinson, what is the operational impact if this UPL is not funded in fiscal year 2024?

General COTTON. [Deleted.]

General DICKINSON. [Deleted.]

18. Senator WARREN. General Cotton and Dickinson, are there plans to include this item in the fiscal year 2025 base budget?

General COTTON. United States Space Force (USSF) and the United States Navy (USN) are responsible for funding these programs. Based on requirements, USSTRATCOM is aggressively advocating for these UPL item capabilities in their ongoing fiscal year 2025 budget discussions.

General DICKINSON. [Deleted.]

19. Senator WARREN. General Cotton and Dickinson, why was this UPL not included in the fiscal year 2024 President's Budget submission?

General COTTON. As the Commander of USSTRATCOM, it is my responsibility to set requirements for the capabilities we need; however, the Department must balance requirements across the joint force with finite resources. The final list of what is included in the fiscal year 2024 budget is ultimately determined by the President and is then transmitted to the Department via the Office of Management and Budget.

General DICKINSON. [Deleted.]

20. Senator WARREN. General Cotton and Dickinson, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

General COTTON. As the Commander of USSTRATCOM, I have no acquisition authorities.

Raytheon is the vendor that would support the EPS-R Strategic Capability. Defer to USSF for specific vendor questions.

The classified UPL item is not yet a program of record and is currently managed by the USN. Defer to USN for specific vendor questions.

General DICKINSON. [Deleted.]

21. Senator WARREN. General Cotton and Dickinson, how often has your command met with the vendor executing this effort?

General COTTON. As the Commander of USSTRATCOM, I have no acquisition authorities. However, Command subject matter experts may attend program meetings sponsored by USSF related to the EPS-R Strategic Capability UPL item, at which vendor representatives may be present. Defer to USSF for additional information.

General DICKINSON. USSPACECOM works with Program Offices for program information and does not meet directly with vendors to discuss programmatic details. Information on vendor relationships is provided from the perspective of the Program Office and is contained in the classified annex.

22. Senator WARREN. General Cotton and Dickinson, what is your relationship history with this vendor?

General COTTON. As the Commander of USSTRATCOM, I have no acquisition authorities. It is my responsibility to set requirements for the capabilities we need; however, I depend on the Services to execute acquisition authorities to deliver these capabilities.

Over the course of my career, I have likely interacted with Raytheon or its subsidiaries on a number of DOD programs as part of my official duties. As the Commander of USSTRATCOM, I have not had any relationship with Raytheon regarding EPS-R Strategic Capability.

The classified UPL item is not yet a program of record and is currently managed by the USN. Defer to USN for specific vendor questions.

General DICKINSON. USSPACECOM works with Program Offices for program information and does not meet directly with vendors to discuss programmatic details. Information on vendor relationships is provided from the perspective of the Program Office and is contained in the classified annex.

23. Senator WARREN. General Cotton and Dickinson, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

General COTTON. USSTRATCOM does not formally track whether anyone who formerly worked for the Command has represented a vendor in meetings related to EPS-R Strategic Capability conducted by program offices that are not part of USSTRATCOM. To date, we have not received inquiries from a contracting officer within the program offices noting concerns related to the representational activities of former USSTRATCOM personnel in the context of the EPS-R Strategic Capability. USSTRATCOM has a robust ethics training program to help current and departing employees understand post-government employment rules, financial conflicts of interests, and rules regarding meetings with industry. USSTRATCOM attorneys routinely provide ethics counsel to current and former employees about these matters.

The classified UPL item is not yet a program of record and is currently managed by the USN. Defer to USN for specific vendor questions.

General DICKINSON. USSPACECOM works with Program Offices for program information and does not meet directly with vendors to discuss programmatic details. Information on vendor relationships is provided from the perspective of the Program Office and is contained in the classified annex.

24. Senator WARREN. General Cotton and Dickinson, in which city/State will the UPL be executed?
General COTTON. Defer to the USSF and USN.
General DICKINSON. [Deleted.]

25. Senator WARREN. General Cotton and Dickinson, is this requirement on an existing contract? If so, with who? What is the history of the contract?
General COTTON. Defer to the USSF and USN.
General DICKINSON. [Deleted.]

26. Senator WARREN. General Cotton and Dickinson, what is the anticipated contract award date if the UPL receives funding?
General COTTON. Defer to the USSF and USN.
General DICKINSON. [Deleted.]

27. Senator WARREN. General Cotton and Dickinson, what funding lines are associated with this UPL?
General COTTON. The research, development, testing, and evaluation (RDT&E) funding line for EPS-R Strategic Capability is 1206432SF.
For the classified UPL item, there are two funding lines: (1) RDT&E line 0604280N and (2) Other Procurement, Navy funding lines 0742 and 3130.
General DICKINSON. [Deleted.]

28. Senator WARREN. General Cotton and Dickinson, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?
General COTTON. All appropriations must be funded simultaneously to complete the capability.
General DICKINSON. [Deleted.]

29. Senator WARREN. General Cotton and Dickinson, how much was enacted and obligated (or expended for RDT&E) in fiscal year 2022 to 2023 for this requirement?
General COTTON. Defer to the USSF and USN.
General DICKINSON. [Deleted.]

30. Senator WARREN. General Cotton and Dickinson, how much was requested in fiscal year 2024 for this requirement?
General COTTON. The USSTRATCOM fiscal year 2024 UPL requested $17.9 million for EPS-R Strategic Capability, and $28.3 million for the classified item.
General DICKINSON. [Deleted.]

31. Senator WARREN. General Cotton and Dickinson, is there a tail associated with this UPL?
General COTTON. Yes.
General DICKINSON. [Deleted.]

32. Senator WARREN. General Cotton and Dickinson, is any tail funded in the future years defense plan?
General COTTON. No.
General DICKINSON. [Deleted.]

33. Senator WARREN. General Cotton and Dickinson, please describe how much the requirement will cost per year for the next 5 years.
General COTTON. Please see table below.

Program Name	Fiscal Year 2024 ($ millions)	Fiscal Year 2025 ($ millions)	Fiscal Year 2026 ($ millions)	Fiscal Year 2027 ($ millions)	Fiscal Year 2028 ($ millions)	Fiscal Year Defense Plan Total ($ millions)
EPS-R Strategic Capability	$17.9	$33.3	$21.9	$7.4	$0.0	$80.5
Classified Item	$28.3	$119.7	$140.1	$146.1	$135.6	$569.8

General DICKINSON. [Deleted.]

34. Senator WARREN. General Cotton and Dickinson, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or UPL.

General COTTON. USSTRATCOM has not submitted either item in a previous UPL request. Defer to the USSF and USN for base budget details.

EPS-R Strategic Capability UPL item request leverages an existing program. No previous budget—request exists for this particular UPL item issue. Please see classified response for additional information.

The fiscal year 2023 budget provided $20.0 million in RDT&E funding to develop and test the classified UPL item.

General DICKINSON. [Deleted.]

35. Senator WARREN. General Cotton and Dickinson, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

General COTTON. This will be determined during future DOD budget deliberations.

General DICKINSON. [Deleted.]

36. Senator WARREN. General Cotton and Dickinson, please provide photos of this requirement for visual aid.

General COTTON. EPS-R Strategic Capability



Figure 1: (U) Family of Advanced Beyond Line-of-Sight Terminal

No picture available for the classified UPL item.

General DICKINSON. [Deleted.]

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN III

ARTIFICIAL INTELLIGENCE

37. Senator MANCHIN. General Cotton, how are novel technologies like artificial intelligence, unmanned systems, hypersonic, cyber, and space-related systems changing the worldwide nuclear risk environment? How is the growing prevalence of these technologies affect U.S. nuclear strategy, deterrence, and R&D?

General COTTON. Novel technologies challenge our traditional warning paradigms, constrain our decision space, and present a risk of strategic surprise. Our adversaries are making large investments in these areas because they know that it can create unique challenges for the United States and its Allies. As the ubiquity of data and speed of decisionmaking continue to increase, Allies and adversaries alike could feel pressure to delegate key decisionmaking functions to machines, which could produce unpredictable results if systems are not appropriately designed, tested, and used. An adversary who devises an unanticipated means of threatening our strategic capabilities or our homeland may lose its incentive for restraint and become emboldened to act in a future crisis or conflict. While the risk of miscalculation has been a concern of strategic conflict since the beginning of the nuclear age, the rapid evolution and application of novel technologies over the coming decades could increase that risk. DOD has been a leader in trying to ensure novel technologies do not undermine strategic stability. For example, in February the United States announced a Political Declaration on the Responsible Use of Artificial Intelligence in

the Military Domain that creates strong norms surrounding the development and use of AI and autonomy in all military systems. It reiterates the commitment we publicized in our Nuclear Posture Review to have a human "in the loop" for all actions critical to informing and executing decisions by the President to initiate and terminate nuclear weapon employment.

The fundamentals of deterrence have not changed, and our tailored approach remains sound. We will deter though safe, secure, and effective nuclear forces enabling country-specific strategies and plans, extended deterrence commitments, and an integrated deterrence approach incorporating suitable non-nuclear capabilities tailored to specific threat scenarios.

As our Allies and adversaries invest in these novel technologies, so must we. The National Defense Strategy states the Department will support innovation and fuel R&D for advanced capabilities, such as directed energy, hypersonics, and cyber, as well as seed opportunities to include biotechnology, quantum science, and advanced materials. DOD will follow market forces driving military-relevant capabilities (e.g., artificial intelligence, microelectronics, space) and continue to develop operational models that expand U.S. options and constrain those of potential adversaries. Furthermore, the Department will explore employment concepts, integrate new technologies, experiment with creative applications, and share, as appropriate, asymmetric capabilities with Allies and partners.

FOREIGN INTELLIGENCE SURVEILLANCE ACT (FISA)

38. Senator MANCHIN. General Dickinson, I understand that SPACECOM is developing a series of contingency plans for protecting the U.S. and allied satellites and tasking the intelligence community for an increased emphasis on foreign space intentions, especially by Russia and China. This year, Title VII of the Foreign Intelligence Surveillance Act (FISA) will be up for reauthorization. Title VII established procedures governing the targeting, for intelligence-gathering purposes-of non-U.S. persons located abroad. They also established statutory and procedural protections regarding surveillance of U.S. persons located outside the United States. What impact would a failure to reauthorize Title VII have in SPACECOM's collection requirements for the IC on collection against foreign space intentions?

General DICKINSON. Section 702 allows the Intelligence community to collect the communications of many of our most critical foreign intelligence targets located outside of the United States who use U.S. infrastructure and services to communicate. It has helped us to understand the strategic intentions of the foreign governments we are most interested in, like the People's Republic of China, Russia, Iran, and North Korea. This authority is vital to keeping the Nation safe and I urge Congress to re-authorize Section 702 prior to it lapsing this coming December.

39. Senator MANCHIN. General Cotton, it is my understanding that China's nuclear force, while still smaller in size compared to the U.S., is modernizing and expanding faster than any other country. Also, China appears to be pursuing other potentially destabilizing systems, such as a nuclear-capable hypersonic fractional orbital bombardment capability. What role does intelligence play in helping us understand China's capabilities and how does Title VII play a role in enabling us to closely assess China's nuclear force structure and posture?

General COTTON. [Deleted.]

SPACE DOMAIN AWARENESS

40. Senator MANCHIN. General Dickinson, you mentioned utilizing civilian assets for space domain awareness. Can you confirm SPACECOM is utilizing the Green Bank Telescope for this purpose, and if so how has this asset performed for so far?

General DICKINSON. USSPACECOM has used the Green Bank Telescope to support space tracking efforts. A contract is not currently in place for further use; however, the Telescope has proven valuable to the space domain awareness mission. The command is in contact with the Green Bank Telescope for future space tracking discussions.

QUESTIONS SUBMITTED BY SENATOR JACKY S. ROSEN

STEM OUTREACH PROGRAMS

41. Senator ROSEN. General Cotton and General Dickinson, what are STRATCOM and SPACECOM's current STEM outreach efforts, particularly in cybersecurity, and how do you plan to grow them to keep up with the defense workforce needs of the future?

General COTTON. STEM talent is in high demand across the country. My human capital team leads several initiatives to include innovative hiring practices and a robust intern program to attract talent for our important mission. USSTRATCOM is considering adopting Cyber Excepted Service, a personnel framework that allows added flexibility in hiring and compensation to attract and retain top cyber talent. Similarly, we have a legislative proposal to obtain Acquisition Demo authority. If approved, this authority would provide simplified job classification, streamlined hiring processes, and pay flexibilities. Our Joint Warfare Analysis Center uses its designation as a "lab demo" to compete for talent in the National Capital Region with pay flexibility, a laboratory bonus program, and expedited hiring practices that reduce hiring times by 84 percent.

Not only does USSTRATCOM compete for proven talent, we expanded our STEM opportunities for college students through multiple internship programs. Several of our previous internships have led to full-time positions for young, innovative talent, giving us the opportunity to grow top talent from the ground up.

From an outreach perspective, my technology leaders have pushed hard to highlight the important work we're doing and the need for industry and academia to be a part of our future success. We published our science and technology top issues to academia, national laboratories, and industry, leading to a highly productive industry day with some of the top minds in the business looking for innovative solutions to our toughest challenges. Through the Services, we pursue opportunities to advance the use of artificial intelligence and machine learning to accelerate our ability to analyze the risk of strategic deterrence failure and more quickly leverage changes in adversary force posture. We continue to seek methods to improve our decision advantage through cutting-edge technologies and a talented workforce that can lead the way.

We have a collaborative relationship with a number of research entities comprised of universities, federally funded research and development centers, and national laboratories through the Department of Energy. As an example, we work with the University of Nebraska to identify innovative possibilities that can accelerate advancements in NC3 and cybersecurity. Through my strategic engagement process, I personally support inspiring the next generation of strategic force leaders who will need strong STEM skills to oversee modernization of the Triad, and my staff is active in many off-base organizations that promote STEM.

General DICKINSON. People are the most important part of any organization, and we are recruiting from the broadest talent pool available to enable the strategic advantages derived from diversity of thought and perspective. Our command partnering with National Security Space Institute, U.S. Space Force's Space Training and Readiness Command, and other space training stakeholders. These partnerships help develop a Command Cyber Workforce training pipeline in accordance with DOD Manual 8140.03 Cyberspace Workforce Qualification and Management Program guidance. Similarly, my team recently stood up USSPACECOM's Academic Engagement Enterprise, akin to U.S. Cyber Command's Academic Engagement Network, this enterprise will enhance workforce professionalization through participation in space and STEM academic programs and increase space applied research and innovation through university partnerships. To date we have 20 member institutions, including Tier–1 research universities like the University of Arizona, the University of Colorado-Boulder, Georgia Tech, and Purdue University.

QUESTIONS SUBMITTED BY SENATOR MARK E. KELLY

SPACE-QUALIFIED TRAVELING WAVE TUBES (TWTS) AND TRAVELING WAVE TUBE AMPLIFIERS (TWTAS)

42. Senator KELLY. General Dickinson, the Administration's "Space Priorities Framework" set a strategic goal of making sure our domestic space industrial base is secure by strengthening the supply chains it supports. Over the last few years, the DOD has found that the U.S. domestic industrial base for a key satellite component is insufficient. Those components are called space-qualified Traveling Wave Tubes (TWTs) and Traveling Wave Tube Amplifiers (TWTAs). They are highly engineered components and are critical to many essential national security, civilian, and game-changing commercial satellites. While China has greatly expanded its ability to produce these components, in the West only two companies produce them. One is a small American company, and the other is a much larger foreign provider that is heavily subsidized by its government. This prevents the American company from competing for opportunities, and impedes the development of a broader United States domestic industrial base for these components—creating supply chain risk.

Last year, to help establish a globally competitive U.S. domestic source for next-generation, space-qualified tubes and amplifiers, I introduced an amendment to the NDAA that would leverage the National Technology & Industrial Base (NTIB)—a construct that Congress developed precisely for reasons like this. Despite support from the Defense Department, process hurdles prevented us from adopting it. Do you agree that establishing a globally competitive U.S. domestic source for next-generation, high-powered, space-qualified traveling wave tubes and amplifiers is necessary for the DOD to obtain these critical components at high quality, on time, and at a reasonable price?

General DICKINSON. Obtaining high quality critical space components on time is necessary to maintaining a resilient space architecture. Whether critical components are sourced domestically or through our closely aligned Allies and partners, timely and affordable acquisition is essential to the development and integration of space capabilities. While domestically sourced components can reduce both timelines and costs, expanding critical component access by leveraging our international Allies also adds to our Nation's supply chain resiliency.

43. Senator KELLY. General Dickinson-do you agree Congress can be a partner in supporting DOD's access to a strong supply chain?

General DICKINSON. Supply chain strength and security are critical pieces of ensuring the resilience of future space architectures. We support all efforts by Congress and the services in acquiring those capabilities and working with industry to ensure the security of our supply chain. The ingenuity of America's space industry is one of our greatest strengths, and we should take the necessary steps to secure it.

SPACE FORCE NATIONAL GUARD

44. Senator KELLY. General Dickinson, how many Air National Guard Space Professionals are currently deployed or on a status supporting Combatant Command Requirements?

General DICKINSON. There are 34 Air National Guard members on long-term Active Duty for Operational Support (ADOS) orders with Headquarters, USSPACECOM, 16 of whom are Space Professionals. USSPACECOM currently employs 109 total Guard and Reserve Joint servicemembers on ADOS orders to effectively meet the command's requirements. The Air National Guard has 11 organizations with a total of 729 authorizations performing mission support for USSPACECOM. Currently, there are 17 Space Professional Guardsmen deployed overseas in direct support of USSPACECOM missions.

45. Senator KELLY. General Dickinson, what would be the mission impacts if you did not have Air National Guard Space Professionals supporting Combatant Command Requirements?

General DICKINSON. Active, Guard, and Reserve components bring important capabilities to bear in defense of the Nation. All USSPACECOM missions are inherently Federal missions, so forces presented to us come to us as Title 10 forces. From my perspective as the commander operationally employing those forces, it is transparent to me whether any particular servicemember comes to us as an Active Duty member, as a Title 10 reservist, or as a Guardsman mobilized to Title 10. At USSPACECOM, they are all Title 10 space professionals. I defer to the services and the department on how best they organize the components that present forces to USSPACECOM.

QUESTIONS SUBMITTED BY SENATOR JONI K. ERNST

DETERRENCE POSTURE

46. Senator ERNST. General Cotton, in a post-New START environment, should the United States prepare to upload its non-deployed nuclear weapons to shore up deterrence? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. The 2022 Nuclear Posture Review (NPR) recognizes that, depending on the security environment, changes in U.S. strategy and force posture may be required to sustain the ability to achieve deterrence, assurance, and employment objectives. As the strategic environment changes, we must continue to reexamine our strategy and force posture to ensure the Triad and related capabilities are appropriately configured.

We must sustain and modernize the Triad, NC3, and infrastructure (to include our forward-deployed stockpile and North Atlantic Treaty Organization dual-capable aircraft). We must maintain a viable, flexible, and full-spectrum strategic deterrent that paces the threat and is able to respond to changes in the security environment.

47. Senator ERNST. General Cotton, how quickly can the United States upload each leg of the Triad? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. [Deleted.]

48. Senator ERNST. General Cotton, are there policies or regulations related to how quickly the United States can upload each leg of the Triad? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. The 2022 NPR states that while we retain the capability to upload a portion of the ICBM force, we continue to configure these missiles with only one warhead day-to-day. The NPR also affirms that we will field and maintain strategic nuclear delivery systems and deployed weapons in compliance with New START. Beyond this, there are no policies or regulations limiting our ability to upload weapons on any leg of the Triad, as long as the aggregate totals do not exceed the New START central limits.

49. Senator ERNST. General Cotton, in your personal opinion, in general, would placing a portion of the bomber force in heightened alert statuses increase its flexibility? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. Absent a crisis or conflict, no. The cost of placing a portion of the bomber force into a heightened alert status decreases overall readiness with marginal increase in responsiveness/survivability. Any long-term heightened alert status would drive significant costs, stretching the maintenance force and air crews to unsustainable limits. Additionally, based on the current force structure, ongoing modernization efforts, and the integrated deterrence strategy of the United States, placing bombers on alert would actually decrease overall flexibility as it limits my ability to support other operations across the spectrum of competition. The Department, in conjunction with the intelligence community, will continue to fully exploit the indications and warning network to ensure the Nation can flex and respond to any crisis in a timely and decisively manner.

Please see classified response for additional information.

50. Senator ERNST. General Cotton, in your verbal testimony, you said you could increase the bomber force's flexibility without adjusting alert statuses; what other measures would you use to increase the flexibility of the bomber force? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. Measures to increase the flexibility of the bomber force without adjusting alert status include: increasing the number of B–2 and B–52 crews to increase operational flexibility; increasing the number of available tankers; and increasing forward-based maintenance capability to support persistent and episodic global presence while retaining the ability to increase nuclear readiness.

51. Senator ERNST. General Cotton, in your personal opinion, in general, would forward stationing dual capable aircraft increase the flexibility of the nuclear deterrent? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. These actions could offer an increase in flexibility. More detailed research across multiple departments is necessary to weigh the gains in flexibility against impacts to strategic stability and financial costs to the DOD (in aircraft, required supporting infrastructure, etc.).

52. Senator ERNST. General Cotton, in your personal opinion, in general, would moving some of the ICBM force to mobile platforms increase survivability? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. This type of analysis was conducted previously and resulted in a decision to pursue the silo-based Sentinel system.

However, a mobile capability could potentially increase ICBM survivability. We must take a holistic perspective regarding how the survivability of the system may

evolve over its lifetime and then balance those findings against the operational concept and associated costs to make an informed decision.

53. Senator ERNST. General Cotton, in your personal opinion, in general, would deploying SLCM-N expand our at-sea deterrent? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. A low-yield, non-ballistic nuclear capability to deter, assure, and respond without visible generation (similar to the characteristics of SLCM-N) offers additional options and supports an integrated deterrence approach. It is one of several possible nuclear or conventional capabilities the U.S. could develop to enhance strategic deterrence. I support funding to assess the full range of possible options to address this challenge in a rapidly changing security environment with the backdrop of multiple nuclear adversaries.

54. Senator ERNST. General Cotton, in your personal opinion, in general, would deploying ground-based, theater-range nuclear forces bolster our deterrent? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. I am currently satisfied with U.S. strategy and capabilities with respect to forward-deployed nuclear forces on Allied territory. As the strategic environment changes, we must continue to reexamine our strategy and force posture to ensure the Triad and related capabilities are appropriately configured.

55. Senator ERNST. General Cotton, in your personal opinion, would you recommend retaining the B83, at least until identifying a capability that meets requirements for hard and deeply buried targets?

General COTTON. I support retaining the B83–1 as stipulated in the Fiscal Year 2023 National Defense Authorization Act (NDAA) until a suitable replacement capability for defeating hard and deeply buried targets (HDBTs) can be identified. We can maintain the B83–1 for a few years; however, when the B–2 retires, it will no longer have a delivery platform. My staff is participating in the Department's response to the Fiscal Year 2023 NDAA mandated HDBT study, which will examine the full range of capabilities required to counter HDBTs. We look forward to the results.

SCLM-N

56. Senator ERNST. General Cotton, the 2018 NPR started an Analysis of Alternatives for the SLCM-N. Could you describe that analysis and whether any alternatives fit military requirements better than SLMC-N? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General COTTON. The Navy completed an Analysis of Alternatives (AOA) and the Office of Cost Assessment and Program Evaluation determined the AOA was sufficient. I support any option that provides a low-yield, non-ballistic nuclear capability to deter, assure, and respond without visible generation.

Defer to the Navy for specific outcomes related to the SLCM-N AOA.

SPACE POLICY

57. Senator ERNST. General Dickinson, what are the current policies in place to identify what behaviors and actions in space constitute an act of war? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General DICKINSON. The issue of what constitutes an "act of war" in space is governed by international law, just as it is in every domain. Like cyberspace, space is a newly contested domain with few historical examples available to make such determinations. Article 2(4) of the United Nations Charter prohibits the use or threat of force against territorial integrity and political independence, except under certain circumstances like self-defense under Article 51 of the Charter. In the space domain, determinations of what constitutes an unlawful use of force can be difficult. This is primarily due to the unique nature of the space domain and associated challenges in developing situational awareness to identify actions and discern intent.

USSPACECOM is an active participant in supporting the Assistant Secretary of Defense for Space Policy and Department of State in establishing norms of responsible behaviors in Space. While not legally binding as rules under international law, the Secretary of Defense's Tenets of Responsible Behavior in Space and the recently released Tenet-Derived Responsible Behaviors are designed to help mitigate the risk

of miscalculation and improve communication and predictability. pace-faring nations could help to ensure the safety, security, and sustainability of the space domain.

58. Senator ERNST. General Dickinson, how can the United States improve policies to address behaviors and actions in space to determine acts of war?

General DICKINSON. First and foremost, adherence to the rule of law in outer space is paramount. The existing legal framework, notably, the Outer Space Treaty and the United Nations Charter, govern space-faring nations' activities in outer space and prohibit the unlawful use of force. The recently issued Department of Defense Tenets of Responsible Behavior for Outer Space and the United States' commitment to not conduct destructive direct ascent anti-satellite missile tests will help with determinations of acts of war in space.

USSPACECOM is working closely with the office of the Assistant Secretary of Defense for Space Policy to develop meaningful policy recommendations that support the establishment of norms and responsible behaviors, ensure the National Space Policy imperative to preserve space for peaceful use, and allow for flexible military employment within the domain, when necessary.

CAPABILITY REVELATION

59. Senator ERNST. General Dickinson, what is the framework by which the Department of Defense evaluates U.S. national security space capability revelations for deterrence?

General DICKINSON. The DOD or Administration determine the policy for when the United States reveals capabilities, including national security space capabilities, to deter our competitors.

USSPACECOM implements those policies at the right time and place to achieve strategic objectives.

60. Senator ERNST. General Dickinson, what is the process by which USSPACECOM executes declassification of certain U.S.

General DICKINSON. When the DOD or Administration make a policy decision to reveal a national security space capability, USSPACECOM will work with the original classification authority for the specified capability to declassify the information necessary to achieve the strategic objectives.

61. Senator ERNST. General Dickinson, where does the decision authority rest for declassification or revelation of certain U.S. national security space capabilities for deterrence?

General DICKINSON. The decision to reveal a certain U.S. national security space capability is a policy question and rests with the DOD or Administration. The decision to classify or declassify information related to the capabilities of a national security space asset rests with the original classification authority.

62. Senator ERNST. General Dickinson, how can the United States improve the declassification and revelation of certain U.S. national security space capabilities to deter aggressive adversary behavior?

General DICKINSON. As stated previously, the overall decision to reveal national security space capabilities rests with the DOD or Administration. The DOD and Administration synchronize these decisions with other strategic level choices to achieve deterrence and national goals.

QUESTIONS SUBMITTED BY SENATOR DAN S. SULLIVAN

B–52J

63. Senator SULLIVAN. General Cotton, what new capabilities will the Commercial Engine Replacement Program bring to the B–521 platform?

General COTTON. The Commercial Engine Replacement Program (CERP) engines will provide increased range, more endurance, approximately 30 percent better fuel efficiency, and will require far fewer maintenance hours. Along with new engines, CERP will replace associated subsystems, such as engine struts and nacelles, the electrical power generation system, and cockpit displays.

64. Senator SULLIVAN. General Cotton, will the B–521 be able to employ the entire Air Force inventory of anti-ship missiles?

General COTTON. Defer to the Air Force for specifics on ordnance load-out.

CHINESE NUCLEAR-CAPABLE BOMBERS AND SUBMARINES

65. Senator SULLIVAN. General Cotton, how are the PRC's investments in nuclear capable bombers and ballistic missile submarines impacting your approach to deterrence?

General COTTON. Per the NPR, our tailored strategy for China is that the United States will maintain a flexible deterrence strategy and force posture that continues to clearly convey to the People's Republic of China (PRC) that the United States will not be deterred from defending our Allies and partners, or coerced into terminating a conflict on unacceptable terms. We are addressing this challenge through integrated deterrence—which spans all domains and capabilities backstopped by a safe, secure, and effective nuclear deterrent.

This approach necessitates the modernization and sustainment of our nuclear forces, NC3, and weapons infrastructure, and this remains the Department's highest priority. The programmed modernization efforts are the minimum necessary to meet the Nation's global security challenges. Further, without proper sustainment of our legacy systems throughout the modernization period, our nuclear deterrent will degrade.

B–2 RETIREMENT TIMELINE

66. Senator SULLIVAN. General Cotton, is B–2 retirement tied to the complete delivery of the B–21 order?

General COTTON. Defer to the Air Force on planning for the B–2 retirement.

67. Senator SULLIVAN. General Cotton, if B–2 retirement is not tied to the complete delivery of the B–21 order, how may B–21s will be operational when the last B–2 is retired?

General COTTON. Defer to the Air Force on planning on B–2 to B–21 transition milestones.

SPACECOM DETECTION AND TRACKING CAPABILITIES

68. Senator SULLIVAN. General Dickinson, how are SPACECOM's detection and tracking capabilities changing to keep pace with adversary threats?

General DICKINSON. My number one operational priority is enhancing existing and advocating for new Space Domain Awareness capabilities allowing us to assess activities across the space domain. We are working through the Department's requirements processes to communicate our unique space domain awareness requirements that will allow us to monitor potential threats and provide the necessary time to take actions that protect our critical space assets. A key part of our strategy is working very closely with industry partners who are developing space domain awareness capabilities and leveraging their investments.

69. Senator SULLIVAN. General Dickinson, how can SPACECOM assets to identify objects, determine if they are threats like cruise or hypersonic missiles, and hedge against Chinese attempts to confuse ground-based missile defense radars?

General DICKINSON. Space Domain Awareness is my highest priority, and we have taken dramatic steps to improve our understanding of the domain and guard against advanced threats.

USSPACECOM is designated as the Global Sensor Manager for the DOD. In that role, we synchronize and prioritize sensors like space-based satellites and ground-based radars assigned to the command. To improve our coverage of advanced threats like cruise or hypersonic missiles, USSPACECOM developed a strategy to integrate non-traditional sensors, such as theater missile defense radars (e.g., AN/TPY–2), sea-based X-band radars, and Aegis afloat capabilities. Proliferating information sources and fusing those together cohesively is part of that strategy to provide timely, accurate, and decision quality information to the chain of command.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MARCH 16, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

UNITED STATES CENTRAL COMMAND AND UNITED STATES AFRICA COMMAND

The Committee met, pursuant to notice, at 9:29 a.m., in room G–50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shahee, Gillibrand, Blumenthal, Hirono, Kaine, King, Warren, Peters, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Let me call the hearing to order. Good morning, and the Committee meets today to receive testimony from General Michael Eric Kurilla, Commander of the United States Central Command (CENTCOM), and General Michael Langley, Commander of United States Africa Command (AFRICOM).

Thank you both for your service, and I am grateful to the men and women serving under your command. While CENTCOM has many responsibilities, the top priority remains deterring the Iranian regime's destructive and destabilizing activities without undue provocation. This is a complicated and urgent mission.

Iran is conducting malign activities across multiple arenas, including continuing its own nuclear development, launching drone and missile attacks on neighboring States, supporting proxy groups, violently repressing its own citizens, and deepening a military alliance with Russia, and these threats are likely to increase.

In an unexpected turn, last week, Saudi Arabia and Iran announced they have restored diplomatic relations in a deal brokered by China. Press reports indicate the key parts of the agreement were a commitment by Iran to stop further attacks on Saudi Arabia and cut back on support for Iranian linked groups that have targeted the kingdom.

The two nations plan to reopen their embassies and reimplement a security pact to cooperate on several issues to benefit their mu-

tual national security. As The New York Times stated, the deal is, "a shift that left heads spinning in capitals around the globe."

General Kurilla, given the unpredictability of the Iranian regime, I would like your thoughts on how best to respond to its malign behavior in the region, taking into account the new dynamic of their restoration of relations with Saudi Arabia. What opportunities do we have to collaborate with our allies and partners to counter drone and missile attacks, and how can we address Iran's closer alignment with Russia and China?

Turning to Afghanistan, although we have transitioned all forces out of the country, the Biden administration has maintained its commitment to ensuring that Afghanistan cannot be used as a base for ISIS [Islamic State of Iraq and Syria], al Qaeda, or other terrorist groups to conduct attacks against the United States or its allies.

I would ask for an update on our posture and capabilities, and whether additional regional agreements have been reached to ensure we maintain a robust regional counterterrorism architecture to address the threat from these groups. General Langley, AFRICOM's area of responsibility (AOR) is becoming increasingly important in the United States strategic competition with China and Russia.

Many African countries have longstanding military ties with Russia and even deeper economic ties with China. As the United States manages relationships across the continent, we must be mindful of these preexisting ties and avoid taking a with us or against us approach, or we will risk alienating the very nations we seek to engage with.

I would welcome your thoughts on how best to calibrate the U.S. approach to strategic competition in light of these factors. The security situation in East Africa remains dangerously unstable. Since last fall, roughly 500 United States servicemembers have been redeployed to Somalia to support the Somali Government's fight against Al-Shabaab, one of al Qaeda's most powerful global affiliates.

Our renewed presence is an effort to stabilize the Somali Government and train their forces, after our departure in December 2020 allowed Al-Shabaab to grow in size and strength. I hope you will share your views on the status of our engagement with Somali partners and the whole-of-government strategy to ensure battlefield successes can be effectively translated into longer term gains.

Finally, the security situation in West Africa also continues to decline. Violent extremist operations have expanded across the Sahel, including pushing down into littoral states in the Gulf of Guinea. At the same time, Russia and China are seeking to increase their engagement in this region.

The Wagner Group continues to seek opportunities to exploit instability in the region, and China has made no secret about exploring basing operations on the West African coast. Both countries are also investing in natural resource extraction across the continent, often at great expense to the long-term health of African partners' ecosystems and economies.

Given these challenges, General Langley, I would like to hear how AFRICOM is seeking to engage with partners in Africa to ex-

pose these harmful and manipulative practices. I want to thank you again and look forward to your testimony.

As a reminder for my colleagues, there will be a closed session immediately following this hearing and room SVC–217. Now, let me turn to the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman. I would like to thank our witnesses for being here. In recent weeks, the Committee has heard from top military and civilian leaders about the significant security challenges facing our Nation.

Our top adversaries, including China and Russia, are testing American resolve, not just in East Asia and Europe, but also across the Middle East, South Asia, and Africa. In the Middle East, Russia and Iran grow closer. Recently, Iran agreed to purchase 24 advanced Su–35 fighter jets. Today, Russia is deploying Iranian drones to kill Ukrainians.

Meanwhile, China works to displace the United States as the partner of choice for many of our longtime friends in the region. The Chinese Communist Party (CCP) offers more streamlined arms sales and Huawei 5G networks that would undermine our operational security in the Middle East. In Africa, the Russian mercenary group Wagner does—Wagner does Putin's bidding.

They sow instability across the continent by supporting coups and spreading lies. They use exploitative practices to get critical minerals. They pressure African governments to move away from the West. At the same time, China is using economic coercion to gain leverage and expand its military footprint in the basing, something former AFRICOM Commander General Steven Townsend called his number one global power competition concern.

We are right to focus on the growing Russia and Chinese threats, but we cannot take our eyes off the other security challenges coming from the Middle East, South Asia, and Africa. In Afghanistan, the disastrous withdrawal of United States troops nearly 2 years ago left a security vacuum the Taliban, al Qaeda and ISIS have filled.

The Biden administration assured us that the Department of Defense (DOD) would conduct counterterrorism operations in Afghanistan even without a limited number of United States troops on the ground, but the United States has only conducted one strike in more than a year. The withdrawal from Afghanistan emboldened ISIS and al Qaeda's affiliates around the world, not just in Afghanistan.

The terrorist threat is real and growing. As a result of the Biden Administration's policies, the world's number one State sponsor of terrorism, Iran, presents an increasing threat to our personnel and partners in the region.

President Biden should have focused on countering Iran's missile program and its support for terrorism. Instead, he focused on returning to the flawed 2015 nuclear agreement. In the process, this Administration has given them practically everything and got absolutely nothing.

According to the Department of Defense, Iran could now produce enough fissile material for a bomb within just 12 days, and its

proxies are on the march nationwide. These facts make it clear continued significant real growth in the defense budget top line above inflation remains essential to our national security.

I will be looking closely to ensure our security assistance funding remains strong in these theaters and that our counterterrorism and contingency forces are fully resourced. This includes additional force protection measures in both theaters, particularly to protect against more complex Iranian backed attacks.

I would also note that the budget zeroing out of LPD [low probability of detection] amphibious ships is the exact wrong move, when we did not even have the capacity to send one amphibious ship to Turkey to help with their earthquake. Finally, I am interested in how the Office of Strategic Capital might be leveraged to push back against the CCP in these theaters and elsewhere as they seek to buy ports and raw materials across the globe.

I thank our witnesses and look forward to their testimony. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Wicker. General Kurilla, please.

STATEMENT OF GENERAL MICHAEL E. KURILLA, USA
COMMANDER, UNITED STATES CENTRAL COMMAND

General KURILLA. Chairman Reed, Ranking Member Wicker, ladies and gentlemen of the Committee, I am joined today by Command Master Chief Derrick Walters, the Command Senior Enlisted Leader of U.S. Central Command.

On behalf of the soldiers, sailors, airmen, marines, coast guardsmen, and guardians who serve this Command, the Central Region, and this Nation every day, thank you for allowing me to testify regarding the posture of U.S. Central Command, alongside my ranger buddy, Mike Langley.

CENTCOM serves as the security integrator for an area of responsibility that encompasses 21 nations, almost 600 million people, and serves as the strategic nexus of the world's most important corridors of trade. I am now 11 months into command.

In that time, I have made 14 trips to the region, and those visits have allowed me first person insights that have informed my strategic approach, which is best summarized in three words, people, partners, and innovation.

People are our greatest asset and our most critical resource. Our servicemembers and civilians in the United States and across the region are our Nation's best. I know this body keeps them top of mind that right now in the CENTCOM region, thousands of troops are in harm's way.

Our people who are closest to the problem understand the opportunities available to solve the region's most complex challenges. That is why we rely so heavily on our partners. Our partners are the Nations comparative advantage against competitors like China and Russia.

Across CENTCOM, we cultivate deep abiding partnerships that can serve as a hedge against the threats in the region, while deterring Iran from its most destructive behavior. We have the kind of relationships that elicit candid, sometimes tough, conversations

that result in solutions. These kind of relationships make us the partner of choice in the region.

A critical component of that partnership is innovation, innovation of thought, innovation of process, innovation of concept and technology extends the value of the partnerships. Innovation allows us to move faster, operate more efficiently, and increase progress across all operational efforts.

This is more important now than any time in our history. Forty years ago, the Department of Defense established CENTCOM to counter the malign influence of a revolutionary regime that seized power in Tehran and to compete with a great power in the region, the Soviet Union. The organization's charter, directed by this body, was to direct and enable military operations and activities with allies and partners to increase regional stability in support of enduring U.S. interests.

That mission remains essentially unchanged to this day. Iran still remains the focus. We now battle violent extremist groups who threaten the region and beyond. The Soviet Union has been replaced with China and Russia as strategic competitors. With these challenges, the CENTCOM region holds the greatest risk of derailing the National Defense Strategy with a flashpoint international incident that may demand a response using unplanned resources and attention.

Today, CENTCOM priorities are to deter Iran, counter violent extremist organizations, and compete strategically with China and Russia. Four decades after CENTCOM's formation, Iran remains the primary destabilizing element in the region. We have seen rapid advances in Iranian military capability over time.

The Iran of 2023 is not the Iran of 1983. In fact, today, Iran is exponentially more capable than they were just 5 years ago. Today, Iran possesses the largest and most diverse missile arsenal in the Middle East, thousands of ballistic and cruise missiles, many capable of striking anywhere in the Middle East. Iran also maintains the largest and most capable UAV [unmanned aerial vehicle] force in the region.

The regime continues to enrich and stockpile uranium far above what is needed for commercial use, and Tehran can enrich uranium far faster than it could even 2 years ago. An Iran with a nuclear weapon would change the Middle East overnight and forever. Iran's vast and deeply resourced proxy forces spread instability throughout the region and threaten our regional partners.

As Iran continues to stabilize the region, we continue to fight against violent extremist organizations. In Syria, we put pressure on ISIS alongside our Syrian Democratic Forces partners. In Iraq, we advise, assist, and enable the Iraqi security forces in their fight against ISIS. While ISIS has significantly degraded in Iraq and Syria, the group maintains the capability to conduct operations within the region and has the desire to strike outside of it.

Our progress in Iraq and Syria contrasts with the security situation in Afghanistan. In Afghanistan, the Taliban's hold on security is maintained through ideology, continued humanitarian aid, and the persistent abuse of human rights to dissuade unrest.

Extremist groups see opportunity and ISIS-Khorasan (ISIS-K) grows emboldened, seeking to expand its ranks and inspire, enable,

and direct attacks in the region and beyond, with the ultimate goal to strike on the American Homeland.

Amidst these challenges, strategic competition is deeply manifest in the region. The People's Republic of China (PRC) has chosen to compete in the region. The PRC is aggressively expanding its diplomatic, informational, military, and economic outreach across the region.

China, dependent upon the region for half of its imported oil, is also moving beyond energy-based investments to encompass physical and telecommunication infrastructure that advances its Belt and Road initiatives.

Over half the oil and more than a third of all the natural gas imported by China is supplied by CENTCOM countries. Nineteen of twentyone CENTCOM countries have signed a Belt and Road initiative with China. We are in a race to integrate with our partners before China can fully penetrate the region.

Russia looks to expand its influence in Syria, seeking permanent basing there and undermining our efforts toward stability and security in the region. The United States Central Command juts up against Russia with a border six and a half times longer than the Russian border with NATO [North American Treaty Organization].

Putin seeks to take advantage of this proximity with a foothold of influence in the Central Asian States, leveraging historical relations and a perceived decline in United States engagement to challenge our influence in that critical part of the world. With all these challenges and opportunities, the CENTCOM region looks to the United States for assurances of our commitment.

For CENTCOM, that commitment is unwavering. In closing, let me thank you for your support to our servicemembers. I would also like to thank the soldiers, sailors, airmen, marines, coast guardsmen, and guardians who serve and sacrifice in CENTCOM, and all those who have done so for the last 40 years. It is the greatest honor of my lifetime to be their Commander. Thank you.

[The prepared statement of General Michael Kurilla follows:]

PREPARED STATEMENT BY GENERAL MICHAEL "ERIK" KURILLA

I. INTRODUCTION: A LANDSCAPE OF INCREASING COMPLEXITY

In 1983, United States Central Command was formed to serve as a hedge against the expansionist goals of Iran—then in the nascent days of its new anti-American regime—and to serve American interests in the Middle East, Levant, and Central Asia amidst strategic competition with the Soviet Union. On November 14th 1982, Caspar Weinberger, the 15th Secretary of Defense, who oversaw the creation of CENTCOM, said: "the central region is among the most important regions in the world as far as we're concerned and as far as the free world is concerned." The Senate Armed Services Committee's January 17, 1982 legislation authorizing this new command explained that "U.S. Central Command, alongside local and regional forces, will be America's security guarantor in the world's central region."

Forty years later, while much of geopolitics and policy has transformed, the security landscape of this part of the world remains largely unchanged. In many important ways, the region's most vexing problems have grown more complex.

Now, as then, the world's geographically central region remains critical to American security interests, global trade, global energy, and global security. Today, more than a third of global container traffic transits the Suez Canal and more than a quarter of global oil transits the Strait of Hormuz. The region is home to almost 50 percent of the world's known oil reserves and more than 40 percent of the world's national gas. This part of the world produces 37 percent of the world's oil, 18 per-

cent of its gas, and houses four of the world's top five OPEC oil producers: Iraq, Kuwait, Saudi Arabia, and the United Arab Emirates.

The central region remains among the most important regions in the world. A disruption in the maritime choke points flowing through the Middle East or the spread of instability throughout the region could threaten vital national interests and hold the global economy at risk.

Four decades after revolutionary students overran the American embassy, Iran possesses the largest and most diverse missile arsenal in the Middle East, with thousands of ballistic and cruise missiles, some capable of striking the entire Middle East and Levant. The Iranian regime now holds the largest and most capable Unmanned Aerial Vehicle force in the region. The advancement of Iranian military capabilities over the past 40 years is unparalleled in the region; in fact, the Islamic Revolutionary Guards Corps of today is unrecognizable from just 5 years ago. Even more concerning, Iran has advanced its nuclear program such that Tehran can now produce sufficient fissile material for a nuclear weapon in less than 14 days. In addition, the regime invests heavily in information operations, including broadcasting, coordinated inauthentic activity, and cyber-attacks.

Alongside the State threat posed by Iran, violent extremist groups continue to threaten the security and stability of the region. For example, ISIS, long past its 2014 pinnacle of capability, remains able to conduct operations within the region with a desire to strike beyond the Middle East. Though degraded, the group's vile ideology remains unconstrained.

In Afghanistan, the reduction in collection, analytical resources, and Intelligence, Surveillance, Reconnaissance assets means our campaign against al Qaeda and ISIS-Khorasan is challenged; while we can see the broad contours of attack planning, we lack the granularity to see the complete threat picture. ISIS-Khorasan has increased attacks in the region and desires to export those attacks beyond Afghanistan to include the United States Homeland and our interests abroad.

The group also seeks to expand its operational presence and influence regionally and beyond. We are addressing this through the development of innovative Intelligence, Surveillance, and Reconnaissance platforms and increasing additional collection methods to build out a more fulsome threat picture.

While Afghanistan's security situation deteriorates, the United States has a moral obligation to safely extract the tens of thousands of Special Immigrant Visa holders, many of whom aided United States troops as interpreters, translators, and advisors during our longest war.

Meanwhile, strategic competition in the central region has grown more urgent over the past 40 years. Only now, the Soviet Union is replaced with Russia and the People's Republic of China, both of whom seek to undermine American interests in the region. Russia looks to aggressively expand its foothold of influence in the region amidst its war in Ukraine. Moscow leverages its military presence by propping up Syria to garner influence in the Middle East. The People's Republic of China aggressively expands its diplomatic, informational, economic, and military outreach in this part of the world.

These challenges and complexities, combined with the opportunities offered by our partnerships in the region, form the basis of CENTCOM's three strategic priorities.

II. CENTCOM STRATEGIC PRIORITIES: DETER, COUNTER, COMPETE

Strategic Priority 1: Deter Iran

Deterring Iran is arguably more urgent than at any time in CENTCOM's history due to Iran's cutting-edge missile and UAV capability as well as its uranium enrichment program. As it was at the time of CENTCOM's formation, Iran is the most destabilizing actor in the region. Today, Iran is undeterred from its malign activities, which include conventional threats to neighbors, support to violent proxy groups that spread chaos and instability throughout the region, and support to Russia's war in Ukraine.

The evolution of the Iranian threat—the primary threat against which this command was born—is a story that runs the full timeline of CENTCOM history. Early in the Iran-Iraq war, the regime realized its armed forces could never fully recover from the crippling losses suffered during that ruinous conflict. Instead, to develop an asymmetric advantage against regional militaries, the regime invested in precision missiles with extended reach. It now commands an imposing measure of missile capability it uses to coerce, intimidate, and bully its neighbors.

Tehran has also manufactured increasingly sophisticated Unmanned Aerial Vehicles. The regime now commands an arsenal of drone systems, ranging from small, short-range systems to modern intelligence, surveillance, and reconnaissance systems to long-range One-Way Attack platforms. They are building larger drones that

can fly further with increasingly deadly payloads. Until the United States helped secure the Yemen truce, Iran was regularly using Yemen as a testing ground for these weapons, threatening both United States partners and tens of thousands of Americans in the Gulf.

Meanwhile, Tehran continues to furnish weapons, support, and direction to proxies across the region who engage in acts of terror and undermine local governments, all advancing Iranian interests. The proxy forces are more emboldened and dangerous through the increased proliferation of these Unmanned Aerial Vehicles, which allow them to target U.S. and partner interests with increased speed, range, accuracy, and explosive capacity.

This story grows more foreboding. Today, Iran continues to enrich and stockpile uranium far above what is needed for commercial use. Increasingly more centrifuges are the advanced IRN–6 models, capable of enriching uranium far faster and more efficiently than Iran's first-generation centrifuges. The regime is now stockpiling highly enriched uranium under the guise of commercial use. The International Atomic Energy Agency report released on February 28th on Iran's enrichment program reveals that Iran's stockpile of uranium enriched up to 60 percent has grown substantially in less than 3 months and that Iran now has sufficient nuclear material for manufacture of several nuclear explosive devices. The region is increasingly worried about a nuclear-armed Iran.

Iran also puts itself increasingly further outside of international norms; Tehran continues to ignore United Nations Security Council resolutions, violate sanctions and embargos, proliferate weapons to its network of proxies and affiliates, and attack shipping vessels in international waters. The regime continues the brutal beatdown of the rights of its citizenry, crushing dissent, protest, and human rights. Iranian-aligned groups routinely strike at American troops and our partners in Iraq and Syria.

Recently, Iran's advanced weapons are seen on the battlefield of Ukraine alongside their Russian partners. Iran often aligns information operations with or in support of Russia. An internationally isolated Iran has clearly thrown in its lot with an also isolated Russia.

Strategic Priority 2: Counter Violent Extremist Organizations

While Iran poses the most ominous threat to the central region, Violent Extremist Organizations (VEOs) operating in the Middle East, Levant, and Central Asian States also represent a danger to security and stability. The Central Command Area of Responsibility serves as the epicenter of violent extremism, with 19 of 21 top tier terrorist groups operating across the region. ISIS and al Qaeda are the principal Sunni violent extremist organizations in the Middle East and Levant. Both groups maintain numerous affiliates pursuing local, regional, and global objectives.

ISIS continues to organize attacks throughout the Middle East and must not be allowed to operate uncontested. Alongside our Syrian Democratic Forces partners, we continue to put pressure on ISIS in Syria. In Iraq, we continue to advise, assist, and enable the development of the Iraqi security forces in their fight against ISIS.

We see ISIS in Iraq and Syria in three groups:

1. *ISIS At Large.* This is the current generation of ISIS leaders and fighters we face in Iraq and Syria today. While we have significantly degraded this group's capability, it retains the ability to inspire, direct, organize, and lead attacks in the region and abroad.

   This group offers the most straightforward solution: partner with Syrian Democratic Forces and advise, enable, and assist Iraqi Security Forces until ISIS At Large is defeated. The two other groups represent far more complex problems.

2. *ISIS In Detention.* These are the roughly 10,000 ISIS fighters in detention facilities throughout Syria, and approximately 20,000 in detention facilities in Iraq. We rely on the Syrian Democratic Forces and our Iraqi partners to secure these sites, keeping this population off the battlefield. The Government of Iraq has sufficient infrastructure to keep these fighters in detention. The only long-term solution in Syria, however, is transfer of these detainees to the custody of their countries of origin.

   Last week, during my sixth visit to Syria since taking command 11 months ago, I again visited the Hasakah detention facility, which houses more than 5,000 detained ISIS fighters predominately from the terror group's tactical defeat at the March 2019 battle in Baghuz. I observed the structural damage incurred during the January 2022 ISIS attack on the facility in which more than 1,000 ISIS fighters escaped. The vast majority were later recaptured by SDF forces. During that 10-day battle involving SDF and United States forces, more than 400 ISIS fighters and 121 SDF soldiers were killed.

This population of detainees represents a looming threat to Syria, the region, and beyond. Syrian Democratic Forces leaders securing the site as well as camp administration officials described the detainee population as unrepentant and subject to further radicalization. One Syrian Democratic Forces official referred to the more than 5,000 detainees as a "ticking time bomb."

Unlike the first group, there is no military solution to this ISIS detainee population. We must support the Syrian Democratic Forces who continue to secure these sites while working with the countries of origin of these ISIS detainees to repatriate and rehabilitate or find a judicial solution.

3. *The Potential Next Generation of ISIS*. This, the most concerning group, includes the more than 30,000 children in the al-Hol camp for internally displaced persons and the more than 1,000 children in the al Roj camp who are in danger of ISIS indoctrination on a daily basis.

Last week, while in the al Roj camp, I spoke with dozens of residents from at least 16 countries, including: Russia, Egypt, Türkiye, Uzbekistan, Kyrgyzstan, Turkmenistan, Morocco, Pakistan, Afghanistan, Lebanon, Yemen, Tunisia, Iraq, Syria, Canada, and the United States. These residents told me that the vile ISIS ideology remains a threat throughout the camp. To a person, they all expressed a desire to return to their country of origin.

During four trips to the al Hol camp in 11 months, I've seen first-hand that these children are prime targets for ISIS radicalization. The al-Hol camp is a flashpoint of human suffering, with more than 51,000 residents, more than 90 percent of them women and children, living in tents. These children have little meaningful education, no access to the outside world, limited hot water, and few constructive outlets to develop their potential. They are at risk of becoming casualties to an ideological war within the camps: ISIS leaders want their minds.

As with the second category of ISIS, there is no military solution for this group. Our long-term goal must be the successful repatriation, rehabilitation, and reintegration of the camp residents back into their country of origin.

While progress against ISIS in Iraq and Syria continues apace, the underlying conditions that led to the group's 2013 and 2014 expansion remain. The ruinous effects of Assad's rule and civil war in Syria lingers, employment and educational opportunities remain scarce for many young men, and millions live in appalling conditions. ISIS' vile ideology remains uncontained and unconstrained, and a seething hatred remains open to exploitation.

Our continued, limited presence in Iraq and Syria allows us to assist the Syrian Democratic Forces and the Iraqi Security Forces in maintaining pressure on ISIS to prevent the group's resurgence to 2014 levels. The minimal United States troop strength in those countries allows us the ability to advise, assist, and enable partner forces with the goal of the enduring defeat of ISIS and the prevention of external attack plots against the United States and nations throughout the region. Our support is essential to ensuring regional stability as well as protecting the Homeland.

In Afghanistan, the Taliban's hold on security is maintained through ideology, continued humanitarian aid, and persistent abuse of human rights to dissuade unrest. Extremist groups see opportunity and ISIS-Khorasan grows emboldened amidst the chaos, seeking to expand its ranks and inspire, enable, or direct attacks in the region and beyond. ISIS-Khorasan is building a capability in Afghanistan from which to strike Western interests worldwide, with the ultimate goal of a strike on the American Homeland.

Al Qaeda remnants remain in Afghanistan. While the July 2022 death of Ayman al-Zawahiri set the group back, al Qaeda desires to rebuild. Though this will take time, al Qaeda remains a long-term threat to American interests and citizens as well as the Homeland.

Strategic Priority 3: Compete Strategically

In addition to its primary role as a redoubt against the spread of Iranian-directed instability across the region, this command was established in 1983 to maintain a military advantage over the Soviet Union amidst Great Power Competition. This was, after all, in the moments after the surprising 1979 Christmas Eve Soviet invasion of Afghanistan—the first major combat operation involving Soviet troops outside of Warsaw Pact territory since the close of World War II. Today, CENTCOM's role in Great Power Competition, clearly defined in the 2022 National Defense Strategy, is more urgent and complex.

Strategic Competition with PRC

China's goal to serve as the world's leading superpower by 2049 puts this region squarely in its crosshairs. The United States Central Command area of responsibility shares a 2,200-mile border with the People's Republic of China—larger than the United States border with Mexico. China looks across that border and sees only opportunity for advantage in influence. Beijing's willingness to take on higher-risk projects threatens American preferential ties and unfettered access. On its current trajectory, the increased technological and military presence serves as a growing strategic challenge to U.S. partnerships, access, force presence, and security in the region.

The People's Republic of China aggressively expands its diplomatic and economic outreach across the region. Last week's PRC-brokered reestablishment of relations between Iran and the Kingdom of Saudi Arabia underscores the emergence of China's diplomatic role in the region.

China, dependent on the region for half of its crude oil, is also moving beyond energy-based investments to encompass physical and telecommunications infrastructure. Beijing also encourages greater military cooperation in the Middle East and Central Asia, aiming to challenge our standing in the region. More than half of all the oil and more than a third of all the natural gas imported by China is supplied by countries within the CENTCOM area of responsibility.

Expanding regional arms sales by Beijing provides economic opportunities, expands influence and increases People's Republic of China interoperability in the region. China seeks to under-mine American economic, commercial, and security interest in this part of the world to be-come the region's leading power.

Beijing has reason for optimism here. China is often viewed by regional partners as more accommodating than the United States, offering lower costs, favorable financing, faster delivery times and no end-use monitoring agreements. During my trips to the region and calls with regional Chiefs of Defense, I routinely hear how much faster and easier China's foreign military sales program is than ours. While the American foreign military sales process involves multiple steps going through multiple layers of government bureaucracy, the PRC can move much faster, often mak-ing us non-competitive by comparison. Although this multi-layered process is a reflection of our form of government and U.S. law, it often has a deleterious effect on our ability to compete for the sorts of long-term relationships that the sales of major defense systems create.

The Belt and Road Initiative remains a strategic lever to supplant U.S. leadership in the region under the guise of benign economic initiatives and broadening security relationships. Of the 21 countries comprising the CENTCOM area of responsibility, 19 have Belt and Road Initiative agreements with China.

Regional powers see the Belt and Road Initiative as an opportunity to modernize their cities and societies to advance regional economic and social reform programs including Saudi Arabia's Vision 2030, Oman's Vision 2040, Qatar's Vision 2030, Kuwait's Vision 2035, and Egypt's Vision 2030. Three Belt and Road Initiative land corridors and one of the three maritime corridors transits the CENTCOM area of responsibility.

As the United States reduced force posture in the region, Chinese investment and influence grew steadily. Consider the following:

- The 8-year period from 2013 to 2021 represented the largest investment period in the CENTCOM region in PRC history with $408.7 billion in commercial investments;
- From 2015 to 2021, just as it was accelerating commercial investment, the PRC devoted $2.6 trillion in trade with CENTCOM countries;
- In 2021, in Israel's largest shipping hub, the PRC opened a new, $1.7 billion modern technological port which is significantly larger than Israel's three international ports and supports large shipping vessels capable of carrying more than 18,000 containers;
- The PRC is building and operating a container terminal in Abu Dhabi;
- The 10-year, $62 billion China-Pakistan Economic Corridor, begun in 2015, is the BRI flagship;
- Saudi Arabia is China's largest supplier of crude oil and with December 2022s comprehensive strategic agreement, PRC reliance on Saudi crude is set to increase;
- Huawei has 5G contracts with 19 of the 21 countries in the CENTCOM region; and
- The PRC targets Iraq for influence and resources—Beijing invested $10.1 billion in BRI projects in Iraq in 2021 alone.

China's economic interests, transactional approaches and perceived lack of Chinese bias in in-ternal and regional affairs, will continue to provide inroads in the region.

Strategic Competition with Russia

Today, 32 years after the fall of the Soviet Union, Russia's objectives are to weaken Western security structures in the Middle East and Central Asia and continue to challenge United States security interests and critical relationships in the region.

The United States Central Command region holds a 4,750-mile border with Russia—more than six times the length of NATO's border with Russia—through the Central Asian States. Since Catherine the Great in 1762, Russia has sought this region as part of its empire. The Kremlin has viewed the Central Asian States as its territory since the 1922 Treaty on the Creation of the Union of Soviet Socialist Republics. The emphasis on ownership over Central Asia took on a fever pitch after World War II, when Stalin used the region for resource extraction and strategic depth. Putin seeks to take advantage of this proximity and history by establishing a foothold of influence leveraging long-established relations and a perceived decline in United States engagement to challenge our influence in that critical part of the world. Russia retains extensive interests in Central Asia, spanning energy, military sales, counterterrorism, counter-drug efforts, and others.

Today, Putin's interests in the Middle East range from energy transit to security relationships to military sales. His overall strategy in the region remains largely unaffected by the war in Ukraine. Despite the recent damage to its reputation and influence, Russia continues apace on several fronts to preserve its influence and access in the Middle East. This includes sustaining military support in Syria that is indispensable to Assad and influential with Syria's neighbors.

Russia has more than 2,500 Russian troops in Syria, which Putin views as a base from which to project power and influence throughout the region and into Europe and Africa. Russian maritime forces maintain a permanent presence in Syria's coastal city of Tartus. In 2019, the two countries signed a 49-year lease for rights to Tartus' Mediterranean deep-water port. Just as CENTCOM was formed to serve as the "security guarantor" of the world's central region, Russia views itself as the security guarantor of the Central Asian States. However, as a result of the invasion of Ukraine, the Central Asian States increasingly view Russia as a threat to their sovereignty.

III. CENTCOM'S STRATEGIC APPROACH: PEOPLE, PARTNERS, INNOVATION

As it enters its fifth decade, CENTCOM requires a new Strategic Approach to guide all operations, activities, investments, and initiatives against these complex and confounding challenges. That Strategic Approach is defined by three words: People, Partners, and Innovation.

People

Throughout CENTCOM's lifespan, its People have served the region, our Nation, and this command. Since our 1983 inception, our People have fought for and provided assistance to the citizens of the world's central region. Over the course of 4 decades, they have displayed the grit, discipline, compassion, and empathy that the United States expects out of its military force.

Today, our People—our servicemembers, civilian workforce, contractors, and supportive Families—serve as the bedrock of everything we do and how we succeed. They underpin all aspects of our strategic approach and drive us along our strategic priorities.

Our People at CENTCOM are our greatest asset and our most critical resource. We hire, invest in, retain, and care for our People and their families.

Partners

Partners are our Nation's comparative advantage against competitors like the People's Republic of China and Russia and serve as a barrier against the ramifications of Iran's most destructive behavior. No nation can face the complexity described above alone. We therefore cultivate deep abiding relations with forces in the region that can serve as a hedge against threats in the region while deterring Iran from its worst, most destabilizing activity. We are in a race to integrate our partners before China and Russia can deeply penetrate the region.

For China and Russia, partnerships are transactional relationships. For CENTCOM, our partnerships are based in our values and our commitment to the region. China views regional countries as possible customers and clients, while we seek partners and allies. Our values and our commitment make us the partner of

choice in the region. We must always hold true to our commitments to partner forces and nations as our actions speak for us to the region.

CENTCOM was formed to serve in support of and alongside Partners—the "local and regional forces" referenced by the legislation directing the formation of U.S. Central Command. Today that focus is more urgent than ever in our 40-year history.

For a period of almost 20 years, CENTCOM served as the priority resourcing requirement for the U.S. Department of Defense. This was an anomaly in America's national security history: the only period in which the Nation was committed to two simultaneous wars since World War II. With the conclusion of the wars in Iraq and Afghanistan, we have significantly reduced our force posture in the Middle East. Without the large volume of planes, ships, and troops we had in the region just 5 years ago, we must integrate our partners into all security constructs to foster regional security and stability.

Referring back to the Senate Armed Services Committee legislation guiding CENTCOM in 1983—this command was established to serve as a "security guarantor of American interests in the world's central region." Today, we uphold that responsibility by serving as a security integrator: integrating our Partners into a framework of operations, activities, investments, and initiatives that will ensure sufficient regional security to protect our vital national interests.

The kind of deep, abiding partnerships CENTCOM seeks is exemplified by the Coalition Maritime Forces, a multinational maritime partnership led by U.S. Naval Forces Central. The Combined Maritime Forces, the world's largest international maritime partnership, exists to uphold the rules-based international order. Through this mutually supportive partnership, the 38 CMF participant countries counter illicit non-State actors on the high seas and promote security, stability, and prosperity across international waters.

The realignment of Israel from European Command to Central Command 18 months ago has immediately and profoundly altered the nature and texture of many of CENTCOM's partnerships for the good. Back in 1983, the boundaries of the CENTCOM Area of Responsibility excluded Israel; Secretary Weinberger and National Security Advisor William Clark were concerned that CENTCOM leaders would be challenged to build enduring, trust-based relations with Arab military leaders while also partnering with the Israel Defense Force. While that concern may have been well-founded then, CENTCOM today readily partners with Arab militaries and the Israel Defense Force alike. In fact, the inclusion of Israel presents many collaborative and constructive security opportunities. Our partners of 4 decades largely see the same threats and have common cause with Israel Defense Forces and the Arab militaries in defending against Iran's most destabilizing activities.

Innovation

Through Innovation we multiply the capability of our People and strengthen our partnerships to deter Iran, counter VEOs, and compete with China and Russia for influence across the region.

Innovation will strengthen our partnerships, assist our operations, and allow us to increase progress across all efforts. In so doing, it will allow us to serve as that security integrator on behalf of regional security and stability.

Innovation is not just about technology for us; it is innovation of thought, innovation of concept, innovation of process. We are building a culture of innovation and our partners are with us on this journey. For example, across all domains, through employment of systems on hand and newly acquired systems, we are building an interconnected mesh of sensors that transmit real-time data. When viewed together through data integration and Artificial Intelligence platforms, this real-time data builds a clearer picture of the operating environment. Across CENTCOM, our formations use unmanned systems paired with Artificial Intelligence to give us better information faster. This allows us to employ our manned systems more efficiently and strategically and thereby achieve decision dominance. We're able to cultivate information and use Artificial Intelligence to make decisions faster than our adversaries and use our manned systems more efficiently.

The U.S. Central Command theater holds almost no assigned forces, and with the declining emphasis on defeating violent extremist organizations and the National Defense Strategy shift in primary focus to U.S. strategic competitors, our forces decreased 15 percent over the course of 2022 alone. CENTCOM force posture saw a reduction of 85 percent from its 2008 peak. With so many looming and existential threats in the region and such a strong possibility of chaos spreading and driving the region to again become a strategic distractor, we must innovate to expand our

presence beyond those allocated forces. This is enabled by the creative application of technology and innovation.

CENTCOM's three innovation task forces—Task Forces 59, 99, and 39—apply these concepts to specific domains. For example, the most advanced—Task Force 59, our maritime innovation task force—operates a fleet of unmanned vessels, both on the surface of the water and under the water. These unmanned vessels carry sensors which are collecting vast amounts of data. That data, pushed through data integration and artificial intelligence platforms, helps build a clearer picture of the operating environment. Through Task Force 59, 99, and 39 CENTCOM is rapidly improving maritime threat detection and maritime domain awareness and building an integrated, unmanned, and artificial intelligence network to achieve safer seas and stronger protection for global trade.

Just this month, Task Force 59 completed a 3-week International Maritime Exercise involving 7,000 personnel, 50 partner nations and organizations, 35 ships, 30 unmanned systems, and more than a dozen AI tools. The exercise, which took place in the Arabian Gulf, Arabian Sea, Gulf of Oman, Red Sea, Indian Ocean, and East African coastal regions, strengthened participants' interoperability and command and control.

More importantly, our international and regional partners are right there with us. Task Force 59 has established hubs in Bahrain and Jordan. Four months ago, Bahrain participated in a naval drill in the Gulf during which seven crewed ships from Saudi Arabia, Bahrain, United Kingdom, and the United States teamed with unmanned systems. By the end of this year, our goal is a Task Force 59 fleet of more than 100 vessels—at least 75 from partner maritime forces—operating together, communicating together, and providing a common operating picture to all participating militaries.

In addition to Task Force 59, which operates at sea in the maritime domain, we have Task Force 99, based in Qatar, operating in the air domain. Through implementation of Commercial Off-The-Shelf Technology and collaboration with industry and academia, Task Force 99 creates a technology transition ecosystem that allows increased awareness and faster decisionmaking and places cutting-edge tools in the hands of warfighters and decisionmakers. The task force's three lines of effort (LOEs) are: increasing awareness of the air domain, accelerating the speed of the targeting cycle, and imposing dilemmas on adversaries.

Task Force 99 also focuses on aerial drones complete with tailored payloads and other capabilities operating together to observe, detect, and gather data that feeds into an operations center. This increases our air domain awareness and rapidly accelerates the speed of our decisionmaking. Task Force 99's fleet of unmanned aircraft will impose dilemmas on our adversaries and detect and defeat threats to our systems and to our partners.

Finally, we have Task Force 39, our newest innovation task force. Task Force 39 tests concepts and technology in the land domain with a heavy focus on testing new technology to defeat adversary drones. In the coming months, this task force will experiment with robotic sustainment vehicles.

Through these innovation Task Forces, CENTCOM seeks to serve as the experimentation center for new drone-defeat systems, ideas, and technology, to include directed energy. At CENTCOM, we consider opportunities for innovation as limitless. They are boundless and cross all realms of possibility.

CENTCOM is also accelerating the employment of Joint All Domain Command and Control solutions to combat operations to achieve vertical integration from the Joint Task Force and

Components, all the way to the Joint Staff and National Command Authority. Every day, we drive Joint All Domain Command and Control capability forward to allow our People to make faster, more informed decisions in combat's critical moments.

As a data-centric warfighting headquarters, we've transformed our targeting process from PowerPoint slides to the employment of live data. Our goal is a Single Pane of Glass that builds better situational understanding and allows commanders to achieve decision advantage like never before.

In late January and early February of this year, our headquarters led Scarlet Dragon Oasis, our Joint All Domain Command and Control live fire exercise on the eastern seaboard, the mid-Atlantic Electronic Warfare range, and across the U.S. Central Command region. The operation successfully passed digital targeting data and mission threads between multiple commands across the United States, from Nevada to Utah to Tampa and our operations centers in South Carolina and Bahrain. From computer vision, full-motion video, and synthetic aperture radar algorithms identifying targets, to digital workflow tools improving speed and precision of tar-

geting teams, to optimizing machine-to-machine communication flow, the exercise marked a critical step toward digital warfighting.

Each of these tools, concepts, initiatives, and task forces are singularly focused on providing our People with the best tools, the most comprehensive rapid situational awareness, and the fastest and most accurate decisionmaking capability. This, in turn, serves a great benefit to our Partners and to the security and stability of the region. Innovation is about linking our People and our Partners with ideas and capabilities that enhance all efforts to deter Iran, counter violent extremist organizations, and compete strategically with Russia and China.

People, Partners, and Innovation and the National Defense Strategy

The strategic approach outlined above is heavily nested underneath the 2022 National Defense Strategy. By empowering our People, building out abiding Partnerships, and embracing Innovation, CENTCOM looks to allow the National Defense Strategy to manifest across the Joint Force. A flashpoint with Iran, a crisis in the region, a successful large-scale attack on a partner country, or an attack on the Homeland by a VEO all will likely require a response, drawing resources not forecast away from higher priority theaters to the Central Command region. Therefore, a modest investment in People, Partners, and Innovation serves as a hedge against National Defense Strategy derailment.

Furthermore, the Central Command region is literally and figuratively central to competition with Russia and China—a National Defense Strategy priority for all of the Joint Force. Our strategic approach aligns People, Partners, and Innovation against Strategic Competition with the People's Republic of China and Russia, which the National Defense Strategy identifies as the priority across all global regions.

IV. CONCLUSION: A VISION AND A PROMISE

United States Army General Robert Kingston saw the future.

At the pinnacle of a career leading troops in heavy combat—Kingston fought in some of the heaviest fighting of both the Korean and Vietnam wars and was among the most decorated military officers of his generation—he was selected as the first commander of United States Central Command. A soft-spoken, battle-hardened warfighter, Kingston knew the central region from his time leading a contingency force focused on Iran during the early moments of the hostage crisis. He understood the unique set of challenges facing the new command and he knew that the answers to all of them relied on an enduring CENTCOM commitment to regional forces.

In assuming responsibility for United States Central Command in a ceremony on MacDill Air Force Base in Tampa, Florida on January 3d, 1983, Kingston told the assembled crowd: "CENTCOM will require regional military forces to accomplish its mission for the Nation."

This posture statement is informed by my 14 trips to the region and the hundreds of calls, video teleconferences, and meetings with partnered Chiefs of Defense and their military component leaders in my 11 months in command. Those engagements crystallized in my mind that 40 years after Robert Kingston spoke those words, one thing is clear: CENTCOM requires regional military forces [i.e. Partners] to accomplish its mission for the Nation. So it will into the future.

The challenges faced by Kingston and his staff and component leaders have only grown more complex. The threats, more capable. The competition for influence with external powers, more urgent.

People, Partners, Innovation is our glidepath to deter Iran, counter VEOs, and compete strategically, allowing us to meet the challenges posed by these threats, complexities, and adversaries and ensure regional security and stability.

We employ this strategic approach along a foundation of regional stability earned by American servicemembers over the course of 4 decades. In peace, in war, in years and years of sustained combat, in the toughest conditions faced by American servicemembers since the

Vietnam War, these men and women bought time and space for American leadership and preserved our vital national interests in this critical region. From the Tanker War to the Gulf War to the Global War on Terrorism and many contingency and humanitarian assistance operations in between—CENTCOM troops have fulfilled the original promise of this command: "U.S. Central Command, alongside local and regional forces, will be America's security guarantor in the world's central region." Today's CENTCOM servicemembers have transitioned this command to a security integrator.

Those troops are the forebears of the soldiers, sailors, airmen, marines, coastguardsmen, and guardians who serve in CENTCOM today—the greatest men and women in the country, thousands of them in harm's way as you read this, advancing

American policy and representing the Nation. It is my life's greatest honor to lead them.

Armed with the right strategic approach and the right measure of resources, I know they will succeed.

Chairman REED. Thank you, General Kurilla. General Langley, please.

STATEMENT OF GENERAL MICHAEL E. LANGLEY, USMC
COMMANDER, UNITED STATES AFRICA COMMAND

General LANGLEY. Chairman Reed, Ranking Member Wicker, distinguished Committee Members, it is an honor to appear before you today to testify on the State of affairs of the United States Africa Command.

I am proud to testify, along my good friend, General Eric Kurilla, the Commander of the United States Central Command. Now, I assumed command last August, and since then, I embarked upon a campaign of learning over the last 7 months to inform our discussion here today.

I undertook this campaign of learning to fulfill my commitment to this Congress to complete a holistic assessment upon confirmation. I made that assessment, and I will continue it throughout my tenure of command.

Upfront, I want to make one thing crystal clear. The team of servicemembers and civilians at AFRICOM is a talent and dedicated body. I am honored to serve among them. I am joined here today by my State Department foreign policy advisor, Mr. Phil Nelson, who represents the exceptionally skilled diplomatic team embedded in our headquarters.

Our entire team is laser focused on implementing our whole-of-government approach, with our partners from the Department of State, USAID [United States Agency for International Development], the intelligence community, and other U.S. Government organizations. We campaign with our allies and partners to advance mutual interest and to promote stability and prosperity on the African continent.

You should be proud of their efforts, I certainly am. Now, Africa is a vast and dynamic continent of sovereign nations. Collectively and individually, these nations are increasingly important players on the global stage. As such, AFRICOM's contribution to American security must be viewed through a global lens.

Threats once contained on the continent are transforming into worldwide threats. Terrorism, poverty, food insecurity, climate change, and mass migration shadow African lives. They sow the seeds of violent extremists and Russian exploitation. The Kremlin's invasion of Ukraine has aggravated the food insecurity crisis in Africa by blocking vital food shipments to the same nations that feel the deepest impact of climate change.

Russia's Wagner mercenaries turned chaos into cash. It destabilizes entire regions across Africa and cuts at American interests worldwide. The expansion of the Middle East based violent extremist groups such as ISIS and al Qaeda, including now the biggest franchise Al-Shabaab, threatens American lives.

Solutions to these colossal problems must be a shared burden. African nations need to be at the helm of a concerted international effort to produce sustainable results, sustainable outcomes.

Assisting African nations to achieving the goals while advancing American interests can only be accomplished through a synchronized whole-of-government approach, a whole-of-government strategy.

We call it a 3-D approach, which is a toolkit of diplomacy, development, and defense, but one tool does not succeed without the whole kit. So, I will advocate for my State Department and USAID partners to receive the resources they need to succeed. Now, Africa faces many other challenges.

How we are putting African needs at the forefront of our campaign, reinforced by multilateral and whole Government engagement, will help AFRICOM and our partners work toward a sustainable peace, stability, and prosperity.

Chairman Reed, Ranking Member Wicker, and distinguished Members of this Committee, thank you for having me here today. I look forward to your questions.

[The prepared statement of General Michael E. Langley follows:]

PREPARED STATEMENT BY GENERAL MICHAEL E. LANGLEY

AFRICAN SECURITY IN A GLOBAL CONTEXT

INTRODUCTION

Chairman Reed, Ranking Member Wicker, distinguished Committee members, Africa's impact on the world is greater now than at any point in recent history, so United States Africa Command (USAFRICOM) sees our mission through a global lens. The vast potential of African peoples to lead the way in worldwide growth is up against a rising tide of existential challenges. Threats from within the continent are transforming into threats to America's interests and allies. Terrorism, poverty, food and water insecurity, protracted conflict, climate change, and mass human migration disproportionately shatter African lives. Solutions to these colossal problems must be a shared burden, with African nations at the helm of concerted international efforts and a United States whole-of-nation contribution that produces sustainable outcomes. Since 2008, USAFRICOM has been proud to defend American interests and lead the United States Department of Defense's inclusive approach to helping African peoples achieve positive outcomes for all.

Crises in Africa set the stage for violent extremist organizations (VEOs) to grow, and for America's strategic competitors to bid for international allies. As the home of some of al-Qaeda's and ISIS's largest and most active branches, Africa is now the epicenter of international terrorism. Russia is expanding its African operations, including via the Kremlin-supported private military company Wagner; destabilization, democratic backsliding, and human rights abuses follow in their wake. Russia's full-scale invasion of Ukraine impaired Africa's food supply, compounding the lingering challenges of the COVID–19 pandemic. Meanwhile, the People's Republic of China's (PRC's) economic and military presence poses challenges for both African nations and American interests. Climate change-related shocks drove a surge in African natural disasters last year, killing and displacing millions though protracted droughts, mass flooding, disease outbreaks and tropical storms. All of these crises combine with protracted regional conflicts to impede progress toward a stable continent and a prosperous planet where democracy, human rights, and the rule of law flourish.

The world needs a stable African continent of sovereign nations pulling together toward the universal goals of peace and prosperity. Africa's six maritime chokepoints carry a third of the world's shipping. Economic growth on the continent has accelerated in recent decades, and Africa is increasingly an engine of the global economy. This engine is partly fueled by vast deposits of rare earth minerals—critical ingredients of the world's transition to clean, sustainable energy—and by the human capital of a swelling population that will account for a quarter of humankind by 2050. Sub-Saharan Africa is the UN's largest regional voting bloc, and three of

our African partners currently sit on the United Nations Security Council: Gabon, Ghana, and Mozambique. Africa's national voices increasingly harmonize in organizations like the African Union, regional economic communities, and multinational security forces that welcome American support. Africa is a continent of opportunity.

The servicemembers and civilians of USAFRICOM are dedicated to helping our African counterparts seize that opportunity. USAFRICOM promotes security and prosperity in collaboration with the U.S. Departments of State (DOS) and Justice (DOJ), the U.S. Agency for International Development (USAID), U.S. Coast Guard, Department of Homeland Security (DHS), U.S. Fish and Wildlife Service and others. By aligning our defense efforts with diplomacy and development, USAFRICOM teams with African and international partners to campaign across the spectrum of diplomacy, development, and defense. By convening those partners in major multilateral exercises like AFRICAN LION, FLINTLOCK, and the ACCORD and EXPRESS series, USAFRICOM tests and shares institution-building best practices—including implementing the 2017 Women, Peace, and Security Act and advocating for strict adherence to the law of armed conflict. By working daily with U.S. embassies and units throughout the Joint Force, USAFRICOM stands ready to deliver lifesaving rapid response to flashpoints in remote and unpredictable parts of the world.

America's tools for defense in Africa include military education, intelligence sharing, maritime and cyber domain awareness, medical training, DOS's foreign military sales, and—when warranted and authorized—lethal force to protect American lives and support partner-led counterterrorism missions. This toolkit of security cooperation and operational authorities helps African partners to fight 21st century terrorists and criminals, providing clear alternatives to unfavorable and opaque deals with Russia or the PRC. Whole of nation investments in Africa are opportunities for America to demonstrate global leadership while reinforcing the international rules-based system across all domains of commerce and defense. USAFRICOM is continually innovating fresh ideas with our partners and fielding new solutions for a peaceful and prosperous Africa—an outcome that will underpin America's long-term security.

Underinvestment in African security raises the risk of an unexpected crisis that would abruptly strip United States resources away from our top national security challenge of strategic competition. It has happened before. In the late 20th century, al Qaeda grew unchecked in Africa culminating in the 1998 bombings of our embassies in Kenya and Tanzania. More recently, the Benghazi, Libya attack in 2012, the Tongo Tongo, Niger attack in 2017, and the Manda Bay, Kenya attack in 2020 claimed American lives. These tragedies drew U.S. defense capital away from enduring strategic objectives. USAFRICOM's mission is to mitigate the risk of such tragedies while guarding NATO's southern flank and protecting the brave Americans who defend our great Nation.

TERRORISM IN AFRICA

The most immediate threat to both American lives and our partners in Africa is terrorism. Al Qaeda and ISIS sprouted in the Middle East but quickly transplanted onto the African continent where they flourished. Terrorist attacks in the Sahel region accounted for over a third of the world's terrorism deaths in 2021, up from just 1 percent in 2007. Today, Africa's VEOs vary in their tactics, resources, and specific goals, but all aspire to target American interests and African governments. These VEOs are dynamic networks that hide in vast under-governed spaces and bustling population centers, creating immense challenges for surveillance and disruption. Their attacks leave countless civilians dead, maimed, and destitute while undermining governance and already struggling economies, which in turn contributes to mass migration into Europe. As VEOs grow, the risk of terrorist plots against U.S. citizens, embassies, and ultimately the Homeland are likely to rise.

USAFRICOM is on the job to counter VEOs in Africa.

Last May, President Biden directed USAFRICOM to move a small force back into Somalia to help its people fight al-Qaeda's biggest and richest franchise, al-Shabaab. Al-Shabaab dominates swathes of territory that feed their coffers, replenish their ranks, and provide springboards to attack neighboring countries. Without relentless suppression and ultimate pacification, al-Shabaab will seek to attack United States embassies and eventually the Homeland itself. Somalia's Government under President Hassan Sheikh Mohamud is waging a heroic war against al-Shabaab in collaboration with an array of local and foreign supporters, including the United Kingdom, TUrkiye, the United Nations, the European Union, and the African Union Transition Mission in Somalia (ATMIS). ATMIS is mandated to gradually draw down until its final exit at the end of 2024.

USAFRICOM plays a supporting role in the fight against al-Shabaab, but our contributions are unique and irreplaceable. Last year, we conducted 15 collective self-defense airstrikes against al-Shabaab, saving the lives of Somali soldiers engaged in combat with our mutual enemy. These airstrikes played a critical role in supporting Somali partners undertaking offensive operations. We also conducted a precision airstrike that resulted in the death of a high value al-Shabaab terrorist, demonstrating our commitment to acting decisively to degrade al-Shabaab's threat to United States persons in the region and beyond. Alongside our DOS colleagues, we are providing financial, materiel, training, logistical and medical support to Somalia's counterterrorism forces. This support includes training and equipping Somali special operations via the Danab Advanced Infantry Brigade, which spearheads missions alongside other Somali and ATMIS forces to clear al-Shabaab strongholds. Enabled by USAFRICOM, a Somali-led offensive has slowed al-Shabaab's offensive momentum. Al-Shabaab has responded with a wave of reprisal attacks against Somali combatants and civilians alike, and Somalia's progress against the group is fragile. To preserve their battlefield progress and degrade al-Shabaab on an enduring basis, Somalia needs United States governance and development support more than ever.

The need for USAFRICOM in West Africa is also acute. Associates of al-Qaeda's second-largest and fastest-growing branch in Africa—Jama'at Nusrat al-Islam wal-Muslimin (JNIM)—kidnapped an American citizen in Burkina Faso last year. Her safe release was thanks to our African partners and a United States whole-of-government effort, but JNIM continues to hold another American kidnapped in 2016 and increasingly threatens Americans in West Africa. They are wreaking havoc with our regional partners as their reach outgrows rural havens in Mali and Burkina Faso and now projects into the Gulf of Guinea littoral states. JNIM has dramatically increased attacks on civilians and security forces alike and expanded territory under its influence. The outcome has been thousands of dead and millions of displaced West Africans along with acute political strain that fostered military takeovers of democratic governments in Mali and Burkina Faso. Wagner mercenaries have been quick to turn this turmoil into opportunity. Wagner's draconian operations with its partner in Mali both add to the human cost of terrorism and create more openings for terrorist groups. USAFRICOM is assisting our West African partners to limit JNIM's activity and prevent JNIM's expansion. We are ever vigilant in monitoring for plots against Americans or the Homeland. As JNIM grows, the likelihood of such plots emerging also grows.

ISIS's seven branches on the African Continent also aspire to attack American interests and partners. From the Mediterranean Sea to Mozambique Channel, ISIS cells heed the call of Middle East-based leaders to kill Africans, destroy Africans' infrastructure, and spread violent jihadist ideology. This ideology feeds off government instability and human rights violations, but our partnership has enabled incremental progress against ISIS. Governments in North Africa and their professional militaries have succeeded in limiting ISIS expansion and crippling the recruitment and outflow of ISIS foreign fighters; United States security cooperation has been key to those efforts, and we must maintain these critical partnerships to prevent ISIS and other VEOs from reemerging. In east, west, and southern Africa, a combination of multinational counter-VEO operations and ISIS's competition with rival VEOs is stymying their growth. At President Biden's direction, in January USAFRICOM took down global ISIS finance leader Bilal al-Sudani, which has already yielded new intelligence insights into ISIS's global operations and its plans and intentions in Africa. The credit for successes against ISIS goes to the local peoples, but USAFRICOM has been a crucial partner in this progress by providing training, funding, and intelligence.

However, ISIS cells throughout Africa are finding ways to adapt and reconstitute. ISIS continues to kill and displace thousands in West Africa, Mozambique, and the Great Lakes region. Former ISIS franchise Boko Haram is wreaking similar damage in Nigeria and the Lake Chad Basin. In concert with national, multilateral, multiregional, and U.N. forces, USAFRICOM is America's eyes and ears to provide warning and options to disrupt ISIS developments before they threaten the Homeland or United States citizens.

STRATEGIC COMPETITION IN AFRICA: RUSSIA

As a producer of food, fossil fuels, and military hardware, Russia has the opportunity to join with the international community in helping African nations overcome terrorism and poverty.

Instead, the Kremlin tramples African interests by leveraging Wagner, a United States-designated transitional criminal organization, to aggravate weak governance and feed instability. The Kremlin's motives are power and profit. Recent coups

d'etat have triggered U.S. restrictions that hinder USAFRICOM engagement, forcing those military regimes to double-down on their dependence on Wagner. Although well intended, United States coup restrictions can inadvertently incentivize the most at-risk African countries to dig themselves deeper into the mire of militancy and corruption.

The Kremlin disregards African interests by withholding fuel and food to create political leverage, under-delivers on military hardware and security commitments, and exploits existing friction points to spread Russia's influence. Wagner exploits political fractures in Libya, where Russia seeks to threaten NATO's southern flank. Wagner benefits from Libya's fragmentation, and its interference in parts of Libya risks hindering efforts to form the unified national government and security forces that the Libyan people want and deserve. Wagner lacks accountability to the rule of law and norms of ethics and human rights, making them a deceptively attractive option for some regimes. Wagner's short-term promises can be enticing, but the long-term outcome for African clients are nations mired in corruption and crime that stunt economic growth. Wagner's financial price tag is exorbitant. The full Wagner bill is even worse: the failure of government institutions, the withdrawal of stalwart security allies, the extraction of mineral wealth, and long-term resource concessions and debt that chips away at Africans' future.

In addition to Wagner's damage, Russia's February 2022 invasion of Ukraine sent African food markets into a crisis. Food prices skyrocketed as grain and fertilizer shipments from Eastern Europe dropped. Without doubt, Africans are victims of the Kremlin's ongoing aggression in Ukraine.

STRATEGIC COMPETITION IN AFRICA: PRC

In contrast to Russia's overwhelmingly harmful influence in Africa, the PRC's deep and diverse investment on the continent is a mixed bag. All sovereign nations are free to evaluate and choose their security and trade partners, and the PRC sees the same promise in Africa's future that the whole world recognizes. The PRC has prioritized Africa for years—and that will not change anytime soon. In January, the PRC's new Foreign Minister used his first overseas trip to visit several African countries—just like every PRC Foreign Minister has done annually for the past 3 decades. Last year, the People's Liberation Army Navy (PLAN) made its inaugural port call at the PRC's first overseas base: Doraleh, Djibouti. Also in Djibouti, the PRC is planning to construct a permanent spaceport. The PRC seeks to establish additional military and space facilities in multiple African countries, notably on the West Coast. This could sustain PLAN combatants in the Atlantic and secure unimpeded circumnavigation of the continent.

USAFRICOM works with United States Indo-Pacific Command (INDOPACOM) to discern the long term outcomes of PRC activities in Africa, which are intensive despite temporary decreases in financial lending and military engagement due to COVID–19. In itself, Chinese basing in Djibouti—or any future basing project—poses a marginal threat to United States interests on the continent. In the event of armed conflict, however, the PRC may leverage its expanded military footprint to project power against the United States, our allies, or global commerce. They already leverage their economic power in Africa to influence U.N. policy and protect their access to natural resources like minerals and fisheries. At least a third of the world's ships engaged in illegal, unreported, and unregulated (IUU) fishing—a problem that disproportionately harms African communities—are Chinese. Too often, Chinese companies harm African environments and peoples through irresponsible mining and harvesting operations that ignore sustainability and shun local stakeholders and job seekers.

USAFRICOM does not offer any nation an "us-or-them" ultimatum. The PRC is on the continent to stay, and they fill a role in Africa's modernization. USAFRICOM does not seek to block the benefits that the PRC can bring to the continent's nations. Yet all nations must take a clear-eyed approach to dealing with the PRC. African nations must be equipped to enforce laws that protect their fisheries and mineral resources, ensuring the benefits of these national assets accrue first and foremost to their own peoples and economies. The long term outcomes of PRC activity in Africa will be an uneven mix of much-needed infrastructure, equipment, and trade alongside depleted natural resources, polluted ecosystems, corruption and deficient military hardware.

HUMANITARIAN AND ENVIRONMENTAL CRISES IN AFRICA

Climate change-related crises and conflicts rank alongside Russia's war of choice in Ukraine as top catalysts of suffering for millions of Africans. Africa contributes a small fraction of the total greenhouse emissions, but changes in global tempera-

ture, combined with highly erratic precipitation, disproportionately hurt the continent. Climatic changes are accelerating the weather processes that create environmental disasters in Africa—partly by raising ocean temperatures. These rising temperatures are pressuring Africa's coastal fisheries, a crucial food source that is already pressured by overfishing. Rainfall patterns are also shifting. Last year, East Africa's current drought—its worst in 40 years—destroyed crops and livestock, displacing millions. Central and West Africa, by contrast, suffered deadly flooding that displaced millions more. The Lake Chad region saw its most intense rainfall in 3 decades. Flooding in southern Africa was largely due to a series of tropical storms from the Indian Ocean early last year, and we're seeing that trend continue this year. Desertification is constraining water and food resources in many parts of the continent, exacerbating interethnic fighting and interState friction.

Tragic in their own right, climate-related shocks in Africa also foster broader population vulnerabilities. The protracted drought in East Africa exacerbated suffering amid a 2-year civil war in Ethiopia. Climate-related shocks in places with weak infrastructure lead to deadly infectious disease outbreaks, like the cholera outbreak Malawi is currently battling in the aftermath of a devastating cyclone. VEOs like al-Shabaab and Boko Haram have become adept at exploiting the consequences of humanitarian crises to recruit new members and degrade the legitimacy of African governments. The costs of climate change in Africa are numerous, devastating, and often unpredictable, but one thing is predictable: the price tag—in both human suffering and in dollars—will only grow in coming years.

WHAT USAFRICOM NEEDS

The security challenges of Africa are complex and dynamic. Only a whole-of-government strategy can maximize USAFRICOM's effectiveness and efficiency in securing American advantage and promoting African development. Therefore, the requirements of our three whole-of-government tools—diplomacy, development, and defense—are intertwined and mutually supporting. One tool cannot succeed without the whole toolkit.

Diplomacy is the first tool. Fully staffed and resourced diplomatic missions in Africa would multiply USAFRICOM's opportunities. Therefore, USAFRICOM appreciates Congress's work to confirm Ambassador nominees and increased staffing for embassies. This boosts our collective ability to implement development and counterterrorism programs under the U.S. Strategy to Prevent Conflict and Promote Stability. Congressional and Cabinet-level delegations to Africa go a long way to reassuring our partners of American commitment, as did the United States-Africa Leaders' Summit in December and two Cabinet member visits in January. USAFRICOM is a key node in protecting United States facilities in Africa, and out of the State Department's 31 designated high threat/high risk posts, 16 are under USAFRICOM's purview. Protecting our diplomatic engagements in conflict areas and preparing for short-notice military assisted departures of our diplomats is vital insurance for America's work on the continent. USAFRICOM lowers risk to American diplomatic missions by maintaining operational readiness to conduct hostage rescue, personnel recovery, and rapid response to large-scale emergencies. Yet the DOS-USAFRICOM tie runs far deeper. Our diplomats, defense attachés, and USAFRICOM military leaders work together daily to pursue a seamless policy on the continent.

Development is the second tool. Three of the five designated beneficiaries of the United States Strategy to Prevent Conflict and Promote Stability are in Africa—Libya, Mozambique, and Coastal West Africa—but all of Africa needs development assistance. In contrast to Russia and the PRC, nearly 95 percent of America's annual assistance to Africa is delivered through grants to both government and nongovernmental organizations, not debt. Expanded funding flexibility would enable USAID to review, reorient, and respond to the ever-changing constellation of African needs. USAFRICOM appreciates the support from Congress to USAID through its $11 billion per year purse focused on Africa. However, this funding is hamstrung by targeted allocation. In fiscal year 2021, over 95 percent of USAID's non-humanitarian assistance funding was directed toward a specific allocation. Years in advance, no one can foresee and allocate funding for fleeting windows of opportunity to provide aid where Africans are most in need. USAFRICOM and its partners must be able to act quickly and decisively in response to rapidly changing security concerns and constraints; a sluggish response is harmful to both victims and America's standing as Africa's external partner of choice. Adversaries like al Qaeda and Wagner are fast and flexible in responding to opportunities, and USAID must have the agility to optimize its budget in ways that maximize America's decisive advantage. U.S. investments focused on stabilization, conflict prevention and peacebuilding, de-

mocracy, governance, economic growth and public health attack the roots of terrorism and tyranny more than bullets and air strikes ever will. Working together with DOS and USAID, we ensure America gets the credit for the United States tax dollars that flow to African needs. These dollars are a testament to the generosity of the American people and a critical piece of our informational competition with adversaries.

Defense is the third tool in our whole-of-nation approach. The first key to defense is security cooperation because this is how we win against VEOs and strategic competitors alike. USAFRICOM engages in direct military-to-military engagement and collaborates on U.S. support to U.N. peacekeeping operations. USAFRICOM drives partner capacity building via train and equip programs and working closely with the DOS International Military Education and Training program. USAFRICOM administers DOS programs like Excess Defense Articles, Foreign Military Sales, and Foreign Military Financing. USAFRICOM is the face of United States security cooperation in Africa. If we do not continue to strengthen our African security cooperation, our partners on the continent will be more likely to pivot toward Russia and the PRC to meet their defense needs.

The second key to defense is operational readiness, which USAFRICOM achieves by providing physical and informational spaces for African, international, and United States interagency partnerships to grow. USAFRICOM's headquarters is a hub of interconnectivity linking representatives from 13 U.S. Government departments and liaison officers from 18 countries. That number is even larger on the continent, where USAFRICOM's activities through Joint Task Forces in Djibouti, Somalia, and Niger bring even more nations together. Protecting these deployed troops is a sacred duty. To succeed in this duty, USAFRICOM needs the resources to provide timely rescue response and defend against the full spectrum of threats, including the alarming proliferation of weaponized unmanned aircraft systems. Last year, this Command deployed or put forces on alert over 20 times, and with unrest on the rise in West Africa, the demand for crisis response will also trend upwards.

USAFRICOM works in concert with the U.S. State Department to facilitate direct training through Security Forces Assistance Brigades, the State Partnership Program (SPP) and health programs. All these efforts show high return for the investment in Africa and USAFRICOM stands ready to scale them up. This training works to modernize and professionalize African security forces that are desperately under-resourced. All USAFRICOM training for partner forces emphasizes respect for human rights, law of armed conflict, avoidance of civilian casualties, and civilian control of the military. Our commitment to African forces will span decades. The United States National Guard Bureau's SPP connects Americans and Africans in ways that create long-term ties of mutual benefit. Africa is fertile ground for SPP growth; we're seeing strong demand from both African partners and United States States. Sixteen partner nations currently pair with 14 State National Guards. Most recently, New Hampshire joined forces with Cabo Verde last year, and more partnership are in the works. These partnerships in Africa will yield long-term benefits in advancing our shared security and prosperity.

Institution-building is central to the USAFRICOM contribution to our partners' defense. Through various engagement channels we assist African security forces and defense ministries establish and strengthen processes for logistics, financial reporting, and communications. Not only does this capacity building help our partners secure their borders, coastlines and vulnerable populations, it also enables many to take on the role of regional security anchors, providing security assistance to other partners and peacekeeping operations on the continent. USAFRICOM invests in a growing cadre of states that leverage United States military training to, in turn, train fellow African partners, multiplying USAFRICOM's efforts. USAFRICOM is doing this through multilateral exercises and USAFRICOM's Africa Distribution Network Forum, which enables the community of African and external partners to pool airlift logistics capabilities, creating financial efficiencies in supplying missions across a continent that is over three times the land mass of the continental United States.

This Command is not alone. Our international partners—including Brazil, the European Union, France, Germany, Japan, South Korea, and the United Nations—bolster African partner forces maritime awareness and enforcement capabilities. African sea lines of communication are the highway of world commerce, but illicit income from IUU fishing, piracy, arms smuggling, wildlife trafficking, and human trafficking bankroll VEOs and enable narcotics flows through Africa to Europe and the Americas.

Our partners in the Gulf of Guinea and the Horn of Africa need robust and interoperable maritime security infrastructure to protect their borders and marine resources. USAFRICOM engages and trains with coastal forces by leveraging two

naval assets: the USS Hershel "Woody" Williams and the USNS Trenton. The U.S. Coast Guard (USCG) augments these vessels with temporary cutter deployments; the USCG Cutter Mohawk made numerous port calls and patrols last year, and this year USCG Cutter Spencer flew Old Glory off Africa's West Coast. Our naval and coast guard ships in the USAFRICOM AOR reinforce America's friendship with littoral countries, bolster food security, and deter crime, including PRC-linked IUU fishing.

USAFRICOM's challenges go beyond the African continent. Our headquarters staff stretches over two overseas locations: Kelley Barracks, Germany and RAF Molesworth, United Kingdom. USAFRICOM's component commands base in multiple European countries and in two enduring Forward Operating Sites in Africa: Camp Lemonnier, Djibouti, and Ascension Island. The Command also operates out of 12 other Posture Locations throughout Africa. These locations have minimal permanent United States presence, and have low-cost facilities and limited supplies for these dedicated Americans to perform critical missions and quickly respond to emergencies. With the exception of Special Operations Command-Africa, USAFRICOM's components are dual-hatted, dividing their time and assets between USAFRICOM and United States European Command (USEUCOM). USEUCOM's role in Ukraine's defense draws from the same resource pool as USAFRICOM requirements.

To expand reach, USAFRICOM relies on developing deeper partnerships; National Guard involvement through the SPP; naval assets, including USCG deployments. Most of all, USAFRICOM needs to maintain funding and training for African partners that are poised to becoming regional security drivers in their own right. These partnerships have track records of producing consistent return on investment for America's security objectives in Africa.

CONCLUSION: THREATS AND OPPORTUNITIES

USAFRICOM's priority is maximizing America's global advantage. The dangers in Africa- terrorism, strategic competitors, climate change, political conflict, and infectious disease—threaten the international community as much as they threaten our partners on the continent. These threats merge into a symbiosis that generates outcomes of violence, resource scarcity, State fragility, and unrealized economic potential. The only way to counter this toxic alliance is through the collaboration of a team of partners: sovereign African nations, the international community, and United States Government institutions. Africa remains a continent of opportunity. Its nations and peoples want freedom and democracy and a level economic playing field. These shared values underpin our ocean-crossing ties.

The ties between Africa and our Nation date back to the Founding Fathers. After the Revolution, Morocco and Tunisia were among the first countries to sign treaties of friendship and trade with the United States, and today they are Major Non-NATO Allies and critical security partners for AFRICOM. Societies on both sides of the Atlantic continue to grapple with the painful past of a vast African slave trade. USAFRICOM seeks to secure a bright future by fostering positive outcomes for Africans and Americans alike. To keep terrorists out of the Homeland, we must fight them in Africa. To compete effectively with strategic adversaries, we must do it in Africa. To protect the flanks of our neighboring Geographic Combatant Commands, we must do it in Africa. To energize the world's struggle for human rights, individual liberty, the rule of law, democratic governance, and free commerce, we must do it in Africa. In this struggle, USAFRICOM and our partners are on the job.

Chairman REED. Thank you very much, General Langley. General Kurilla, you have rightly emphasized the critical importance of leveraging allies and partners to counter threats from Iran and Iranian linked groups.

Does our posture change with respect to the new agreement between Saudi Arabia and Iran, and how will it impact our allies in the region or across the globe?

General KURILLA. Thank you, Chairman. Appreciate that question. This agreement between Iran and Saudi Arabia is the culmination really of 3 years of discussions that have been going on, but just recently by China.

I would say an agreement is not implementation. While these discussions were going on, in the last 90 days, we have interdicted

five major weapons shipments coming from Iran to Yemen, which those weapons are then used against Saudi Arabia.

One of those shipments included components of navigation systems for short range ballistic missiles. Again, I think the implementation is a completely different matter on this.

Chairman REED. Will China be held accountable by the Saudis if they cannot limit attacks against the kingdom and weapon transfers, as you described?

General KURILLA. I think that remains to be seen, Chairman. What is concerning on this is China's penetration into the region. In the national instruments of power, they already have their economic in the region, their information, their military with the increase in sales of at least 80 percent over the last 10 years in terms of their foreign military sales. Now we are seeing for the first time really their diplomatic.

Chairman REED. Thank you. General Langley, you mentioned the presence of the Wagner group in Africa and their behavior, which is contrary to any decency at all in the world.

How are we trying, through the information domain, to expose them and what they are doing, and also obviously expose the Russian Government that is supporting them and sponsoring them?

General LANGLEY. Chairman, from the mil-to-mil perspective in engagement with our partners, we do use information operations to effect and address the negative sentiment in their message, that destabilizes in countries in which they enmeshed themselves in, especially in Mali.

That is very—has been very much present, that they have this destabilizing activities. It has been—it is reinforced by the United Nation force there, illuminating and amplifying some of the atrocities that the Wagner Group is guilty of. So therein lies the whole-of-government approach.

Since I don't have mil to mil, because of sanctions at this point, but we still have a whole Government approach that can take that mantle and still be able to do information operations.

Chairman REED. Thank you. General Kurilla, when we spoke about China, we also speak about Russia.

The aid that Iran is giving to Russia now in the Ukraine fight and what would presumably be the reciprocation by the Russians in many different ways is another factor that has recently emerged.

What is your response to that? What advice can you give to us, and how can we limit this—the impact of this arrangement?

General KURILLA. Chairman, thank you for the question on that. It is very concerning any time we see adversaries working together. We do know that they have shipped hundreds of their advanced unmanned aerial vehicles to the Ukraine.

These are the same ones that have hit our servicemembers in both Iraq and in Syria. They are improving upon them based on what they are learning inside the Ukraine. I am concerned then with the support that Russia can give back.

As you know, the Iran State media announced the approval of—don't know the exact number yet what will come out of the agreement, but the Su–35 is a fourth generation plus fighter, which has a lot of our partners in the region concerned as well.

Chairman REED. What types of steps are you contemplating or we should be contemplating to try to disrupt or diminish this threat that is emerging?

General KURILLA. Chairman, I think this will take a whole-of-government approach to include all of the instruments of national power on this to be able to prevent that.

Chairman REED. With respect to the Iranian nuclear program, they have made significant steps since the termination of the JCPOA [Joint Comprehensive Plan of Action]. Is there any indication that either Russia or China would encourage them, sponsor them, or on the other hand, discourage them from moving further?

General KURILLA. Chairman, I will be able to talk about that in the classified session immediately following this.

Chairman REED. Thank you very much, General. Thank you both. Again, thank the men and women. Glad to see the Master Chief is here, so you are well supervised, General Kurilla. Thank you very much. Senator Wicker, please.

Senator WICKER. Thank you, Mr. Chairman. Let's stay with Iran, General Kurilla. You can tell us in a non-classified setting, can't you, whether the threat from Iran has grown stronger or lesser in the past 2 years.

General KURILLA. Iran's malign behavior has increased in the last 2 years, Senator.

Senator WICKER. Okay, and what do you need from the Congress of the United States to meet this threat?

General KURILLA. As we look at the threat mainly that we face is the ballistic missile and their UAV threat in the region. One of the ways that we are countering that is through regional agreements and a regional architecture.

As we go toward an integrated air and missile defense in the region, we are making progress on that. So, what we need is the continued resourcing, and I want to make sure that I have a sufficient and sustainable posture in CENTCOM so that I can accomplish the missions I have been given to make sure I can mitigate the risk. If there is one area in the world, I believe that can derail the National Defense Strategy, it is that currently the CENTCOM AOR.

Senator WICKER. The resources to help you facilitate these agreements?

General KURILLA. It is the resources, Senator.

Senator WICKER. Okay. Will—help us be specific about that. Now, after the disastrous Afghan withdrawal, the Departments assured this Committee that countering terrorist groups would still be possible over the horizon. We have only done that once. Is that correct?

General KURILLA. Senator, we—actually all kinetic—all finishes in the methodology of find, fix, and finish on counterterrorism targets are not kinetic. There is two that are non-kinetic that we disrupted and I will talk about that in setting that involved over five combatant commanders to disrupt those finishes.

Senator WICKER. Okay, so two non-kinetic and one kinetic.

General KURILLA. Right.

Senator WICKER. Do you think we should be doing more of those?

General KURILLA. It is difficult right now, as I said in my confirmation hearing. It is a difficult but not impossible. One of the

things that we are trying to do is increase our intelligence, surveillance, reconnaissance over that.

We are putting an investment into long duration, high altitude, alternative airborne ISR [intelligence, surveillance, and reconnaissance] that can go up for days and weeks, because right now I am spending 80 percent of my time transiting to the region to be able to collect over the top.

Senator WICKER. Okay. General Langley, tell us what China is doing. How far along are they on their base in Djibouti? Where do you think they might likely be making their strongest effort for a military base in West Africa?

General LANGLEY. Thank you, Senator, for that question. China's aspirations, especially at Doraleh, they are coming across a thinly veiled front that is all for goodwill. But we know that they are establishing, especially with the destroyer that visited Doraleh last March, shows that they have indications that——

Senator WICKER. Tell us where that is.

General LANGLEY. Duraleh is in Djibouti. I am sorry. Ranking Member, their aspirations are pretty clear. That is a strategic line of communication, especially as it embarks upon the Suez Canal and Bab-el-Mandeb, if they wanted to fully militarize that. Duraleh is of concern.

They are saying it is all about goodwill, but I think the other. They do have other aspirations, and in closed session, Ranking Member, I know that I can be able to lay that out where in West Africa is their next military base aspiration.

Senator WICKER. Okay, but tell us then if you can, and I think you can, how that would affect our security as Americans, and particularly to North America, if the Chinese are able to establish a base in West Africa.

General LANGLEY. It would put us—it would change the whole calculus of the geostrategic global campaign plans of protecting the Homeland. It would shorten—if they build any capacity on the West Coast, geostrategically it will put them at an advantage. Right now, we have the decisive advantage. They cannot—we can't let them have a base on the West Coast because it would change the dynamics.

Senator WICKER. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much. Thank you, Senator Wicker. Senator Shaheen, please.

Senator SHAHEEN. Thank you, Generals Kurilla, Langley, thank you both for being here this morning. General Kurilla, I want to pick up on a conversation that we had when we met a couple of weeks ago, and I appreciated that opportunity.

One of the things we talked about was the situation in the ISIS detainee camps in Syria. Can you give us an update on what the current conditions are and what you are doing in CENTCOM to help destabilize what is happening there, and what you need from us in order for us to be more successful there?

General KURILLA. Thanks, Senator. I have been to Syria six times. I was in Syria last week. As we look at ISIS in Syria, it has three categories. The first category is ISIS at large. That is the ones that we are fighting right now with our Syrian Democratic

partners, and I think we have contained ISIS, but the ideology is uncontained and unconstrained.

The second category is what you may refer to as the ISIS in detention. I refer to them as an ISIS army in detention. There are over 10,000 ISIS detainees spread across 26 different prisons in Northeast Syria. I went inside the Hasaka prison last Thursday.

That is the same prison that January 2022, last year, there was 4,400 ISIS detainees in there. They broke out. Over 1,000 made it outside the walls. In a 10-day battle that involved both our United States forces, air power, and Syrian democratic forces, over 400 were killed. Some escaped, the exact number unknown, and then the rest were captured.

But 121 of our SDF [Syria Democratic Forces] partners were killed in that prison breakout. What we are doing specifically about the detention facilities is we are trying to consolidate them now. This body provided funding for us to build another prison, which we think can consolidate the vast majority of the rest of the prisoners.

We also train the guards that are on these detention facilities and the CTF [counter-terrorist financing] funds help facilitate that. The last category is the potential next generation of ISIS. I had an opportunity to go into the Al Roj camp and into Al Hol inside and talk to residents. I talked to women from 16 different countries last week inside the camp to include the woman from Alabama.

I also went inside the Al Hol camp and I met three teenagers who had been there for 6 years, and remember, ISIS really didn't come to Al Hol until about late 2018. These were people that went there to escape ISIS and escape the regime.

With the fall of ISIS's territorial caliph in really March 2019, it swelled from about 35,000 to 70,000, and currently right now there is about 51,000 inside of Al Hol. Over 30,000 of them are children, and they are at risk from radicalization.

About 50 percent of the camp holds or espouses some form of ideology, according to the camp guards, the camp administrators, and the residents, and the other half are trying to escape ISIS.

Really, the only role there is that we can do, is there is no military solution, is the repatriation, rehabilitation, and reintegration back into the society.

Senator SHAHEEN. Are we having any luck getting some of the countries to repatriate those detainees who came from their countries?

General KURILLA. Absolutely, ma'am. We have actually had more success in the first few months of this year than the last 6 months of last year. About half of those IDPs [internally displaced people] that are in Al Hol are from Iraq.

We work with our Iraqi security partners in the Iraqi Government to repatriate them. They have done 1,200 in the last 2 months. At that pace, it would be about 4 years to get everybody back. So, we are working with them on how they can increase the throughput.

But right now, it is their ability to go through the Jeddah 1 camp, which is South of Mosul, as they bring them back. What they don't want to do is just move one IDP camp to another, so they are working through that process.

Senator SHAHEEN. Thank you. Well, I hope you will let this Committee know if there are additional resources or other supports that you need. General Langley, the map of Africa shows where the Wagner Group is operating, but it doesn't speak to the success or not that they are having with recruitment.

Can you speak to that, and maybe Senator Reed asked about the success that information or disinformation efforts that they have underway. Can you also talk about what we are doing to respond to that in a little more detail?

General LANGLEY. Senator, first and foremost, I mean, talk about Wagners intentions. They are all about power and profit. If they are going to give a false offering of security, it is only for the elites in a particular country.

We are seeing that in Mali. Wagner failed in Mozambique. They tried to entrench upon it, and that government, albeit developing, did not like that false value proposition. They have continuing actions in Dakar, a Central African Republic. In that vein, I think Central African Republic is kind of getting fed up.

So, there is no recruiting going on. It is all about profit, making their way to gold mines, diamond mines, or rare earth mineral mines. That is extension of the Russian Federation.

Senator SHAHEEN. Thank you. I will submit a question for the record on the disinformation efforts.

Chairman REED. Thank you, Senator Shaheen. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. Thank you both for being here today and thank you for your service to our country. General Kurilla, how long would it take ISIS-K to generate the capability to conduct external operations?

General KURILLA. Specifically, ISIS-Khorasan, Senator? It is my Commander's estimate that they can do an external operation against U.S. or Western interests abroad in under 6 months with little to no warning. In the classified session, I will talk about why I make that assessment. It is much harder for them to be able to do that against the Homeland.

Senator FISCHER. Senator Wicker talked to you quite a bit about over the horizon and our capabilities that we have there, or don't have there in Afghanistan. Do you think that you need any additional resources in our upcoming budget to increase or improve those capabilities?

General KURILLA. We have been funded, like I said, for some alternative airborne ISR that will help us get longer duration. But it is not just about ISR. We are also increasing our other intelligence efforts to get penetration into the networks that we want.

A part that goes unseen a lot of times is the analytical back side. These are the analysts, the linguists, and the production capability that help us make the decisions. There has been a significant decrease shifted from the NDS [National Defense Strategy] to go against higher priority targets, but I would like to see to make sure that we don't lose so much of that capability that we cannot see the threat.

Senator FISCHER. Because knowing that threat is obviously very important, as you have stated, for the existence that we still see in Afghanistan of the terrorist groups that are there.

General KURILLA. Correct, ma'am.

Senator FISCHER. Thank you. Have you requested authority to conduct any strikes in Afghanistan against the ISIS-K targets that have been identified?

General KURILLA. In a classified study, ma'am, I can talk about where we are in terms of the find, fix, and finish on them.

Senator FISCHER. Okay. Do you still have a need for munitions that can hit hard in deeply buried targets?

General KURILLA. I do, ma'am.

Senator FISCHER. Do you have specific requests in that area?

General KURILLA. That was in my unfunded priority list (UPL) last year.

Senator FISCHER. Do you plan to include it this year?

General KURILLA. It depends on the full funding, ma'am.

Senator FISCHER. Would it be your recommendation and your best military advice to this Committee that it would be—that it should be included?

General KURILLA. We did receive funding in my fiscal year 2023 to include the additional procurement of the—its the Massive Automated Ordinance Penetrator, which goes against hardened, deeply buried targets.

Senator FISCHER. Which are growing in number with our adversaries. Is that correct?

General KURILLA. That is correct, ma'am.

Senator FISCHER. What is your assessment of Iran and Saudi Arabia reestablishing diplomatic ties? You talked about that a little bit. But how does that affect our mil-to-mil relationships that we have with Saudi Arabia?

General KURILLA. We have a very strong mil-to-mil relationship with Saudi Arabia. I think this agreement is, again, is the culmination of 3 years of talks between them. The more concerning part is that China is the one that was mediating this.

Senator FISCHER. As we look at Iran and their proxies throughout CENTCOM AOR, do they continue to pose a significant threat to our partners and to our own forces in the region? What more can be done to deter Iran from those malign activities?

General KURILLA. We see Iran as the largest malign actor in the region. Less than 60 hours ago, we had rockets attacked from Iranian aligned militia group against one of our bases in Syria.

Senator FISCHER. What more can be done to deter them?

General KURILLA. One of the things that we are doing is increasing our defensive posture in these areas. I want to thank the services for providing a capability. So particularly the Army has given us some tremendous capability in terms of counter-UAS and counter rocket mortar at our bases.

Senator FISCHER. With Syria and Iraq, what do you assess to be the situation in Syria right now? Have you seen any change in Russia's presence in Syria, or has that remained pretty steady since the invasion of Ukraine?

General KURILLA. Senator, Syria is very important to Russia. They have taken very little out of Russia since their invasion. They have taken a small number of forces, some munitions, but generally has stayed about the same. What we are seeing, though, is

an increase recently in the unprofessional and unsafe behavior of the Russian air force in the region.

Senator FISCHER. Can you give us an example of that here?

General KURILLA. I can. They fly over our bases with ground attack aircraft with weapons on them in an attempt to try and be provocative. But really, it is unsafe, unprofessional, not what we expect of a professional air force. They want to try and renegotiate the deconfliction protocols that they violate every day.

Senator FISCHER. This is not new Russian behavior, is it, sir? Especially with regard to the drone incident that we recently have seen.

General KURILLA. It is not new, but we have seen a significant spike since about March 1, in Syria.

Senator FISCHER. Okay. Thank you.

General KURILLA. Thank you, ma'am.

Chairman REED. Thank you, Senator Fischer. Senator Gillibrand, please.

Senator GILLIBRAND. Thank you, Mr. Chairman. I would like to continue Senator Fisher's line of questions with regard to Iran. If this was a 3 year of talks, how recent was China engaged in those talks?

General KURILLA. Ma'am, I understand that it is in the last several months.

Senator GILLIBRAND. Well, obviously, that raises serious concerns, because I just took—I just joined a delegation to visit the Abraham Accords countries, and the interest of those countries, UAE [United Arab Emirates], Bahrain, Morocco and Israel, is to broaden and strengthen the Abraham Accords, and they were hopeful that they could engage Saudi Arabia in that context.

This seems to me that that would make that extremely problematic, because if China is involved, it would be very difficult to have the kind of technology shared in the Abraham Accords if they are now in alliance with China.

Second, if they are in an alliance with Iran, the whole point of the Abraham Accords is to counter Iran's malign threats. So, does this make the possibility of extending or expanding the Abraham Accords impossible? What do you recommend that this Committee do to focus on how we create more regional alliances?

General KURILLA. Ma'am, I believe this is a—the talks about opening diplomatic relations so much as this is not an alliance between Saudi Arabia and Iran. They have had diplomatic relations in the past while they were still shooting at each other in the past.

This is really about opening embassies and opening diplomatic relations when they closed the embassies back in 2016. What this does do, though, is that with China, the most concerning part about this is that China is the one brokering this because it shows that they are bringing the diplomatic aspect of their national instruments of power.

What we see with China on the military side is that they have a significant increase in bringing their equipment into the region and their foreign military sales. If there is Chinese equipment there, we cannot integrate it with United States equipment.

As we try and build the regional partnerships, and we have been there for the last 75 years, when we try and build these regional

partnerships. You want to be able to integrate with your partner. If there is Chinese equipment there, we are not going to be able to integrate it.

Senator GILLIBRAND. Understood. Can you, in this setting, give us more detail on where China has integrated its equipment in the region?

General KURILLA. China has sold equipment all over the region inside the Middle East. I can take that for the record and give you a specific followup for that, ma'am.

Senator GILLIBRAND. Do you have a focused plan on what to do about that?

General KURILLA. One of this is to increase our partnership with these elements. Again, this is a race to integrate before China can penetrate.

Senator GILLIBRAND. Would you recommend expanding and deepening the Abraham Accords?

General KURILLA. I would, ma'am.

Senator GILLIBRAND. Thank you. With regard to Afghanistan, I would like an update on what we are doing to get our partners out and whether those operations are continuing, and what are the barriers that you are facing currently.

General KURILLA. Ma'am, the getting the partners out through special immigrant visas. That is a State Department run program. But from the United States, from the military side, we are responsible for bringing them into a place called Camp As Sayliyah in Qatar.

We currently have about 2,600 there right now. We provide the in processing, the security, and the basic life support. The State Department runs the actual immigrant visa side. They are averaging about 60 days there before they are moved on.

In my understanding right now in the pipeline is about 85,000 special immigrant visas, but I would defer to the State Department on the exact number.

Senator GILLIBRAND. Again, with regard to Iran, we know that Russia and Iran have escalated their military cooperation over the last year. How is CENTCOM coordinating with EUCOM [European Command] to ensure that our forces are able to respond to threats that touch both areas of responsibilities?

General KURILLA. I talked to Chris Cavoli often, the EUCOM Commander in the SACEUR [Supreme Allied Commander, Europe]. We have done several operations that I can talk about in a classified setting to create additional dilemmas for Russia.

Senator GILLIBRAND. My last question for you, sir, is you activated the U.S. Space Force Central, which is responsible for space operations within the CENTCOM area of responsibility. How are you incorporating the space domain into planning and training so that your subordinate commanders can effectively integrate space into their operations?

General KURILLA. We think this is a very big positive of actually having a component of Space Force. Space has always played a large role in the CENTCOM AOR, but now I have a Commander that sits at the table that is able to then integrate more effectively because he has a seat at the table to be able to do that.

We actually just finished a large with all the Combatant Commands in the region to talk about the lessons we have learned over the last decade of doing space operations in CENTCOM.

Senator GILLIBRAND. Thank you. General Langley, despite the size and growing importance of the continent, the 21st century wars in CENTCOM, the Russian invasion of Ukraine, and the strategic competition with China have dominated much of our focus on this Committee. What might we be missing about Africa that you think this Committee should take note of in the coming years?

General LANGLEY. Senator, I would say just aspirations of China. The aspirations of China is threefold, one from a geopolitical. They are trying to change the international norms and they are using some of the African countries within the U.N. construct, whether it be General Assembly or the Security Council, trying to affect votes to change those international norms and the international system writ large.

Then there is the geostrategic operation. Their aspiration for military bases on the continent of Africa. Just talked to my African partners, they don't want to be militarized in a strategic sense.

The last piece, Senator, is geoeconomic. Our future economy is dependent upon a number of rare earth minerals. Some of our clean energy technologies depend upon the rare earth minerals. About 30 to 40 percent of those minerals are on the continent of Africa. That is forward thinking by the PRC.

They are trying to harvest and leverage upon that through shaky deals, engaging with some of these countries so they can corner a market, if you will. That is what I am concerned about, Senator. Thank you.

Chairman REED. Thank you, Senator Gillibrand. Senator Cotton, please.

Senator COTTON. Welcome, gentlemen. General Kurilla, I want to return to your answer to Senator Fischer about the threat of terrorist attacks originating from Afghanistan. If I heard you right, you said you believe that such attacks could occur in a mere 6 months out of Afghanistan against American citizens or allies or partners in Eurasia. Is that right?

General KURILLA. Senator, I said abroad, which I would also include Europe in that.

Senator COTTON. Eurasia. But you said less than—more than that against the American Homeland.

General KURILLA. It would be harder for them to do that against the American Homeland.

Senator COTTON. If you assessed 6 months against Europe or Asia, what would you assess would be the timeline against the Homeland?

General KURILLA. I think it is hard to put a timeline on that. But again, I assess that they could in as little as 6 months with little to no warning, and I will talk about that in the closed session as to why assess that.

Senator COTTON. How likely do you think a terrorist attack on the United States or one of our allies is originating from Afghanistan?

General KURILLA. I think it is a higher probability overseas than it is in the Homeland.

Senator COTTON. When you add up all the troops you have in your area-of-responsibility and American citizens who are there for business or tourism or pilgrimages on any given day, what are we talking about? Probably hundreds of thousands, right?

General KURILLA. At least.

Senator COTTON. Hundreds of thousands within range of a terrorist attack, in your assessment, in a mere 6 months from Afghanistan. Okay, I want to turn to Iran.

Senator WICKER. I don't think we heard the answer.

General KURILLA. Yes, I do assess it.

Senator COTTON. I want to turn to Iran. You said in your written statement they can produce sufficient fissile material for a nuclear weapon in less than 14 days. You also say that deterring Iran is arguably more urgent now than any time in CENTCOM's history due to one, their cutting-edge missile and UAV capability. Two, their uranium enrichment program. That is correct?

General KURILLA. That is correct, Senator.

Senator COTTON. Yet you also say Iran is undeterred from its malign activities. So that is not good. That it is more urgent to deter them than in any time in Central Command's history, but they are undeterred. Why is Iran undeterred right now?

General KURILLA. Currently, right now we see them, that their malign activity is increasing. We see them again in the last 90 days. We have some of the highest numbers of our advanced conventional weapons and munitions that we have seen going from Iran to Yemen.

We see their attacks on our United States forces in Iraq and Syria increasing, and we see the threat streams that I can talk about in a higher classification.

Senator COTTON. I mean, those are more the results of the lack of deterrence against Iran. Do they feel undeterred because they feel safe that neither the United States or our partners are going to threaten anything they hold dear?

General KURILLA. I can't say the exact reason why they feel that, but I know right now when I look at them, I believe they are undeterred.

Senator COTTON. I mean, there is a history—you are right throughout your statement. There is a history of Iran being deterred by the credible threat of military force or actual military force. That is right, isn't it?

General KURILLA. I think that deterrence is always temporal, so you can deter for a period of time and then it will wane. I do believe the Suleimani strike was a deterrence.

Senator COTTON. We can go back much further than that. Iran waged war with Iraq for 8 years and Ronald Reagan sunk half their navy in the spring of 1988, and surprisingly, that war ended just a few months later.

Iran also stopped its enrichment program in 2003, after the United States had invaded and toppled governments on both its East and its Western border. Then, as you say, they took only very tentative steps toward higher enrichment in 2019.

After we killed Kassam Soleimani, they did nothing at all for most of 2020 is that right?

General KURILLA. They—it was a higher level of deterrence after that.

Senator COTTON. Last week on the Intelligence Committee, we had our annual worldwide threats briefing and the director of National Intelligence cited the killing of Mohsen Fakhrizadeh, a notorious Iranian nuclear scientist, in November 2020, as the reason Iran accelerated its enrichment program. Do you agree with that assessment?

General KURILLA. Senator, I think any talk of the Iran nuclear program would be best in a classified setting.

Senator COTTON. I pointed out there is also something that happened in November 2020 besides the killing of Mohseh Fakhrizadeh that might have emboldened Iran, and that was the election of Joe Biden that gave the Iranians confidence that they were no longer going to be held militarily at risk.

Speaking of that timeframe, I think it was December 2020, didn't we face threats to our personnel in Iraq from militias and the Former President tweeted what he called some friendly health advice to the Ayatollahs that if a single American was harmed in Iraq, he would hold them responsible?

General KURILLA. I am not familiar with that specific tweet.

Senator COTTON. That did happen. It is okay. There are a lot of them. You don't have to be familiar with every one of them. But I also don't think those attacks happened. So, I think what we can learn here whether it's from Kassim Soleimani or the tanker wars or anything else, that the only thing that will deter Iran is the credible threat of military force.

One final question, I know you have added Israel to your AOR, and you right in your statement that you readily partner today with Arab militaries and the Israel Defense Force alike. In fact, the inclusion of Israel presents many collaborative and constructive security opportunities.

One of the opportunities I see is having Israeli Air Force personnel training alongside American personnel on KC–46 tankers, which we expect to be providing them in the future, and that is training that we can provide them so they will be ready to operate those aircraft as soon as they get them.

Do you think that would be what you call a collaborative and constructive opportunity between the United States and Israel?

General KURILLA. I think when they get closer to getting their aircraft, starting to train those pilots so they can retain that training and go right into the execution of operating them.

Senator COTTON. Thank you.

Chairman REED. Thank you, Senator Cotton. Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. I would like to turn to another part of your missions. In both Central Command and in Africa Command, United States diplomatic efforts are—diplomatic efforts are at the forefront of your missions. The military-to-military engagement is one very important aspect of your responsibilities, but your organizations are just one part of a whole-of-government approach.

General Langley, I note your team's work in implementing the 2017 Women Peace and Security Act. Amid the many extremist

threats in both of your areas of operations, it is more important than ever, as far as I am concerned, to work for equality for women and girls around the world. Generals, how are your commands supporting and protecting women and girls in your AOR?

General LANGLEY. Senator, thanks for that question. As Women's Peace and Security Act passed in 2017, I have seen from afar what AFRICOM has started to do. We didn't wait for the plan or the construct over years.

CENTCOM—excuse me, AFRICOM got after it. I saw this because I was at CENTCOM and I was at the J5, and we got out there as well at that time. But how far that CENTCOM and AFRICOM has gone in the vein of the intent of women's peace and security—Senator, I would like to just make note, we have it—we have been to our Africa campaign plan to effect in working with the Department of Defense to finish out the construct.

But we just didn't—we didn't wait for the word to go. Just for your information, Senator, across the Horn of Africa, our JTF [joint task force], we have a Major General Shawley, and she is affected that in every exercise that we do all the way down from Djibouti down to Kenya.

Even her, Valerie Jackson, Brigadier General, the United States + Corps, as they work with other countries, they get it. President Assad Sheik Mohammed sees a representation of our talent base in our military and in our U.S. military, that 50 percent of the talent base are women, and they are showing that it is effective.

It is—and for partners on the African continent, they realize that. So, it is changing culture.

Senator HIRONO. General, I think we have to be very intentional about the support we provide to women and girls, because wherever there is instability, and certainly both of your AORs are characterized by what I would call instability, women and girls are the ones who bear the brunt of the challenges. General Langley, would you like to add to what General Kurilla said? Because you are doing a, I would say, a pretty good job.

General KURILLA. Ma'am I think——

Senator HIRONO. Please.

General KURILLA. Ma'am, I think you are referring to me on that. So, the—I value the program.

Senator HIRONO. I am sorry. Yes, I was referring to you, General Langley. Go ahead.

General LANGLEY. Yes, Senator. In execution, as we work with even in the West in our exercises, we ensure that we do represent and within the spirit and a letter of intent, of the Act of WPS [women, peace, and security], that we—that our partners ensure that their culture is changing and women and girls get meaningful opportunities within the overall governance and society.

That is why I brought up Major General Shawley as she makes her travels across. They see that America gets it and they start to get it as well. It is very compelling, Senator.

Senator HIRONO. Thank you. General Langley, further question for you. You noted in your testimony the climate as a challenge in Africa. Can you describe the destabilizing impact of climate change on African nations and what we can do to counter this impact, or these impacts?

General LANGLEY. Absolutely, Senator. That is a driver of instability, especially with irregular patterns across the Sahel. We are seeing that. Across a whole-of-government approach as I work with USAID, I would say just more flexibility, trying to predict where the effects are going to go.

We need to stay ahead of this, and that is why Administrator power is action for non-humanitarian actions, so she can move resources, so we can address the effects of climate change, because it is hard to predict. Even the USAID being an evidence-based organization can't predict where the next, 2 years out, where the next atrocity is going to happen as a result of climate change.

There needs to be flexibility across State Department and USAID, then backed up by military, by building a capability, adaptability within our partners and our military so they can go out and assist the affected people as a result of climate change.

Senator HIRONO. Thank you. Mr. Chairman, I am particularly interested in what we are doing to counter climate change impacts in Africa, because I agree that this is a very destabilizing situation. So, I will continue to pursue inquiries along these lines. Thank you.

Chairman REED. Thank you, Senator Hirono. Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman. Gentlemen, first of all, thank you both for your service to our country and to your teams as well. A question for both of you.

With regard to our country's refocus with regard to the threat that we see from both the other major powers in the world, specifically China, Russia to some degree as well, what impact has that had in terms of the discussion and the clear evidence that we have turned from literally more than 20 years of fighting terrorism to where we are now focusing on this major power competition.

What is the impact in terms of the countries within your AORs, and how are they perceiving the United States interest in your regions of the world? General Kurilla.

General KURILLA. Senator, we are concerned. Again, as I said, this is about a race between integration with our partners and Chinese penetration into the region. There has been a significant increase both in their economic $460 billion in infrastructure development in the last 5 years, $2.6 trillion in trade.

Really, we see their military capability where they are trying to sell military equipment and foreign military sales. In the last 10 years, we have seen a 30 percent decline in the United States, but an 80 percent increase in Chinese on foreign military sales. When they buy a Chinese system, we cannot integrate it into our systems.

Senator ROUNDS. General Langley.

General LANGLEY. Senator, as Eric just alluded to, we had the same effects on the continent as well, as far as investments by—from a military standpoint, both the PRC and Russia. How we partner—that really segways into the main issue as far as how slow our 333 program of our arm, train, and equip our partners. So, they do know that they have choices.

Now, as we saw down in South Africa, they want to show the world that they have choices and that is why they had Mosi II exercise. But up in our partners in the Gulf of Guinea region, they

are pressurized by all kinds of—by extremist organizations threatening their borders.

They come in, they asked, and they said, hey, General Langley, we don't want your boots on the ground. We want your equipment. We need help so we can put up a good fight and take care of these violent extremist organization across all the affiliates.

But as slow as our processes are, we have 333 and also 332, our other title 10 authorities is moving to slow, Senator. Just moving too slow, and they make the wrong decisions.

Senator ROUNDS. Let's dive into that just a little bit more for both of you. The foreign military sales, or FMS, is a critical part of our foreign policy. It requires not just the availability but also the approval process. Could each of you share with me your opinion about the approval process and whether or not there needs to be a more expedited process in order to allow us to continue with FMS? General Kurilla.

General KURILLA. Senator, they say about 95 percent of all FMS goes according to plan. Five percent doesn't, 80 percent of those 5 percent are in the CENTCOM AOR. The challenge we have is the time it takes to get equipment to our partners.

There is the DOD, Department of State, Congress, and industry all have a role in that. But what China does is they come in, they open their entire catalog, they give them express shipping, they give them no end user agreement, and they give them financing, which at the end of the day can end up being some type of predatory financing.

But they are much faster to need, and our security partners have real security needs and we are losing our ability to provide our equipment so that it can integrate into the region.

Senator ROUNDS. They would prefer to have our equipment, wouldn't they?

General KURILLA. Absolutely. When you buy U.S. equipment, you buy—you get the quality, you get the training, the sustainment, the upgrades, but you are also buying into the bureaucracy, right now.

Senator ROUNDS. They just can't get it because of our bureaucratic processes is delaying the delivery of that product. If it is available, it is still a bureaucratic mess to get it there.

General KURILLA. There is some that goes very fast and some that goes very, very slow.

Senator ROUNDS. General Langley.

General LANGLEY. Absolutely, Senator. We see that just all along, and I fully concur with Eric about our training and the capacity is more of a quality. But the sense of urgency, especially in West Africa, across the Sahel, across Ghana, Cote d'Ivoire and Benin, and Togo, they need equipment. They need weapons now.

So even with our significant security cooperation initiatives, that process is not any faster. It is designed to be faster, so they make choices, and they make the wrong choices in siding with—going with either PRC or Russia for especially lethal aid.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rounds. Senator Warren, please.

Senator WARREN. Thank you, Mr. Chairman. The Biden administration announced last week that it is requesting $842 billion for the Pentagon budget. It is one of the largest budget requests ever.

Despite this already massive number, every year DOD pushes to get even more money by using unfunded priority lists or what I call wish lists that don't go through the other budgeting screens. The services and Combatant Commands ask Congress for billions more in funding for programs from these lists.

Other Federal agencies have to balance their must haves and their nice to haves, but DOD doesn't. Instead, it games the system by submitting a second list of items that they want so that their budget can grow even bigger. I know that there are colleagues on both sides of the aisle who are concerned about this and want to see this practice stop.

Last year, both your predecessors at AFRICOM and CENTCOM submitted these wish lists. So, what I am asking today is about whether you plan to do the same. General Langley, AFRICOM requested an additional $353.6 million in unfunded priorities last year.

In its submission, AFRICOM argued that if some of these programs weren't funded, it would result in, "unacceptable risk." So, my question is, this year will AFRICOM be putting all of its priority projects, if it is that important, if it is putting us at unacceptable risk, will you put that into your base budget request?

General LANGLEY. Senator, and just be transparent, I will be submitting an unfunded priority list and here is why. Because of the emerging threats. When President Biden directed us back in last May to return to our persistent presence in Somalia, and I took command a few months after that.

I asked, being a former programmer, I said, okay, what is the fully burdened cost? I need to communicate to Congress what the fully burdened costs. I need to communicate to the Department first.

I did that. I did that after budget submittal to—from the services to the Department. So that emerging cost was informed by the risk that we have——

Senator WARREN. So, you are telling me that this request, the ink is not dry on the budget request from Congress and from the President, and you are already saying that you know that it is not enough.

I want to remind you about emerging threats. DOD already has transfer and reprogramming authorities to deal with emerging threats. You have the ability to come back to Congress if you can justify an emerging threat.

We have a panel looking at whether or not there are more changes that are needed. But these unfunded priority lists are just another way to game the system. If it is a priority to cover something like this, then I think you should be covering it.

Are you telling me that the only things that will be on your unfunded priority list are things you couldn't have known about when you submitted your budget?

General LANGLEY. Senator I—even my predecessor also put the other piece of that cost on there on ISR. We never had enough.

Senator WARREN. I am not hearing a yes or no. Are you telling me that your unfunded budget priority list will have nothing on it except things that you could not have known about when you submitted your budget?

General LANGLEY. There is a persistent threat that we have to account for. On that, on the list it will include that.

Senator WARREN. That is what your budget is for, accounting for the persistent threat. Let me ask General Kurilla the same. Last year, CENTCOM submitted a request for $35 million in its unfunded priority list. Are you planning to submit a wish list again this year?

General KURILLA. Senator, I am. But on last year's, I am the one who signed last year. That was for the Massive Ordnance Penetrator for heavy, deeply buried targets. I do not have procurement dollars in my baseline budget, that is why I requested it.

Senator WARREN. What you are really telling me is that this unfunded priority list is just a way to say I need a bigger base budget.

General KURILLA. I don't have that color of money, Senator, to ask to request that, but what I what I do as a commander is I mitigate risk and I go through my priorities and the missions I have, and then when I have any risk left over, by the law, I will submit per the UPL.

Senator WARREN. You know, look, I appreciate this—you all know I have raised this issue before. If we are going to have a budget, we ought to have a budget. There is no reason that DOD shouldn't be able to work within the budgeting process like every other part of Government.

I am out of time on this, but I am going to be submitting more questions for the record, Mr. Chairman, on what these commands are doing to prevent civilian harm. DOD is on the right path, but I remain concerned about whether or not we are getting accurate and honest reporting. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Warren. Senator Mullin, please.

Senator MULLIN. Thank you, Mr. Chairman. Thank you both for being here. General Kurilla, I just want to personally tell you how much I appreciate your service.

Upon reading more about you, I was even more impressed. Any of us that have been in situations like you were in Mosul. Being able to keep your head in the fight after being shot three times and still be able to direct fire, I commend you for that.

That is while it should be common, everyone in front of you or, and behind you knows that is not always common. So, thank you for doing that. I want to talk about Afghanistan a little bit. The American withdrawal from Kabul in 2021, as you know, was a complete disaster. It brought in systematic failures from the top down across multiple agencies. But it is not enough to just say this was a disaster and move on.

Lives were lost and our posture on the world stage has been forever changed. As you reach 1 year in your current position, can you explain what you have learned in the aftermath of the Afghanistan withdrawal and how we can prevent these types of failures moving forward?

General KURILLA. Senator, just for clarity, specifically about the withdrawal or overall?

Senator MULLIN. The lessons we learned from the withdrawal, and how we can prevent this from happening again, and how this has changed your position.

General KURILLA. In terms of the actual withdrawal, one of the top lessons we learned is the importance of partners' access, basing, and overflight. We would not have been able to execute the actual execution of the withdrawal without all of our partners that we have in the Middle East——

Senator MULLIN. I think executing would be a hard word to say.

General KURILLA. It would not have been possible, at the scale at which we did it, without our partners who provided the access, basing, and overflight. I think one of the other big lessons learned initially, it was just the mission was given to CENTCOM. It became a five Combatant Command mission, and then also with our partners, bringing them all into that planning session.

Senator MULLIN. Do you think people should be held accountable from that withdrawal?

General KURILLA. I think anybody should be held accountable if there is a failure in something.

Senator MULLIN. As you know, there was a tit-for-tat going on between a couple of people during that whole situation. Gerald Mackenzie, General Donoghue. I found myself caught in the middle of that as we were trying to get—out with the team that I was part of. At the day we did end up getting over 300 Americans out. But it wasn't from the assistance of our Government.

In fact, I found that it was easier to work for the Taliban because I knew the price, I was going to have to pay for each one, than it was to get them out dealing with, unfortunately, us. In fact, Ambassador Pommersheim that was over Tajikistan literally told me, Mr. Mullin, I was told not to assist you or your group in any way. Unfortunately, it cost the life of a 3-year-old young girl.

At the same time, I see no one, not a single person held accountable. In fact, General Donahue is now over 18th Airborne. The irony of that is he is looking over Europe now and deterrence in Europe. General Mackenzie retired. No one in the State Department has been held accountable. What does that say to our partners?

Our partners that lost lives. I was with His Highness in UAE and he was even upset about it. He said that if America is willing to walk away from the billions of dollars that they spent in Afghanistan, what does that say about our region?

He went on to say that I fought, him, his Royal Highness fought in Afghanistan, his two sons fought in Afghanistan, and every single soldier that they lost, he visited their house personally. Yet we pulled out, loss of lives of—that didn't have to be lost. Not to mention our 13 soldiers, marines. No one, not a single person, has been held accountable. You think that is right?

General KURILLA. Well, Senator, if I could. I have great respect. I have known Frank McKenzie and Chris Donahue——

Senator MULLIN. I know you do. I am very familiar with the relationship. It doesn't make any differences underneath their command, and no one was held accountable.

In fact, the only person that was chastised about it was the one Colonel that came out and chastised the withdrawal mechanism, and how dare him speak out negative about something. I get it. I get the chain of command.

I remember he broke protocol. Don't you think someone—you cannot sit here and tell me that that was successful withdrawal. Don't you think that someone should be held accountable? It was an absolute disaster.

General KURILLA. Senator, I served 5 years in Afghanistan every year from 2009 to 2014.

Senator MULLIN. I know. I am aware of it.

General KURILLA. I am vested in there.

Senator MULLIN. So am I.

General KURILLA. The actual thing. I was not part of the——

Senator MULLIN. I know.

General KURILLA.—force provider. But I would say that the execution——

Senator MULLIN. You were there before Donahue and you came back. You know it intimately. I am just asking you, once again, shouldn't someone be held accountable. If someone is below your command, and they went through this, and they had an absolute disaster like this, losing marines. Don't you think someone at that point would be held accountable?

General KURILLA. I think it is an absolute travesty that we lost those 13 marines at Abbey Gate——

Senator MULLIN. But you don't think anybody should be held accountable?

General KURILLA. I don't know if accountability has been assigned to anyone, Senator.

Senator MULLIN. Well it hasn't. I mean, I get what you are saying, but you know there hasn't. At some point, we have got to—our adversaries and our allies are both taking a look at this and we look weak.

I know you are dealing with this and we are dealing with this. It is time for someone to be held accountable. What I am looking for is your help and your assistance in moving forward. We got to right this wrong. With that, I yield back. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Mullin. This issue of accountability is a serious one, but it would take in a 20-year history of the struggle in Afghanistan. Based on the operation, NEO [noncombatant evacuation operation] was one of the most difficult operations, General Kurilla. Evacuating over 120,000 people was something I think was remarkable. Would you concur?

General KURILLA. I absolutely agree. Again, I think the execution of bringing the people out was done very effectively in terms of the numbers. We would not have been able to do the numbers.

Chairman REED. Thank you. Senator Kelly, please.

Senator KELLY. Thank you, Mr. Chairman. General Langley, good to see you again. Thank you for being here.

As you know, I recently returned from a bipartisan CODEL [Congressional Delegation] to Africa, where I had the opportunity to travel across the continent to Niger, Zambia, South Africa, Morocco, Botswana, Cote d'Ivoire, and had conversations with a lot of

experts, senior leaders on a wide variety of topics that we care about, including food security, conservation efforts, critical minerals and defense.

While we, the United States, is doing a lot of great work across the continent, I worry that it is not well known that we are providing this. At the same time, it is clear that China and Russia have a lot of influence in Africa. This concerns me a lot, and I know it does concern you, too.

I mean, Africa has strategic importance to us for a number of reasons, including that many critical minerals that our defense industry requires are mined in Africa. This is something that China knows and they have begun to exploit.

Last year, Senator Cotton and I introduced the Reshore Act to reduce our reliance on China for these critical minerals. But the important work on securing U.S. supply chains need to continue.

So, General Langley, what are you seeing in Africa with respect to China's mining activities and their infrastructure development?

General LANGLEY. First of all, Senator, thanks for that question. Thank you for going on the CODEL, as I saw in Munich when you were on your way down there. That that really matters. That shows—those are assurance actions of our Nation's leadership going on to the continent, and I thank you for that.

It pressurizes and it makes—causes hesitation in countries that are thinking about picking the PRC or even Russia as their partner of choice, because those are assurance actions that matter and resonate.

Yes, I agree, we are not telling our story well enough. That is why, when the CODEL came through, right after I took command on their way to the continent, they asked what was being done on the continent. Show us—we know what the PRC is doing, their investments. Show us what we do. That is why I provided a blue map just to show our investments. So, all that falls into collectively across our whole-of-government approach as I engage across the interagency and also State Department, USAID, how we can be able to coalesce this into actions that resonate.

Senator KELLY. General, can you talk a little bit about what China is doing and how it is impacting countries that we have had relationships with. I don't want to lead you into, but I am really interested in the negative impact that China's mining and infrastructure activities have had on the continent.

General LANGLEY. Yes, Senator. So, yes, I also provided to the foreign actor reliance on the African metal stores, and that is a very compelling story.

For economic reasons and also how they go about striking deals with some of the countries on some of our critical assets for not only for our rare earth minerals that feed into our clean energy, but also into the military side, as far as our high technical type of our arsenal and equipment.

China is trying to harvest that. So, it is their engagement with countries laid out on the slide, the last slide we have, on the critical reliance on foreign minerals. This is our new economy. This is going to be a big demand as we start to modernize our forces and China realizes that.

Those are actions they are trying to take on the illustrated countries that we have highlighted on here. So, yes, it is a strategic consequence that we need to be able to face and in turn to these countries to ensure that they have a partner of choice.

Senator KELLY. General, how do we do a better job telling our story? Because you got China in there making bad deals, building bad infrastructure. This isn't good for the African nations. You know, at the same time, the Russians have Wagner in there supporting essentially terrorism. What can we do to better tell our story on the African continent?

General LANGLEY. Senator, illuminate and amplify. I saw a good story this morning in the press about the Kenyans have gone to the street tired of some of the stuff that the PRC is doing for them, how they are taking advantage of their economy and taking advantage of their environment.

News stories like that resonate. They change ideas. I guarantee you the rest—if it happened in Kenya, is happening all across the continent of Africa, and people read these stories and it resonates. People are taking action.

Senator KELLY. Thank you, General, and Mr. Chairman, I will have a couple of questions for the record. Thank you.

Chairman REED. Thank you, Senator Kelly. Senator Scott, please.

Senator SCOTT. Thank you, Chairman. The—first, I agree with Senator Mullin that we need to have some way to hold people accountable for what happened in Afghanistan.

So, I have had a bill that would have a bipartisan committee that would investigate exactly what happened there. I want to thank the military for what they did, but the decisions that were made don't seem to make much sense.

What does the American public not know about China that if they knew would change—because I assume you spend a lot of your time thinking about what China is doing all over the world.

What does the American public need to know about China that they don't know right now that maybe would impact, would have a positive impact on impacting their ability to spend the resources to impact Africa anywhere in the world? For both of you.

General KURILLA. Senator, so I would go to what one of the chiefs of defense told me. He says, you have no idea how much they have closed the gap on you and your technology. This is someone who is buying Chinese equipment.

I also think that the American public don't have an understanding of how much they have penetrated into the Middle East in terms of their diplomatic, informational, military, and their economic instruments of national power.

Senator SCOTT. General Langley.

General LANGLEY. Senator, I agree with my good friend Eric here. China, we have enjoyed for a number of years a decisive overmatch. But that gap is closing because of China's advancements or stealing our technology, you name it. How they are—the procedures they are executing to close that gap.

That is what has me concerned, and even in the economic realm, as they are trying to harvest a lot of the critical minerals on the continent of Africa, all that falls into them being able to, from an

economic standpoint, to actually try to close the gap on that decisive overmatch as well.

Then also changing the international order and international system as they try to get some of the African countries to vote or abstain, something that is not along social norms or the right thing to do in voting, especially with mining or other things that—or humanity, or human rights, because they commit some of those atrocities back in China or some activities they do in Hong Kong.

So just changing the economic system. In those three areas is where it is most pressing of the list of the activities of the PRC.

Senator SCOTT. So, if elected leaders spend more time explaining exactly what China was doing with the end result that every American would call out China for their human rights violations or stop buying their products or not putting their devices on our phones.

Would that, you think that would impact their ability to do the bad—you know, to spend their money on the resources to counteract our military, not be able to go into places around the world and lend money at unreasonable terms?

General KURILLA. Senator, I think education is very important that people understand what China is doing.

General KURILLA. Senator, I think it will impose costs on them as well that they will have to reckon with.

Senator SCOTT. Yes. General Kurilla, what is the optimal cooperation you envision among United States, Israel, and the Arabian, or Abraham Accords members? Is it air defense? What would you hope out of that?

General KURILLA. I think there are several areas, Senator, that we can do. The Abraham Accords are also economic, and I think that is going to—the economic benefit you get in terms of job creation also is a—reduces instability and some of the Abraham Accords countries. We do have, we talked about Middle East air defense. We talked about maritime security and cyber defense as well.

Senator SCOTT. General Langley, you talked about what is happening in Kenya. On top of the public being up in arms about what is going—what China is doing, are the governments pushing back at all in Africa?

General LANGLEY. Senator, that is part of the problem, because what they invest in, and when they strike these deals, they are striking the deals for mostly autocratic or authoritarian type of governance. Those of democracies have a voice because they know that the people are watching. I think it really matters what particular country that they are pressurizing.

Senator SCOTT. General Kurilla, do you have the resources and personnel that you need to conduct your counterterrorism mission that is laid out in the National Defense Strategy?

General LANGLEY. Senator, we are currently balancing the missions that we have with the resources we get, and I am adjusting risk every day dynamically with the resources that I have. I am requesting the additional resources I would need to be able to accomplish all of my tasks.

Senator SCOTT. Is what you requested is adequate?

General LANGLEY. What I have requested is adequate, and then it is up to the allocation of those resources in accordance with the national defense priorities.

Senator SCOTT. Thank you. Thank you, Chairman.

Chairman REED. Thank you very much, Senator Scott. Senate Rosen, please.

Senator ROSEN. Thank you, Chairman Reed. Appreciate it. Appreciate you holding this hearing. I would really like to thank Generals Kurilla and Langley for your service and for being here today. I am just going to kind of get right into it about Iranian aggression, of course, top of everyone's mind.

General Kurilla, the Pentagon estimates that hundreds of American troops have been killed by Iranian backed militias in Iraq and Afghanistan, yet Iran's regime has never been held accountable for orchestrating attacks against Americans. The men and women who gave their lives are taken by these State forces. There are thousands of families there without their loved ones as a result.

So today, Iranian aligned militias, they are increasingly targeting United States installations, servicemembers in Iraq and Syria via rocket and drone attacks. On a regular basis, we know Iran, the world's leading State sponsor of terrorism, is threatening the United States and our allied interests in the Middle East and around the world again via both direct attacks and also through their support for Hezbollah and the Islamic Republic's other terrorist proxies.

So, could you discuss in this setting some specific threats the Iranian aligned militia groups pose to the United States and our coalition forces? What can we do to proactively not just defend against them, what can we do to proactively maybe push them back?

General KURILLA. Thanks, Senator, for the question. So, again, Iran is the number one malign actor in the Middle East. The latest attack we just had was less than 60 hours ago on one of our bases in Syria that we know that was Iranian aligned militia groups that conducted this attack.

We do see the threat that we face from them are from rockets, from unmanned systems that are increasingly longer range and more accurate. Just in January, we had three UAVs attack our base in on Al-Tanf garrison in Syria.

That was Iranian drones that did that. So, we do see that across the region, and also against our allies and partners, whether that was from the Houthis coming out of Yemen against Saudi Arabia and the UAE, or from Lebanese Hezbollah against Israel, or from elements coming out of Iraq and Syria against Iranian aligned militia groups.

What we can do is it is going to take a whole-of-government approach to be able to go after this problem set. It is not just a military solution.

Senator ROSEN. So, we can work with you on the resources we need to take care of that. Because I want to get to something we talked about a little bit earlier, Task Force 59 and some other interesting things we are doing, but really, Israel's transfer to CENTCOM. It is now within your area of responsibility.

It is my sincere hope that this realignment is going to potentiate even greater military cooperation between the United States and

our shared goals, as well as greater cooperation between our Arab and Israeli partners, as we see with things like the Abraham Accords coming forward.

So, I know that I am pleased to see the increasing pace of joint exercises between the United States, Israel, Arab partners. Can you tell us a little bit about the progress you have made in advancing the integration of Israel into your multilateral maritime partnerships, like the very exciting task force, the development they are doing. I was able to learn about them when I recently visited NAVCENT [Navy Forces Central Command] in Bahrain.

General KURILLA. Thank you, Senator. We think it is going very well with the integration of Israel into the CENTCOM AOR, including our exercises and our training as well. We did have a bilateral exercise called Juniper Oak that we just did in January, which was the largest exercise with 142 aircraft that we participated with them in January.

When you talk about Task Force 59, that is our Maritime Security Innovation Task Force. Is an unmanned and undersea unmanned vessel task force, where we basically are enhancing the manned platforms that we have.

One police car—one destroyer in the Red Sea is the equivalent of one police car patrolling the State of California. When we take a bunch of unmanned platforms like sail drones and other unmanned surface vessels and undersea vessels, they act as a series of indications and warnings with sensors out there in a mesh network.

They can feed it back into a structured data base that then we run algorithms against to help us make decisions. Is that normal behavior, abnormal behavior, to then use our manned platforms better to be able to get after the problem set.

Senator ROSEN. I am going to—hopefully you will come and show us all a briefing on what you are doing there. It is pretty exciting. In the few seconds I have left, we are talking about the region integrated air missile defense, naval maritime partnerships.

How is CENTCOM reassuring our regional partners that the United States is really committed to regional stability and security? When we were there leading the Abraham Accords caucus delegation when I was there, this was the number one thing people wanted to know. Are we committed to the region? How are you showing them that?

General KURILLA. I spend 50 percent of my time in the region. We have a series of exercises and training events. So last 41 training and exercises that we do multilateral and bilateral, and that is the way we are trying to buildup our partner capacity with them by integrating them into the systems that we have as well.

Senator ROSEN. Thank you. I see my time is up, Mr. Chairman.

Chairman REED. Thank you very much, Senator Rosen. Senator Budd, please. Oh, excuse me, Senator Tuberville has arrived. Senator Tuberville.

Senator TUBERVILLE. Thank you, Mr. Chairman. Generals, thanks for being here, and thanks for your service. You have got your hands full. General Kurilla, in your organization, Task Force 59, has had some great success building unmanned systems. I am familiar with one of their platforms, Saildrone.

It seems like these systems have a lot of potential for both CENTCOM and the Navy, and it is encouraging to see your command taking advantage of cutting-edge technology commercial sector. What do you think has contributed to the success of Task Force 59 work with systems like Saildrone?

General KURILLA. I think what is successful is the people. It is the people that we hire that are innovative and creative and critical thinkers. When we push these systems into their hand, they are using them in ways that we never thought possible. A lot the systems in the unmanned and the undersea that we use, they are used for commercial fishing.

When fishermen go out, they are not going out to find fish, they are going out to catch fish. So, we use a lot of these systems with their integrated sensors.

I think Saildrone initially was used for maritime oceanographic capabilities, and we have turned that into something they can act as indications and warnings with the sensors that are on it.

Senator TUBERVILLE. Yes, we almost lost a couple a couple of Saildrones. I think Iran tried to load a couple on one of their ships. Was that during your——

General KURILLA. It was.

Senator TUBERVILLE. Yes. How did that go out?

General KURILLA. We got him back.

Senator TUBERVILLE. You got them back? Good. Well, that is good to know. At one time, we had 60 balloons over Kabul, Afghanistan. Our ISR is very limited. How confident are you in the intelligence you have to see new threats rising from the Taliban?

General KURILLA. Currently our intelligence has degraded since we are no longer in Afghanistan. I believe we can see the broad contours of an attack. Sometimes we lack the granularity to see the full picture. We are working to close that gap with our alternative airborne ISR and some of our other intelligence that we are working to penetrate into those networks.

Senator TUBERVILLE. It seemed like for some reason this Administration is going to accept Iran developing a nuclear weapon. If Iran does develop a nuclear weapon of mass destruction, which the United States spent trillions trying to keep out of the hands of dictators in the Middle East, how will that scramble your AOR?

General KURILLA. It would change it overnight and forever.

Senator TUBERVILLE. General Langley, I am aware of several vacancies in key diplomatic posts. I was in South Africa recently. China is there daily, trying to move in. Is that important to you, the diplomatic post being filled?

General LANGLEY. Senator, absolutely it is. It builds capacity. As I talk about the 3-D construct, having full-fledged bolstered capacity at our diplomatic posts is essential and it makes a difference of us being able to maintain our partnership and capacity. Moreover, ensuring our strategic access.

Senator TUBERVILLE. Could you talk a little bit about South Africa and what you have done since you have been there, your relationship that you have made and what you see coming from China, and maybe even Russia?

General LANGLEY. Senator, I haven't been to South Africa yet. I will be going there in the coming months. But right now, what I

am really concerned about is Mosei II, that exercise, that naval exercise. That was just a messaging campaign by the Russian Federation and also by the PRC. So, I have been having discussions with Ambassador Brigety down there and saying, what is South Africa's story?

South Africa, they are—they have been a good partner. We are building that relationship, but they don't want to be pressurized in who they choose. So, I have to use assurance actions to compel them that we are the partner of choice.

Senator TUBERVILLE. Don't you think it is vital that we keep China from overtaking that port there in South Africa?

General LANGLEY. Absolutely, sir, because as we look at the Cape of Good Hope and look at how much transit that our commerce goes across, and it can also be a power projection point as well. So, we can't ill afford, from a geostrategic opposition, allow either the PRC or even Russia to use that as a platform.

Senator TUBERVILLE. Yes, I know it is not your purview, but they are trying to do the same thing in Argentina, you know, which is the point of South America. We definitely don't need to lose those two contacts in terms of navigation. Thank you. Thank you very much. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Tuberville. Senator Peters, please.

Senator PETERS. Thank you, Mr. Chairman. General Kurilla, welcome. Good to have you here. I, along with my colleagues on the Committee, have worked to strengthen our partnership with Israel.

In particular the collaboration and synergies between our two countries in the innovation space, I believe probably has never been greater, and it certainly is an area that I believe the United States must do more to take advantage of our friendship with like-minded, I guess you could call them techno democracies that are highly sophisticated in that area.

I was proud to sponsor legislation creating a United States, Israel Operations Technology Working Group to help further the DOD efforts in that area. My question for you is, if you could please speak to the strategic advantage that our relationship with Israel offers in a global environment where rapid innovation and the fielding of emerging technologies rapidly is absolutely key to our national security.

General KURILLA. Thank you, Senator. Israel is one of the world leaders in technology in terms of the innovation and how to take that to the areas of national security. I have been over there several times. I have seen how they are implementing that. I do find that the relationship that we have with them is already bearing fruits in terms of that.

I look at that in the counter United States field where I have been all the way down from Iron Dome, all the way up to the exoatmospheric Arrow 3. It is the ability to understand their technology and be able to proliferate that as well.

Senator PETERS. Right. General, at the end of this month, we will mark the 8th year of the war in Yemen. This conflict has been a humanitarian catastrophe for hundreds of thousands of deaths, millions displaced, and tens of millions Yemenis suffering from both famine and disease.

The war has been exacerbated by the role of a proxy conflict between Saudi Arabia and Iran and has been the people of Yemen who unfortunately have been the victims and have suffered as a result of this geopolitical strategizing. Congress has been active in ensuring that United States support is not the cause for any innocent suffering in Yemen.

A June 2022 GAO [Government Accountability Office] report regarding civilian impacts of United States military support for the Saudi coalition provided recommendations to the DOD on measures to help mitigate civilian harm from our support.

So, my question for you, sir, is has the Department developed and implemented guidance for reporting any indications that United States made defense articles were used in Yemen by Saudi Arabia or the UAE against anything other than legitimate military targets?

General KURILLA. Senator, I am aware of that GAO report. I have read it. I have seen it. My understanding right now is the Department is working through any implementation instructions from it.

Senator PETERS. Very good. General Langley, drug trafficking and the cartels profiting from that trade are without question a global threat. AFRICOM is certainly not immune to these issues with West Africa in particular now serving as a popular vector for cartels to move products from Latin America to Europe.

The drug trade destabilizes lawful governments, undermines public safety, and provides critical funding and resources for other transnational criminal organizations. So, my question for you, General, is what efforts is AFRICOM making to strengthen the ability of local governments to conduct counter-narcotics operations and to attack this insidious trade?

General LANGLEY. Senator, thanks for asking that question, because that is of particular concern with our partners. The Gulf of Guinea is like the wild, wild West of illicit activity, especially the drug trade.

Two exercises that just happened in the past month. Obangame Express. Obangame Express is where we—it had a number of countries that come together to focus on illicit activity across the Gulf. The drug trade is one of it, smuggling is another, and transiting citizens as well across that region.

But it is inextricably linked to South America as well. So, I work with General Richardson on that, and I thank this Congress for legislation that gave us $200 million to address this issue. But building partnership and capacity with African nations, especially in the Gulf of Guinea, addresses that issue as they build their maritime capacity. But that is also an opportunity for another ask.

Hershel Woody Williams and even the Coast Guard when they bring a cutter in, it makes a difference. This is naval diplomacy at its best. If we can get assignment to another ship, I wish I had another *Hershel Woody Williams* to cover the other side of Africa continent. But just naval activity and bolstering our partners' ability for their maritime expertise. To buildupon that building capability is essential going forward. Thank you.

Senator PETERS. Thank you, General. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Peters, and now, Senator Budd.

Senator BUDD. Thank you, Chairman. Good morning, gentlemen. I want to thank you both for your leadership and your service, particularly your commands of units in North Carolina at Fort Bragg and Camp Lejeune. So, I recently returned from both of your overseas areas of responsibility.

A common complaint from our allies and our partners is that the foreign military sales process is overly complicated and slow. It is just downright bureaucratic. So, in that vein, I have a series of questions.

If you would, just if you would give me a simple yes or no to the answer, and then at the end hopefully we will have a little more time and I will give you some time to elaborate. General Kurilla, is the current FMS process fast and flexible enough to meet our foreign partners' security needs in your respective AORs?

General KURILLA. In CENTCOM, no.

Senator BUDD. General Langley.

General LANGLEY. AFRICOM, no.

Senator BUDD. Does the transfer of U.S. defense products build our partners' capacity to provide for their own defense and respond to threats? General.

General KURILLA. Yes, Senator.

General LANGLEY. Yes, Senator.

Senator BUDD. Given the success of Western arms against Russian equipment in Ukraine, is there an increased interest in United States defense products in your AOR?

General KURILLA. There is a very strong interest in U.S. products.

General LANGLEY. Very strong in Africa as well, Senator.

Senator BUDD. Thank you. Thank you. Is China increasing arms exports to any countries in your AOR? General Kurilla.

General KURILLA. Yes, Senator.

Senator BUDD. General Langley.

General LANGLEY. Senator, it is kind of flatline right now.

Senator BUDD. But they have been before.

General LANGLEY. They have been before in the past.

Senator BUDD. Thanks. Is the United States still the security partner of choice in your AORs?

General KURILLA. It is, Senator.

General LANGLEY. Absolutely, Senator. It is in Africa.

Senator BUDD. Is the United States at risk of losing that security partner of choice status to either China or Russia?

General KURILLA. China is making inroads. I do not assess Russia is.

General LANGLEY. It is a risk, Senator.

Senator BUDD. So, if you—elaborate that, if you could each explain how FMS challenges are impacting strategic competition with China and Russia in your AORs. If you would elaborate on that, please.

General KURILLA. Sure, Senator. In the CENTCOM AOR, with the number of attacks that we see in there, our partners have real security needs, and so they want to have the equipment they need fast.

What China is able to do is come in very quickly, open up their catalog, let them pick from anything in it, very quickly to deliver it. There is no end user agreement. But what they don't do is they don't followup with it and they don't have the training, the expertise, the sustainment, the upgrades.

What we do find with our partners is when they buy Chinese equipment, a vast majority of it becomes non-mission capable. A year or so after they have that equipment and we do see a complaint from that. They want to buy U.S. equipment, but sometimes it is the timeline to get it that is a hindrance.

Senator BUDD. And the process——

General KURILLA. The process is what takes the time to do it. There are I know that the Department of Defense has a Tiger team to look specifically at what the Department of Defense can do to increase it. There is four levers, Department of Defense, State, Congress, and industry, and I know the Department of Defense is looking at their lever.

Senator BUDD. Thank you. General Langley.

General LANGLEY. Senator, I have characterized in my assessment since taking command that West Africa is at a tipping point. What I mean is how these extremist groups, whether we are talking about ISIS, West Africa, or even JNIM [Jama'at Nusrat al-Islam wal-Muslimin] or Boko Haram, they are all at the door, especially at the Gulf of Guinea states.

As I have done my travels, and I was in Ghana, they said, we don't want your boots on the ground, but we would like your equipment. All we need, in Ghana all we need to affect quad initiative, which is a coalition of willing of states of Togo, Benin, and Cote d'Ivoire, but they want equipment.

Before they go across the line of departure, they need equipment. They want U.S. equipment but they know how long it takes. So, there they are considering because these affiliates are at their back door, they need something now.

They want to come with us, Senator, but the process is too slow, and they need to be able to affect a viable offense to help Cote d'Ivoire—excuse me, to affect Burkina Faso save their own country.

So, we are showing a good—what we would like to see, partner led, U.S. enabled, but we need to step up the U.S. enabled at this point.

Senator BUDD. You know, that matches conversations with our allies recently. Can you please discuss how your requirements for Special Operations Forces has grown, and what cuts to SOF in strength would have on your operations?

General KURILLA. Senator, I rely very heavily on our Special Operations Forces in the CENTCOM AOR. They are doing tremendous work. Any cuts to in the CENTCOM region would affect me significantly.

General LANGLEY. It would take the heart out of our efforts, both in the East and the West with our Special Operations Forces of AFRICOM.

Senator BUDD. Thank you both. Chairman, I yield back.

Chairman REED. Thank you very much, Senator Budd. Senator King, please.

Senator KING. Thank you, Mr. Chairman. General Langley, we have been having a lot of discussion today about China's activities in Africa. Is there any buyer's remorse? China has sort of scaled back on Belt and Road to some extent, and some of the debt issues are now coming to the fore. Are there countries in Africa starting to rethink some of those commitments? Buyer's remorse is probably the best term.

General LANGLEY. Senator, great question, and in I traverse for that, for any indicators of that, and I low and behold I saw a story this morning out of Kenya. They have taken to the streets of how China has been taking advantage of them in the deals that they strike. Now, there are other indicators across the continent, other stories of debt trap diplomacy that——

Senator KING. They call it debt colonialism.

General LANGLEY. Oh, yes, absolutely, Senator.

Senator KING. So, let me followup if that is the case, and it appears that it is, does this create an opening for us to be more active in infrastructure projects, support for development in these countries, that we can come in and show that it can be done in a much more efficient and skilled way.

General LANGLEY. Absolutely, Senator. That we do have—that we see that as an opportunity. As we call it, a consolidated strategic opportunity, and we need to match it up with key strategic activities.

Whereas we can use a whole-of-government approach, we can use Prosper Africa, Digital Africa, and get these programs off the ground and going. I know that I have met with Assistant Secretary Molly Phee last week and also, I was over at USAID, and they we have a plan of action collectively, whole-of-government to be able to put it in motion.

Senator KING. You use the term whole-of-government, and I think the private sector also has to be included in this in terms of development of resources. You used a phrase earlier that I noted about the Chinese efforts to monopolize and get a hold of these rare earths and minerals. Forward thinking by the PRC.

We haven't been doing that forward thinking. We have allowed them to take control of, for example, lithium, an essential element for EV batteries. Eighty-seven percent of the process to lithium that goes into EV batteries in this country comes from China. We haven't been doing that forward thinking.

I am suggesting that that is something we should start to think about and it should be a combination of Government action, but also the private sector. We don't do everything by the Government here.

General LANGLEY. Senator, that is correct. We don't tell the good news story enough, and that is why I provided—well, this, the blue chart here. But on legislation passed affect us such as Prosper Africa is also a message to our private industry to invest in Africa. That is what I talk about when I talk to the country teams as they are heavily recruiting back in the United States for investment in the African nations and states.

Senator KING. Thank you. General Kurilla, King Abdullah was here about a month ago and he said the this was the most dangerous moment in Israeli-Palestinian relations that he would seen

in decades. Give me your analysis of the status of that. It seems like it is a very heightened sense of danger in terms of open conflict.

General KURILLA. Senator, I agree with the statement of King Abdullah on that, and we watch this very closely. We think the conditions are there, the tinder and the kindling is there, and we don't know what it could take for what spark to be able to start a larger conflict in the West Bank.

Senator KING. Let me just ask a sort of parenthetical question. Often, we get the question about Iran's nuclear capacity. Do you have a military analysis of what a strike, an air strike, a significant substantial airstrike on Iran's nuclear capacity would actually—what would be the impact of that on their ability to move toward a nuclear weapon?

General KURILLA. I do, Senator, but I best believe that would be in a classified setting.

Senator KING. Okay. Thank you. One other question in your AOR about stability, and that is Pakistan, a nuclear armed country. They have had a lot of political issues lately. An assessment of the stability and long-term prospects for stability in Pakistan.

General KURILLA. They have an idea of what the military relationship is there. I have a great relationship with the Chief of the Army Staff, General Munir. I think the concerns right now in Pakistan are their budget, their financial situation, the current political situation, and the counterterrorism situation as they see the three key Taliban, Pakistani, the TTP [Tehrik-e Taliban Pakistan], the attacks are significantly increasing with the end of a cease-fire there.

Senator KING. Are you confident of their nuclear security procedures?

General KURILLA. I am confident of their nuclear security procedures.

Senator KING. Thank you. That may be the first good news we have heard today. Thank you, General. Thank you, gentlemen.

Chairman REED. I thank you, Senator King. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. Thank you all for being here. Appreciate it. I want to followup a little bit on the question that Senator Scott asked. I think part of our challenge right now is, as the newest or one of the newest members of this Committee, it has become very clear to me that China is an immediate threat, long term threat, intermediate threat.

How are you going to characterize it? China should be a very important focus of ours. So, one of their tools, obviously, that they deploy around the globe is the debt trap. I would like for both of you if you could help us communicate back home to the folks who are wondering what are the most pressing needs of the country, what is the most concerning thing from a national security perspective, how that affects what you guys do, and what are some of the most egregious examples that you have seen in your roles.

General KURILLA. So, Senator, thank you. What I see again is the penetration economically where they go in and they provide infrastructure with the financing that goes with it, and I can use an

example in one country where they went in, they provided infrastructure, and it was almost like a balloon mortgage payment.

In the peak of the COVID crisis overseas, at the worst point of their economy in this one country, they came and they demanded their payment and it absolutely crushed that country to do that. It caused them to see the way that China does in terms of their debt trap.

There are several other examples also in the Central Asian states as well. It is important to understand, though, what China is doing. They are doing it for their own benefit, not for the other's benefits.

General LANGLEY. Senator, the same thing has taken place on the continent of Africa as well. Whether in the vein of debt trap diplomacy—here is the difference that makes us a partner of choice. We go off aid first, financing last.

China does financing first, and that financing puts at a disadvantage of those that are asking for the funds. Very few times will they actually do any type of aid. So that is the assurance action that it causes our partner countries on the African continent to side with us.

There is a number of initial deals struck in a memorandum of agreement in the Belt and Road Initiative across 40 countries across the continent of Africa. That is very compelling. It hasn't matured yet to actually show the negative effects. But in aggregate, we do communicate cautionary tales from signing such agreements.

Senator SCHMITT. Eighteen months ago, Israel was integrated into CENTCOM, and I just wanted to find out how that has gone. What your—is there, you know, fully integrated into that theater. How you view that?

General KURILLA. It is going exceptionally well and we view it as a net positive, Senator.

Senator SCHMITT. Okay, that is great. I guess finally, because I have got about a minute and a half here, we talked about the debt trap, but I think that the building of the islands in the South China Sea being fully weaponized with the spy balloon that traversed over Alaska and the Continental United States, it has certainly raised awareness, I think, at a point now that we have not seen before.

I think and these are terrible things that have happened. But I think the American people now recognize the threat that China poses to the United States, and not just I think, obviously economically, some of the theft from an intellectual property perspective has been well documented for a while.

But clearly, as they try to project that strength into the Indo-Pacific and the South China Sea, and those islands are fully weaponized. Beyond the debt trap that you, illuminated, what are a couple of other examples that you see that maybe most people don't know about, that certainly raises a lot of concerns and the alarm bells are going off about how serious China is about global domination.

General LANGLEY. Senator, I will focus just on them trying to change the international order, trying to change the international system. That is very compelling, and how they engage with African

nations on the continent, and how they vote in the U.N. General Assembly. That is an indication that they cannot gain a strategic advantage unless it is along their norms, what they consider their norms.

Then the economic piece is very compelling of how they are trying to corner the market on what we call some of the rare earth minerals or even resources that are on the continent of Africa, and how they are trying to strike bad deals with these countries, extracting these resources without the benefit of the African nations. That is a cautionary tale that needs to be told.

General KURILLA. Senator, we see 19 of 21 countries in the CENTCOM AOR have signed Belt and Road Initiative agreements with China. That is for China's benefit. We have also seen 20 of 21 countries have Huawei contracts in them. They are building smart cities and a lot of this is for Chinese advantage.

Senator SCHMITT. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Schmitt. Senator Blumenthal, please.

Senator BLUMENTHAL. Thanks, Mr. Chairman. Thank you both for your extraordinary service to our Nation. I want to focus on the Wagner Group, which I think is kind of the elephant in both of your rooms, so to speak.

I am a strong supporter of designating the Wagner Group as a foreign terrorist organization, which will have a constructive impact. I would think, in both of your commands. General Langley, if I remember correctly in your testimony, you talk about the price of the Wagner Group in Africa as being, "the failure of government institutions, the withdrawal of stalwart security allies, the extraction of mineral wealth, and long-term resource concessions and debt that chip away at Africans' future."

In Ukraine, as we well know, the Wagner Group poses a very severe and immediate threat, not only in Bakhmut but throughout the country. It is probably one of Putin's most effective fighting forces right now, a mercenary, murderous organization.

The argument that I have heard against it is that designating Wagner as a foreign terrorist organization complicates our interests in Africa because governments doing business with the Wagner Group could suffer sanctions as a result of that business.

I think that is totally a bogus argument. I see no valid reason not to designate Wagner as foreign terrorist organization. Please give me your views. General Langley, and then General Kurilla.

General LANGLEY. Thank you, Senator, for asking that question because I do need to message some of the atrocities going on with the Wagner Group, not only in the Central Africa Republic, but also in Mali since this past summer. They have been reported on by the U.N. multinational force there of the atrocities and egregious actions that are taken on the public. This is very serious.

The Wagner Group, even though we know that to Yevgeny Prigozhin, everything is about power and profit, but they are inextricably linked to the Russian Federation. So, the further they are on—the more they are on the continent, preying upon fragile governance will be a problem and destabilizing across the African continent.

Senator BLUMENTHAL. So, would you feel they should be designated as a foreign terrorist organization?

General LANGLEY. Well, Senator, I will just—I will say this, collectively——

Senator BLUMENTHAL. They are foreign terrorist organization, are they not?

General LANGLEY. Senator, I think that is—if we have a policy representative, you know, I will stay out of that. I would like to just focus on what we need as AFRICOM to be able to do this, and we do it in the information space. But across all other—the rest of the whole-of-government, we do have pressurizing things. I can take that into, if you—or let me bring this up in closed session.

Senator BLUMENTHAL. Of course. Let me ask you both. Maybe I can ask General Kurilla first. Israel is going through domestic unrest, protests. I have been visited by a number of members of the Israeli military on a number of occasions, some personally, who feel that this unrest is impacting their readiness. Do you have any views on that topic?

General KURILLA. I talk to the Israeli chief of defense often, I talked to him yesterday morning. What we talk about is he is trying to ensure that his military stays out of the political conversation.

Senator BLUMENTHAL. Do you think that the recent proposals for changes in their judicial system is in any way undermining their readiness or preparedness?

General KURILLA. I think as you look at the Israeli system, they have reserve units and that is where we are seeing some of this manifest itself. But I do not want to make a statement really on the judicial system without knowing all the facts of what they are doing.

Senator BLUMENTHAL. Let me ask to followup, I think it was Senator Mullin who was asking you about our Afghan at risk allies. I have been a leading advocate of the Afghan Adjustment Act. I have played a part in trying to extract the translators, guards, security personnel.

My own son served there in the Marine Corps. Actually, was able to get his translator out of Afghanistan. But there are thousands still at risk with targets on their backs. Having served there repeatedly with great distinction, are we doing enough to get them out?

General KURILLA. I think we have a moral obligation to get those out. Again, we think the number is, you know, I would defer to the State Department the exact number. The State Department works the aspect of getting them out. Once they come to us in Camp As Sayliyah, we provide the in-processing, security, and basic life support for them.

Senator BLUMENTHAL. I agree totally. We have that moral obligation. Veterans groups agree steadfastly and passionately about it. I am hoping that not only we will pass the Afghan Adjustment Act, but also take greater measures to enable them to escape the persecution, torture, and death that many of them are at risk.

General KURILLA. I do applaud our veterans groups that are doing—taking that action on as well.

Senator BLUMENTHAL. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Blumenthal. Senator Ernst, please.

Senator ERNST. Thank you, Mr. Chair, and gentleman, thank you very much for your service and your leadership. General Kurilla, just a few quick questions.

Some of this has been covered briefly by a number of other Senators, but we do have the great powers that are out there putting a lot of pressure on us in Asia and in Europe. We also have competing priorities here at home. We have got a financial crisis. We have got Southern border issues.

Then the very sobering of fiscal outlook right now. We are entering into an era where being able to support defense with everything we have got has really slowed down significantly. The belt is tightening and you have heard concerns today.

I know that the NDS has directed the Department to right size your forward military presence in your AOR. Of course, doing that, accepting prudent risk as necessary. So how has CENTCOM improved the economy of force in your theater?

General KURILLA. Thank you, Senator. CENTCOM is 85 percent smaller than at the peak in 2008. That was in the midst of two conflicts. After the withdrawal from Afghanistan, even in 2022, we reduced by 15 percent, post-Afghanistan withdrawal.

What we require in CENTCOM is a sustainable and sufficient force structure to be able to accomplish the missions we have been given. Again, I go back to if there is one place that can derail the NDS, it could come out of CENTCOM with a flash point.

Senator ERNST. Yes, I absolutely agree with that. I know the President, during the Afghanistan withdrawal, told us that if we withdrew from Afghanistan, there would be a windfall of resources to prioritize China. So, what resources did this action free up in our budget, and then how did DOD reinvest those?

General KURILLA. I really, Senator, would defer to OMB [Office of Management and Budget] and the Department of Defense on any cost savings. But I believe those resources were then moved to against the higher priority of INDOPACOM and EUCOM.

Senator ERNST. Okay. Thank you, and I would be willing to bet there weren't as many cost savings maybe as we would have thought. Different topic, but you have heard a lot of discussion about the Abraham Accords today.

I also am a co-chair with Senator Rosen on the Abraham Accords caucus. I am very proud that our legislation on air and missile defense cooperation did get passed last year in the NDAA, and it does help our partners with their security burden.

So, you have talked a little bit about this, but when you are implementing this or trying to implement this integration framework, what challenges are you running into now that we might be able to iron out without legislation, and is there an area where we might need legislation?

General KURILLA. I can tell you where we are right now. We are making progress. We are going toward a shared air picture between a group of countries. The challenge we have, though, is if there is Chinese equipment that we cannot integrate.

So, whether that is a radar or whether that is an actual air defense system, we can't let that touch our network based on the—

on what we know about the Chinese equipment. So, it just is not compatible with it either. So that is the one challenge that we have to be able to do that.

I am not sure what legislation—the legislation that could help us potentially is how do we get FMS faster so they don't have to choose to buy a Chinese system.

Senator ERNST. Excellent, and this has been a discussion as well about FMS and whether it should be the jurisdiction of Armed Services or another committee here in the U.S. Senate. That is something for us to iron out. So, you don't necessarily need additional authorities for implementation then, that you are aware of?

General KURILLA. I believe I have all the authority they need right now, ma'am.

Senator ERNST. Okay. I would just encourage our partners in that region to buy American. Maybe that is the message that we need to send.

General KURILLA. I would be happy if they just bought Western.

Senator ERNST. Western—well, compatible——

General KURILLA. It would be great with all of our systems.

Senator ERNST. No, excellent point. Excellent point, General. I do want to thank you for your tireless efforts to build partnerships in the region. I was recently on a CODEL where we visited Israel, the Kingdom of Saudi Arabia, and the UAE. I heard over and over again your name mentioned specifically, and we described that or we have described that in the past as leadership by walking around.

You did State earlier that you spend 50 percent of your time in the AOR, and I know that that is greatly appreciated by our partners. So, thank you for doing that. Truly appreciate your leadership. Presence is power.

General Langley, I know that you are out there and engaged as well. I do have a question I will submit for the record for you. It deals with a 127 ECHO program, which I think is incredibly important in your region to maintaining stability.

Thank you, gentlemen, very much. My time has expired. Thank you, Mr. Chair.

Chairman REED. Thank you, Senator. Let me note that the vote has begun and recognize Senator Sullivan.

Senator SULLIVAN. Thank you, Mr. Chairman. Gentlemen, thank you for your service, testimony today. Very much appreciate it. Your team members behind you. I know how much they put into these kind of hearings.

General Langley, I want to begin by also mentioning, we probably are getting the picture, we had a number of Senate CODELs to the region recently. I think that is actually important. I was part of the CODEL with Senator Rosen and seven U.S. Senators to the Abraham Accords countries.

Started in Morocco. Really impressive ally, one of our longest standing allies anywhere in the world. I don't know to what specificity you can provide thoughts, and maybe this is kind of even against your own interests, but it did occur to me that I think it is time to have AFRICOM headquarters in Africa, somewhere. Morocco, I think they would be a great candidate. What do you think about that?

General LANGLEY. Senator, this has come up numerous times in the past.

Senator SULLIVAN. I know, and it has been blocked by some Members of the Committee, and they are always like, well, we don't know where to put it, so let's keep it in Germany. That is not a good answer, right?

Come on, we don't know where to put fricking CENTCOM's forward headquarters, but we chose Qatar. So, like, real countries make real tough decisions. What do you think we should do? I don't think that is a good answer, which is too tough. Too many good countries, so let's keep it in Germany. What do you think?

General LANGLEY. Senator, I see the—I see some utility being on the continent, but at this time, just with our processes of getting down to visit to numerous countries has been beneficial. As far as how we are laid out now, I think we are right sized. Because when we are in Europe, there is other partners there in proximity that we can plan——

Senator SULLIVAN. What about like a CENTCOM is headquartered in Tampa and has a forward headquarters in Qatar. What about a forward headquarters for AFRICOM somewhere in——

General LANGLEY. Senator, I can talk about that in closed session because we do have something established——

Senator SULLIVAN. Okay. Let me, both of you keep talking and the military loves the phrase, whole-of-government, all instruments power. We have been talking about critical minerals, which is really important and a big part of the discussion.

How much sense does it make for the United States to shut down our critical mineral production capacity, as a Department of Interior has done in Alaska, and then you guys come here and say, boy, oh boy, we sure got to work on critical matters.

Do you think that is smart, like we have—not you guys, but other agencies literally shutting down—There is something called the Amber Mining District in Alaska, one of the resource rich, critical mineral areas of the world. We had an environmental impact statement Energy Information Administration (EIA), 7 years, $10 million, ready to go.

Then the Department of Interior came in and reversed that and said, hey, America, Alaska, start all over. We will keep getting critical minerals from China. Were you guys informed of that? Were you informed of that interior making that idiotic national security decision?

General LANGLEY. No, sir.

Senator SULLIVAN. Do you think it makes sense for us to look at areas of critical mineral capacity in America and say, we are not going to do that because lower 48 environmental groups don't like it. You would think that makes sense from a national security perspective to shut down our critical mineral production when this whole hearing has been about critical minerals? Does that make sense? General, in your personal opinion?

General LANGLEY. Senator, I am just here to pass a cautionary tale about China and their illicit activities on the continent of trying to corner the critical——

Senator SULLIVAN. But if we can help uncorner it by producing our own, doesn't that make sense?

General LANGLEY. Senator, I don't have a position on that.

Senator SULLIVAN. Come on, General, you do have a position. You just don't want to say it. What is your personal opinion on that? Does it make sense to produce more critical minerals in America if we have them?

General LANGLEY. Senator, we can discuss that in that closed session about essentials for——

Senator SULLIVAN. This is the problem, you talk all instruments of power, whole-of-government, and we don't do it. Again, that is not you, but it is Biden, it is the Administration. It is national security suicide, and we do it every damn day. We have shut down resource development in our own country. It is idiotic.

That is the right answer, by the way. Real quick, General Kurilla, you mentioned Iran taking shots at our troops. Are we retaliating against them? I think one of the lessons we learned when they were providing very sophisticated IEDs [improvised explosive device] to kill and wound thousands of Americans in the 2005, 2006, 2007 timeframe, that that was a bad signal to let them just kill our people, the best and brightest in America.

I am sure you lost soldiers to the Quds Force, IEDs, and until we killed Soleimani, which I think was a really important message, we weren't retaliating. So, I hope either covertly or overtly, when these guys are trying to kill Americans, which they are pretty good at and they do a lot, that we are sending messages like, all right, you want to try and kill Americans, game on.

What are we doing to retaliate against these guys?

General KURILLA. Senator, I am prepared to retaliate overtly, but also not all responses are overt.

Senator SULLIVAN. Okay. But can you assure this Committee that we are not just letting them try to attack Americans? You have already mentioned that they are—without some form of retaliation.

General KURILLA. Senator, we have all the capability to be able to retaliate. But not all retaliations are overt.

Senator SULLIVAN. Good. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Sullivan, and thank you, gentlemen, for your testimony. We have a vote on, so I would encourage all my colleagues to vote, and we will reconvene within about 15 minutes in SVC–217 for the closed session of this hearing. I will now adjourn the open session. Thank you.

[Whereupon, at 11:47 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JACK REED

UNITED STATES AFRICA COMMAND

1. Senator REED. General Langley, the United States provides limited but growing assistance to fight severe malnutrition including through the distribution of U.S.-made Ready to Use Therapeutic Food (RUTF). From your perspective, how important are such efforts to United States Africa Command (AFRICOM) mission to "advance U.S. national interests and promote regional security, stability, and prosperity"?

General LANGLEY. United States humanitarian and food security assistance is critical to United States Africa Command's (AFRICOM) mission to advance U.S. national interests and promote regional security, stability, and prosperity. Twentyseven of the fiftythree countries in my Area of Responsibility are enduring complex humanitarian and food security emergencies due to a myriad of factors. These countries cannot focus on security, stability, and prosperity when a significant percentage of their populations are struggling to meet basic needs. When populations are malnourished and under duress, this impacts every aspect of their human development and increases their vulnerability to communicable diseases such as COVID which impacts global health security. When populations are malnourished and under duress, AFRICOM cannot achieve our objectives to build partner capacity and sustain security. In addition, when complex humanitarian crises persist involving conflict, DOD inherits more issues to address such as violent extremism and protracted State failure that our adversaries are taking advantage of like Wagner in Mali, Central African Republic and other areas. USG efforts, particularly USAID's efforts in AFRICOM's area of responsibility, to address critical human development concerns such as malnutrition and food security are vital to AFRICOM's mission.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

2. Senator WARREN. General Kurilla and General Langley, historically, have previous Unfunded Priorities Lists items been included in the following year's base budget?

General KURILLA. Mission-critical items requiring funding outside the base budget have historically been addressed in subsequent budget submissions.

General LANGLEY. Yes, although USAFRICOM's objective is to have requirements captured in the Department's base budget. The Command has submitted Unfunded Priority List (UPL) items in the past. For example, in fiscal year 2021 and fiscal year 2023, Congress provided $22 million for Force Protection and $14.5 million for Force Protection, respectively. During the annual fiscal year 2024 Program Budget Review (PBR) cycle, the Department included in the base budget $99.2 million ($269.7 million across the Future Years Defense Program-fiscal years 2024 to 2028) for Force Protection to support physical protection at several in-theater posture locations.

3. Senator WARREN. General Kurilla and General Langley, have Unfunded Priorities Lists items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

General KURILLA. For the fiscal year 2023 budget, we requested Congress consider adding $35 million to replace the stockpile of the GBU–57 Massive Ordnance Penetrator. The Massive Ordnance Penetrator allows us to neutralize or destroy hardened, deeply buried targets. This stockpile has dipped below validated levels due to necessary live fire testing performed with the weapon system. The Fiscal Year 2023 Unfunded Priorities List submission simply allows us to replace those munitions expended in the testing. The U.S. Air Force chose not to add this to their fiscal year 2024 base budget until they complete a study on the potential replacement for this munition. The U.S. Air Force did fund in fiscal year 2023 additional testing on the GBU–57.

General LANGLEY. Yes. The command submitted fiscal year 2023 Unfunded Priority List (UPL) items to Congress for $23.5 million for Force Protection and for $70.1 million for Counter-Unmanned Aircraft Systems (C-UAS). The Department, during the annual fiscal year 2024 Program Budget Review (PBR) cycle, included in the base budget $99.2 million ($269.7 million across the Future Years Defense Program—fiscal years 2024 to 2028) for the Force Protection submission to support physical protection at several in-theater posture locations and provided additional funding to the Joint C-UAS Office. USAFRICOM does not have acquisition authority and can only provide limited information on vendors. The Force Protection vendor in fiscal year 2024 will come from the Army's Logistics Civil Augmentation Program (LOGCAP) contracts and equipment purchases awarded to several vendors over the fiscal year.

4. Senator WARREN. General Kurilla and General Langley, do you agree that Federal agencies should be required to work within the confines of base budget process?

General KURILLA. U.S. Central Command follows the budget process directed by the Department of Defense and the U.S. Congress. The Fiscal Year 2017 National Defense Authorization Act requires Combatant Commands to submit an Unfunded Priority List.

As a Combatant Command with few assigned forces and no acquisition body, CENTCOM relies on the Military Services for most resourcing. The Unfunded Priorities List allows us to inform the Department of Defense regarding which of our mission-critical capabilities are not resourced by the Military Services.

Additionally, the congressionally mandated Unfunded Priority List program offers an opportunity to resource against changes within the operational environment since delivery of the base budget. In so doing, the program allows CENTCOM to buy down risk to force and risk to mission.

General LANGLEY. I agree that all Federal agencies should be good stewards of taxpayer dollars and to abide by the law. The Department's fiscal year 2024 budget request seeks to adequately fund the efforts necessary to implement the 2022 National Defense Strategy (NDS). AFRICOM follows the current statute for submitting an annual Unfunded Priority List (UPL) as described within the 2017 National Defense Authorization Act (NDAA), Section 222a and as amended in the Fiscal Year 2022 NDAA, Section 1051, that "the commanders of combatant commands shall submit to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, and to the congressional defense committees a report on the unfunded priorities of the combatant commands."

INFORMATION ON UNFUNDED PRIORITIES LISTS

5. Senator WARREN. General Kurilla and General Langley, what was the cost of putting together this Unfunded Priorities List?

General KURILLA. Development of the Unfunded Priority List is part of our annual research and budget analysis, a core staff function for U.S. Central Command, and elicits no additional cost.

General LANGLEY. AFRICOM's internal fiscal year 2024 Unfunded Priority List (UPL) development process did not incur any additional costs over and above day-to-day costs to the Command. Instead, the fiscal year 2024 UPL was developed over a 3-month period by one full-time GS–13 Federal civilian employee and two O–4 military members, at a reduced quarter-time need, working within the United States Africa Command's J8 Resources and Assessments Directorate (ACJ8). Three O–5 military member subject matter experts (SME) and three GS–13 civilian employee SMEs also contributed at a reduced one-tenth need from three separate Command joint directorates (ACJ2/ACJ4/ACJ6). From these actualities, a nominal cost can be produced using the following assumptions: 1) a GS–13 Federal civilian or an O–5 military member costs approximately $120K annually; 2) one ACJ8 GS–13 working at full-time; 3) two ACJ8 O–4s working at one-quarter time; and six other directorate SMEs working at one-tenth time. With these assumptions, the total cost for the Command to develop the fiscal year 2024 UPL equals approximately $63,000. This is a low-cost investment for providing risk mitigation to emerging and/or unfunded Command requirements that were unable to be fulfilled within the Department's top-line.

For each item on the unfunded priorities list you submit in response to Title 10 U.S.C. 222a, please provide the following information:

6. Senator WARREN. General Kurilla and General Langley, please provide a detailed description of the Unfunded Priorities Lists.

General KURILLA.

Providing for Air Defense

a. *Air Vigilance Operations and Sustainment:*

Executive Summary: Countering Unmanned Aerial Systems is a top CENTCOM priority. State and non-State actors continue to mature their Unmanned Aerial Systems capabilities, tactics, techniques, and procedures at an alarming rate and present a direct threat to the United States and its regional partners and allies.

Operational Impact / Risk to NDS: The Air Vigilance system delivers a ground-based passive signals intelligence sensor employed to detect, track, identify, geolocate, and report UAS threat activities. Within the CENTCOM area of responsibility, 18 Air Vigilance systems in eight countries provide force protection capability for both forces and critical infrastructure.

b. *Crestone UxS Data base Inventory:*

Executive Summary: Crestone is being used operationally throughout the CENTCOM region to identify and track specific signals of interest. Funding will be used to hire additional engineers, shorten testing timelines, and expand the signal of interest library capacity to enhance defeat options against the UAS threat throughout the CENTCOM AOR.

Operational Impact / Risk to NDS: Additional investment in Air Vigilance and CRESTONE systems sustains operational capability to collect critical intelligence data on emerging aerial threat systems and provide early warning of operations in restricted air space. The requested funding supports the required communications transport layer and the maintenance services for power, heating-ventilation-air conditioning, and Intrusion Detection Systems. Any loss or degradation of our ability to collect and report on adversarial attack vectors and share collected data with other Geographic Combatant Commanders increases operational risk to United States and Partner Forces.

Priority	CENTCOM Fiscal Year 2023 Unfunded Priorities Budget Line Item Number (LIN)	Sub-Activity Group (SAG)	Program Element (PE) Number	Amount ($ in millions)
1	Tactical Electronic Surveillance System—Adv Development / Air Vigilance Operations and Sustainment	121	0603766A	$14.7
	AF TENCAP / CRESTONE Data base	012C	0207247F	$15.0

Building Joint Force Resiliency / Agile Logistics

a. *Prepositioned War Reserve Materiel (PWRM) Stockpile Readiness:*

Executive Summary: Sufficient PWRM stocks are a necessity to compensate for the lack of forces and footprint in theater. Additional investment will help build a long-term enduring advantage in managing risk and preparing to respond to small-scale, short-duration crises without substantially impairing high-end warfighting readiness caused by the diversion of resources. Contingency preparedness in the form of PWRM readiness is foundational to deterrence. Mobile prepositioned stocks are critical to quickly stand up temporary and smaller-scale logistical support locations near the point of use as conflict unfolds.

Operational Impact / Risk to NDS: Without PWRM levels requested, CENTCOM is unable to fully meet contingency plan operational base requirements in the specified time period. Funding is critical to filling shortages of bed-down and life support systems, fuel support distribution and storage equipment, and rapid runway repair sets. The requested $125.1 million will replenish PWRM stockpiles up to the quantity required to achieve a C–1 readiness rating.

Priority	CENTCOM Fiscal Year 2024 Unfunded Priorities Budget Line Item Number (LIN)	Sub-Activity Group (SAG)	Program Element (PE) Number	Cost ($ in millions)
2	Expeditionary Airfield Basing Assets (BEAR, AGE, RADR)	021D	0401135F	$82.2
	WRM Equipment / Secondary Items (Fuels Support Equip)	021D	0208031F	$25.6
	Globally Positioned Network CENTCOM (GPN–CENT)	041Z	0708550F	$16.0
	WRM Equipment / Secondary Items (APS–5)	212	0208031A	$4.1

Innovation

a. *Data Analysis and Artificial Intelligence (AI) Initiative Baseline:*

Executive Summary: Additional investment is critical in moving CENTCOM toward leveraging data as a strategic asset. CENTCOM's military advantage is increasingly reliant on data-driven technologies and the integration of diverse data sources, elastic computing to the edge, and rapid software deployment. Data provides new ways and means to monitor, respond, and deter aggression at the speed of operations.

Operational Impact / Risk to NDS: CENTCOM requests $8 million to recruit data scientists and provide hardware and technology capable of processing large amounts of code, and data libraries.

b. *Maven Smart System (MSS) Enterprise Licenses:*

Executive Summary: CENTCOM's military advantage is increasingly reliant on data-driven technologies and the integration of diverse data sources, elastic computing to the edge, and rapid software deployment. Information sharing and data analytics are principal mechanisms for understanding China's encroachment, illuminating Russia's activities, disrupting Iran's UAS / Advanced Conventional Weapons supply chains, and spoiling ISIS and AQ external operations. We are currently using MSS as a component of our Joint All Domain Command and Control (JADC2) capability in CENTCOM.

Operational Impact / Risk to NDS: Funding provides CENTCOM with an enterprise license for users of MSS as a component of our JADC2 capability. MSS allows users to explore and visualize the battlefield while increasing ability to anticipate, monitor, and respond to destabilizing activities from strategic competitors. Leveraging MSS as a strategic asset provides new ways and means to monitor, respond, and deter aggression at the speed of operations.

c. *Cloud Computing Environment / Cloud Transition:*

Executive Summary: Cloud Computing Environment is the foundation upon which CENTCOM builds and tailors effective cyber security, advanced analytical capabilities, command and control, and future enabling technologies. CENTCOM cloud strategy focuses on agility, flexibility, and modernization. Rapid delivery of enterprise resources and services result in an organization equipped to respond and fight in the digital age. When mission needs change, a flexible cloud-based IT enterprise can rapidly scale or reallocate resources or react and remediate incidents. The desired end State is to establish a multi-vendor, multi-cloud ecosystem that hosts both on-and off-premise services across all classification levels.

Operational Impact / Risk to NDS: Funding facilitates CENTCOM's migration to this new capability and provides resources to leverage existing systems and develop tools and protocols for secure operations and applications. Without these funds, CENTCOM falls short of meeting DOD CIO mandates. CENTCOM and coalition partner operations are put at risk due to increased network security threats due to the inability to securely manage and implement critical software / firmware updates on all networks and systems throughout the Command.

Priority	CENTCOM Fiscal Year 2024 Unfunded Priorities Line Item Number (LIN)	Sub-Activity Group (SAG)	Program Element (PE) Number	Amount ($ in millions)
3	CCMD Direct Msn Support / Data Analysis and AI Initiative	015F	0201138F	$8.0
	CCMD Direct Msn Support / MSS Licenses	015F	0201138F	$34.0
	CCMD Direct Msn Support / Cloud Transition / Computing	015F	0201122F	$30.0

Active Campaigning:

Executive Summary: Full Motion Video Extension Unified Relay (FEURY) serves as a critical enabler of precision strikes, force protection, and mission command within the Combined Joint Operations Area (CJOA). Since January 2022, seven Operation Inherit Resolve (OIR) FEURY sites have enabled 53 airstrikes, linked to 1,779 Rover feeds, and supported 5,672 total mission hours in the ongoing fight against Da'esh and Iranian-Aligned Militia Groups (IAMG). The situational awareness that FEURY provides is vital to the exercise of mission command, even when not resulting in an airstrike. In January 2022, FEURY provided decisionmakers and operators real-time, situational awareness of a prison break in Syria. FEURY was a vital link in coordinating ground force responses used to contain the situation. FEURY also gives Combined Joint Task Force-Operation Inherit Resolve (CJTF-OIR) the ability to monitor politically sensitive sites and the Iraqi forces the ability to leverage their airpower in protecting United States forces in a theater constrained by Force Manning Level (FML) limits and competing NDS priorities.

Operational Impact / Risk to NDS. Service funding support for seven FEURY nodes in the CENTCOM area of responsibility ends in November 2023. CJTF-OIR requires support for these seven FEURY nodes for an additional year to preclude gaps in Full Motion Video (FMV) capability while alternative means for providing similar capability is pursued. Complete loss of FEURY FMV would severely degrade CJTF-OIR's ability to identify and prosecute targets, execute mission command, and place personnel and CJTF-OIR missions at risk.

Priority	CENTCOM Fiscal Year 2024 Unfunded Priorities Line Item Number (LIN)	Sub-Activity Group (SAG)	Program Element (PE) Number	Amount ($ in millions)
4	Agile ISR / Full Motion Video Extension Unified Relay (FEURY)	011C	0305206F	$12.0

Digital Modernization

Executive Summary: CENTCOM Digital Modernization is essential to the Command's ability to maintain information and decision advantage, preserve C4 systems, and ensure critical kill chains. CENTCOM's Digital Modernization plan applies the Department of Defense 2019 Digital Modernization Strategy principles to develop its Future Mission Environment. The Future Mission Environment is an essential element for integrating CENTCOM into Joint All Domain Command and Control and the DOD Mission Partner Environment.

Operational Impact / Risk to NDS: The Future Mission Environment replaces legacy counter-violent extremist organization-oriented capabilities developed over the past 3 decades that tether the Command to fixed information technology hubs that are becoming increasingly vulnerable to state-based adversaries. Future Mission Environment implementation requires several Digital Modernization enhancements.

Zero Trust Architecture (ZTA) / Internet Protocol v6:

Executive Summary: In existing CENTCOM networks, users and endpoint devices are automatically trusted within the perimeter and put the organization at risk from malicious internal actors and those with assumed legitimate credentials with unauthorized and compromised accounts-wide access within the network.

Operational Impact / Risk to NDS: With funding for Zero Trust Architecture, CENTCOM will be able to implement networks that leverage micro-segmentation, security monitoring and response, and general protective / preventative controls that improve an organization's cyber security posture and reduce risk.

Software Defined Networks:

Executive Summary. Software Defined Networks use software-based controllers or application programming interfaces to communicate with underlying hardware infrastructure to direct network traffic. Use of this approach is directed in the DOD Zero Trust Reference Architecture / Software Defined Networking, December 2020. SDN benefits include cost savings realized through reductions in time spent on manual tasks and improved utilization of existing CENTCOM network resources.

Operational Impact / Risk to NDS. Not resourcing SDN critically degrades operational availability and uptime / loading of software upgrades to all CENTCOM networks. SDN speeds system recovery times and reduces CENTCOM networks failure rates.

Army Intelligence Information Technology (IT) Systems and Networks:

Executive Summary: U.S. Army Central Command's (ARCENT) funding to support Army Intelligence Information Technology Systems and Networks has been decremented 100 percent in PB24. United States Army Central Command requires $5 million for the information security systems necessary to protect Department of Defense intellectual property and technical advances.

Operational Impact / Risk to NDS: Without additional funding, the Joint Worldwide Intelligence Communication System network and system support would be severely degraded. The number of organic military personnel with the appropriate Military Occupational Specialty are insufficient to fill the contract void. The loss of JWICS support to OIR and Spartan Shield would result in an unacceptable loss of actionable intelligence to support targeting, force protection, collection management, and threat monitoring across the AOR.

Army Strategic Network Transport:

Executive Summary: U.S. Army Central Command requires Command, Control, Communications, Computer, Information Technology (C4IT) infrastructure in order to direct operations, access information needed for situational awareness, decisionmaking, and maintain the ability to exchange information in a contested environment. In this role, USARCENT provides the C4IT capabilities and infrastructure in the Southwest Asia (SWA) Theater supporting Operation Spartan Shield (OSS) and CJTF-OIR. To meet these requirements, USARCENT requires resources for South West Asia (SWA) network modernization, sustainment, and service support necessary to meet the Theater's on-going and future operational requirements. Recent Theater transition, both operational and budgetary, has led to a gap in required funding in PB24 placing risk on USARCENT's ability to operate, maintain, modernize, and defend the SWA network.

USARCENT provides Southwest Asia network support across theater via Commercial Satellite leases, Terrestrial Fiber leases, Southwest Asia Theater Signal Service Support, and Field Service Representatives. These capabilities require sufficient funding to support USARCENT, Joint, and Coalition operations across Southwest Asia. The decrements to these requirements present a high risk to the USARCENT's mission to provide C4IT capabilities in support of on-going operational requirements. Failure to fund effects the two highest priority requirements that support strategic communications—commercial satellite and terrestrial fiber leases.

Operational Impact / Risk to NDS: Without an additional $25.3 million in fiscal year 2024, USARCENT will be unable to lease the primary and alternate means of transporting data to the Department of Defense Information Network (DODIN) and source FSRs to maintain the network. Lack of funding reduces USARCENT's ability to protect and defend the SWA strategic network against cybersecurity threats on all voice, video, and data services across the Non-Secure Internet Protocol Router (NIPR), Secure Internet Protocol Router (SIPR), and coalition networks. This translates to degraded command and control and increased risk to operations in what remains a very kinetic and dynamic theater.

Priority	CENTCOM Fiscal Year 2024 Unfunded Priorities Line Item Number (LIN)	Sub-Activity Group (SAG)	Program Element (PE) Number	Amount ($ in millions)
5	CENTCOM Communications / Zero Trust Architecture, IPv6	015F	0201122F	$5.5
	CENTCOM Communications / Software Defined Networks	015F	0201122F	$3.4
	Military Intel Program (MIP) Activities / Army Intel Info Systems and Networks	411	0305192A	$5.0
	Army IT Services Mgt C2 Systems	121	0208550A	$2.3
	Defense Enterprise Wideband SATCOM / Army Strategic Network Transport	122	0310700A	$23.0

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) addresses actions to establish a Somalia persistent presence to further ensure strategic access, confine Violent Extremist Organizations (VEOs), secure Sea Lines of Communication and limit competitor military expansion. More precisely, a lodgment in Somalia will serve to degrade the growing threat from al-Shabaab, assure freedom of navigation through the Bab al Mandab sea-lane chokepoint, and monitor the expanding Chinese presence in Djibouti. In addition, USAFRICOM requires Intelligence, Surveillance, and Reconnaissance (ISR) services and bandwidth increases to meet Departmental High-Risk ISR requirements for the African theater. Next, USAFRICOM Command and Control (C2) services and capabilities on the African Continent must be addressed to ensure USAFRICOM is postured for network resiliency and survivability in a denied, degraded, intermittent or limited (DDIL) communications environment. Last, USAFRICOM requires additional commercial satellite leases to compensate for the shortage of communication access on the African continent.

7. Senator WARREN. General Kurilla and General Langley, what does the Unfunded Priority List purchase?

General KURILLA. The Unfunded Priority List purchases mission-critical capabilities not funded within the base budget, thereby buying down risk to force and risk to mission. As combatant commands do not procure military capabilities, the Unfunded Priority List is necessary to mitigate risk.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) request that supports the return to persistent presence in Somalia addresses estimated one-time costs including: $42.0 million for airfield improvements, $43.0 million to improve life support areas, $11.0 million for communications improvements, and $56.0 million for increases in basic life support/communications costs.. Our High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL will purchase additional contract ISR services, comprised of B–350 and MQ–9 aircraft, and will provide additional bandwidth and associated processing, exploitation, and dissemination (PED). Meanwhile our Command and Control (C2) Resiliency UPL will purchase information technology (IT) equipment to enable network resiliency and survivability on the African continent, and the Commercial Satellite Communications (COMSATCOM) UPL would procure COMSATCOM services to compensate for the shortage of communication access on the African continent.

8. Senator WARREN. General Kurilla and General Langley, please include detail on all end items with quantities, contractor full-time employees (FTE), etc.

General KURILLA. All such details are provided by the Military Services as they are directed to resource any items on our Unfunded Priority List.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List request (UPL) that supports the return to persistent presence in Somalia addresses required infrastructure and communications improvements and associated sustainment. The request does not intend to procure specific end items or hire specific contractor manpower equivalents. Our High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL item will purchase contract ISR services that will provide three B–350's and two MQ–9 lines (4 aircraft each), additional data bandwidth, and the associated processing, exploitation, and dissemination (PED) of data. Our Command and Control (C2) Resiliency UPL item will purchase network and computer equipment, digital storage equipment, peripheral keyboard, video, and mice (KVM) switches, cryptographic material, facility infrastructure upgrades, and a surge installation labor team. Our Commercial Satellite Communications (COMSATCOM) UPL item will be for a satellite communications services contract for satellite communication bandwidth. The government would not receive end items or labor.

9. Senator WARREN. General Kurilla and General Langley, what specific capability will the Unfunded Priorities List provide?

General KURILLA. Our submitted Unfunded Priority List is intended to provide a range of mission-critical capabilities not funded within the base budget, thereby buying down risk to force and risk to mission.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) addresses actions to establish a Somalia persistent presence to further ensure strategic access, confine Violent Extremist Organizations (VEOs), secure Sea Lines of Communication, and limit competitor military expansion. The funding will fully enable U.S. military capabilities to degrade the ability of VEOs to threaten the U.S. Homeland, allow ready crisis response, guarantee strategic access to support U.S. contingency plan execution, isolate and delay strategic competitor military expansion in the Command's area of responsibility, and limit spillover impacts on other Combatant Commands/North Atlantic Treaty Organization (NATO). The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL will increase time-on-station for collection coverage in East, North, and West Africa. For East Africa, this equates to increased Full Motion Video (FMV) and Signals Intelligence (SIGINT) collection, target development, and force protection to support United States periodic engagement and partner nation operations in high-risk areas. For North Africa, this equates to increased FMV and SIGINT collection against Global Power Competition (GPC) requirements and supports Key Leader Engagements (KLE). For West Africa, this equates to increased FMV and SIGINT collection against VEO operations, target development, and support to Allied partners. The Command and Control (C2) Resiliency UPL will enable a continent-based network at Camp Lemonnier, Djibouti-Horn of Africa (CLDJ-HOA) to function independently in a denied, degraded, intermittent, and limited (DDIL) environment independent from Europe, the location of the greater USAFRICOM enterprise network. The Commercial Satellite Commu-

nications (COMSATCOM) UPL will compensate for the shortage of communications access across the African continent.

10. Senator WARREN. General Kurilla and General Langley, what gap will this fill that is not in the base budget?

General KURILLA. All of these gaps are identified in the executive summary and the operational impact if not funded portion of question #5 that outlines each Unfunded Priority List items and risk associated.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) addresses an emerging requirement with the return to persistent presence in Somalia that was identified, approved by the President, and planned out of sequence with the Department's yearly Program Budget Review (PBR) cycle. It addresses unprogrammed costs to the Services for Intelligence, Surveillance, and Reconnaissance (ISR) not identified within the Department's recently concluded fiscal years 2024 to 2028 PBR. It addresses un-programmed costs for Command and Control (C2) Resiliency to address a threat that emerged after USAFRICOM's Program Objective Memorandum (POM) fiscal years 2024 to 2028 submission to establish a standalone, on-continent network necessary for a resilient Defense Ecosystem. Finally, the Commercial Satellite Communications (COMSATCOM) UPL will compensate for the shortage of communication access across the African continent since USAFRICOM's POM fiscal years 2024 to 2028 submission.

11. Senator WARREN. General Kurilla and General Langley, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

General KURILLA. The capabilities identified in our Unfunded Priorities List all serve to enhance CENTCOM's support of the objectives outlined in the U.S. National Security Strategy, National Military Strategy, and National Defense Strategy.

The National Military Strategy and National Defense Strategy both identify the People's Republic of China as the Nation's pacing challenge and Russia as its acute threat. Meanwhile, the National Defense Strategy identifies Iran and Violent Extremist Organizations as persistent threats. All of these threats and challenges are active in the CENTCOM region. The systems, programs, and capabilities identified in the CENTCOM Unfunded Priorities List all serve to address them.

The CENTCOM region holds the greatest risk of derailment of the National Security Strategy and the National Defense Strategy, both of which correctly prioritize the Indo-Pacific region. A flashpoint with Iran, a crisis in the world's central region, a successful large-scale attack on a partner country, or an attack on the Homeland by a Violent Extremist Organization all will likely require a response, drawing unplanned resources away from higher priority theaters into the Central Command region. Therefore, the CENTCOM Unfunded Priorities List can serve as a hedge against derailment of national strategy.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) addresses capabilities that fully support National Defense Strategy (NDS) priorities, the National Military Strategy (NMS) in accordance with the concept of Strategic Discipline, the Department's NDS-Implementation (NDS-I) Memo, and the USAFRICOM NDS-I Memo. For example, the 2022 NMS tasks USAFRICOM to reinforce diplomacy and strengthen relationships with Allies and Partners. Our return to Somalia and partnership with the administration of Somali President Hassan Sheikh Mohamud, is vital in the fight against Violent Extremist Organizations (VEOs) in the region. Further, this requirement fully supports the Department's direction in the recently published fiscal years 2025 to 2029 Defense Planning Guidance dated 22 February 2023. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL will further the Command's efforts to monitor, react to, and shape the strategic environment while fully aligning with the NDS's approach to Africa. Both the Command and Control (C2) Resiliency and Commercial Satellite Communications (COMSATCOM) UPLs support the NDS, as it calls on the Joint Force to build a resilient Defense Ecosystem. They are also fully supported by the NMS in accordance with the concept of Strategic Discipline, as well as the Department's NDS-I Memorandum.

12. Senator WARREN. General Kurilla and General Langley, what is the operational requirement and how does this Unfunded Priorities List support current or future operations?

General KURILLA. The response to question 5 offers a detailed description of the operational requirement for each item on our Unfunded Priorities List.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) request supports establishing an operational/persistent presence in Somalia

that prioritizes strategic access, confines Violent Extremist Organizations, and limits competitor military expansion. This requirement enhances the reliability of existing airfield infrastructure and life support areas which addresses operational risks at the USAFRICOM posture locations in support of persistent presence in Somalia. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL will increase services provided by specialized, manned B–350 aircraft and contract MQ–9 aircraft. These platforms provide intelligence collection operations with sufficient range and flexibility in deployment locations, and are politically acceptable on the African continent. The Command and Control (C2) Resiliency UPL addresses an emerging threat for increased capability and required resiliency particularly in the area of cyber security needs for the USAFRICOM C2 enterprise network. The Commercial Satellite Communications (COMSATCOM) UPL fulfills the need to communicate with units in austere locations supporting all USAFRICOM assigned missions/operations on the Africa continent.

13. Senator WARREN. General Kurilla and General Langley, what is the operational impact if this Unfunded Priorities Lists is not funded in fiscal year 2024?

General KURILLA. The response to question 5 offers a detailed description of the risk associated with failure to fund each item on our Unfunded Priorities List.

General LANGLEY. For the return to a persistent presence in Somalia, if unfunded, there would be a direct and significant increase in risk to mission and risk to force for United States forces operating in/near East Africa If the High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL is not funded, the threat to U.S. forces conducting operations in the USAFRICOM area of operations (AOR) will remain high risk. This is due to the limitations of available airborne ISR platforms and the need to balance force protection against operational objectives. In a not-so-distant past, 83 percent of available ISR assets committed to an AFRICOM operation were re-tasked to support another Command's operation. For the Command and Control (C2) Resiliency UPL, lack of funding would add risk to on-continent USAFRICOM operations and Enterprise Network (AEN) resiliency if the European based network were to be compromised. By not funding the Commercial Satellite Communications (COMSATCOM) UPL, force protection/security personnel, C2 communications, day-to-day troop communications, base support activities, as well as special operations units working with local partner forces at continent posture locations would incur significant risk to force and risk to mission.

14. Senator WARREN. General Kurilla and General Langley, are there plans to include this item in the fiscal year 2025 base budget?

General KURILLA. As we do every year, we will coordinate with the Military Services for the fiscal year 2025 base budget requirements.

General LANGLEY. Yes, USAFRICOM will continue to advocate for our Command's Unfunded Priority List (UPL) items to be included in the DOD fiscal year 2025 base budget. We do this through our annual Advocacy Letters provided to the Services and many Agencies, along with the annual DOD Program Budget Review (PBR) process.

15. Senator WARREN. General Kurilla and General Langley, why was this Unfunded Priorities List not included in the fiscal year 2024 President Budget (PB) submission?

General KURILLA. These items were submitted to the Military Services. Based on internal priorities, the Services did not include these items in their Fiscal Year 2024 President's Budget submissions.

General LANGLEY. The fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) includes the Presidential-ordered return to persistent presence in Somalia. This is an emerging requirement directed by the President and out of sequence with the Department's Annual Program Budget Review (PBR) cycle. Somalia Persistence Presence addresses un-programmed cost to the Services not identified within the Department's recently concluded fiscal year 2024 PBR. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL addresses Joint Staff validated, but consistently unfulfilled requirements for the USAFRICOM area of operations. The Command and Control (C2) Resiliency requirement emerged after USAFRICOM's Program Objective Memorandum (POM) fiscal years 2024 to 2028 submission. The Commercial Satellite Communications (COMSATCOM) requirement was included in USAFRICOM's POM fiscal years 2024 to 2028 submission but ultimately not funded by the Army.

16. Senator WARREN. General Kurilla and General Langley, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

General KURILLA. We rely on the Services and Service Support Agencies to select the vendors and let the contracts to deliver the capability we require to meet our National Defense Strategy objectives.

General LANGLEY. USAFRICOM does not have acquisition authority and can only provide limited information. For the fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) items, the return to persistence presence in Somalia will be executed via multiple means to include a combination of troop labor, the Army's Logistics Civil Augmentation Program (LOGCAP) life support task orders (incoming performance contractor is Fluor), and through competitively awarded supply and construction contracts by cognizant contracting offices, in accordance with the Federal Acquisition Regulation (FAR) and associated supplements. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL requirements will be executed through the current USAFRICOM Reconnaissance Intelligence Exploitation Services (ARIES) contract. The ARIES contract is administered by the General Services Administration (GSA) and was awarded to Smartronix, LLC. The Command and Control (C2) Resiliency UPL requirements will be satisfied by a variety of information technology (IT) equipment using government contracts. The Commercial Satellite Communications (COMSATCOM) UPL will be executed on an existing USAFRICOM COMSATCOM contract with SES S.A. and Peraton.

17. Senator WARREN. General Kurilla and General Langley, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?

General KURILLA. As a Combatant Command, we are reliant on the Services and Services Support Agencies to meet with vendors.

General LANGLEY. USAFRICOM does not have acquisition authority. In general, USAFRICOM does not meet with specific vendors, as this is a function of our lead service components and subordinate contracting activities. USAFRICOM publishes guidance on engagements with non-Federal entities in an internal instruction. USAFRICOM J5 Strategy, Engagement, and Programs Directorate has a non-Federal entity "gatekeeper" that coordinates engagements with members of industry.

18. Senator WARREN. General Kurilla and General Langley, what is your history with this vendor? Please detail when the relationship began, the number of contracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor.

General KURILLA. As a Combatant Command, we are reliant on the Services and Services Support Agencies to meet with vendors.

General LANGLEY. USAFRICOM does not have acquisition authority. In general, USAFRICOM does not meet with specific vendors, track the number of contracts bid by a vendor, or track the number of contracts awarded to a vendor. These are functions performed by our lead service components and subordinate contracting activities. There are no personal relationships established.

19. Senator WARREN. General Kurilla and General Langley, has anyone who formerly worked for your command represented the vendor in meetings?

General KURILLA. We do not participate in vendor meetings and do not track vendor representation.

General LANGLEY. USAFRICOM Office of Legal Counsel provides comprehensive post-employment guidance to outgoing personnel. USAFRICOM does not prohibit or track employment of former personnel by commercial entities. However, those prospective employees are subject to post-service employment rules as stipulated in the Code of Federal Ethics.

20. Senator WARREN. General Kurilla and General Langley, what is their name, what was their position, and when did you meet with them?

General KURILLA. We do not participate in vendor meetings and do not track vendor representation.

General LANGLEY. USAFRICOM Office of Legal Counsel provides comprehensive post-employment guidance to outgoing personnel. USAFRICOM does not prohibit or track employment of former personnel by commercial entities. However, those prospective employees are subject to post-service employment rules as stipulated in the Code of Federal Ethics.

21. Senator WARREN. General Kurilla and General Langley, in which city/State will the Unfunded Priorities Lists be executed?

General KURILLA. We do not participate in vendor meetings and do not track vendor representation.

General LANGLEY. USAFRICOM does not have acquisition authority and can only provide limited information. Somalia Persistent Presence, High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) and Command and Control (C2) Resiliency, would be executed Outside Continental United States (OCONUS). The Commercial Satellite Communications (COMSATCOM) UPL would be executed in Manassas, VA, Tampa, FL, and Herndon VA.

22. Senator WARREN. General Kurilla and General Langley, is this requirement on an existing contract? If so, with who and what is the history of the contract?

General KURILLA. We rely on the Services and Service Support Agencies to select the vendors and let the contract to deliver the capability we require to meet our National Defense Strategy objectives.

General LANGLEY. USAFRICOM does not have acquisition authority and can only provide limited information. For the fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) items, the return to a persistent presence in Somalia would be executed via multiple means to include a combination of troop labor, the Army's Logistics Civil Augmentation Program (LOGCAP) life support task orders (incoming performance contractor is Fluor), and through competitively awarded supply and construction contracts by cognizant contracting offices, in accordance with the Federal Acquisition Regulation (FAR) and associated supplements. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL requirements would be executed on an existing contract with Smartronix, LLC that currently provides contract ISR services. The current contract was awarded in August 2022 and is a follow-on to a previous contract. The Command and Control (C2) Resiliency UPL requirements will be satisfied by a variety of information technology (IT) equipment using government contracts. The Commercial Satellite Communications (COMSATCOM) UPL requirements would be executed via multiple existing contracts with SES S.A. and Peraton.

23. Senator WARREN. General Kurilla and General Langley, what is the anticipated contract award date if the Unfunded Priorities Lists receives funding?

General KURILLA. We rely on the Services and Service Support Agencies to select the vendors and let the contract to deliver the capability we require to meet our National Defense Strategy objectives.

General LANGLEY. USAFRICOM does not have acquisition authority. Due to the critically of these Unfunded Items, USAFRICOM would seek our Components to award contracts as soon as funds are made available.

24. Senator WARREN. General Kurilla and General Langley, what funding lines are associated with this Unfunded Priorities Lists?

General KURILLA. Development of the Unfunded Priority List is part of our annual research and budget analysis, a core staff function for U.S. Central Command, and elicits no additional cost.

General LANGLEY. The funding lines associated with our Unfunded Priorities List are identified in the answer to question 5.

Somalia Persistent Presence

APPN	BSO	LI	BA	AG	SAG	PE	Fiscal Year 2024 Request ($ in millions)
OMN	60	1C6C	01	1C	6C	0201109N	$88.6
OMN	60	1C1C	01	1C	1C	0201109N	$26.5
OPN	60	126	07		02	0201109N	$36.9
Total							$152

High-Risk ISR

ROC	SAG	PE	Fiscal Year 2024 Request ($ in millions)
8K0	411	0303025A	$95.3
8K0	411	0303025A	$2.1
8K0	411	0303025A	$121.7
8K0	411	0303025A	$4.7
Total			$223.8

Enterprise C2 Network Resiliency

LIN	BSA	SAG	Army PE	OSD PE	Fiscal Year 2024 Request ($ in millions)
3002BD3000	02	93	BE4162000	0219900A	$10
Total					$10

Commercial Satellite Communications (COMSATCOM)

LIN	SAG	Army PE	OSD PE	Fiscal Year 2024 Request ($ in millions)
	141	141209000	0201109A	$12
Total				$12

25. Senator WARREN. General Kurilla and General Langley, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?

General KURILLA. No single Unfunded Priorities List item is split between multiple appropriations.

General LANGLEY. USAFRICOM requires all appropriations to be funded simultaneously to synchronize efforts within each individual fiscal year 2024 USAFRICOM Unfunded Priority List (UPL) item.

26. Senator WARREN. General Kurilla and General Langley, how much was enacted and obligated (or expended for research, development, test, and evaluation (RDT&E)) in fiscal years 2022 to 2023 for this requirement?

General KURILLA. The services have expended funds for similar types of capabilities, but we cannot identify specific allocations to our requirements identified in the UPL.

General LANGLEY. No research, development, test, and evaluation (RDT&E) funding was enacted or obligated for any of our fiscal year 2024 Unfunded Priority List (UPL) items in fiscal years 2022 to 2023.

27. Senator WARREN. General Kurilla and General Langley, how much was requested in fiscal year 2024 for this requirement?

General KURILLA. The services have expended funds for similar types of capabilities, but we cannot identify specific allocations to our requirements identified in the UPL.

General LANGLEY. Given the emergent nature of the Somalia Persistent Presence requirement, execution represents an un-programmed cost to the Services and was not identified within the Department's recently concluded fiscal years 2024 to 2028 Program Budget Review (PBR). Consequently, this fiscal year 2024 Unfunded Priority List (UPL) funding request is USAFRICOM's attempt to secure funding. For the High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) UPL item, USAFRICOM requested $223.8 million in its Program Objective Memorandum (POM) fiscal years 2024 to 2028 submission through the Army and DOD's fiscal

years 2024 to 2028 Program Budget Review (PBR) processes. The Command and Control (C2) Resiliency item emerged after the Army's POM process for fiscal year 2024. The Commercial Satellite Communications (COMSATCOM) item was included in USAFRICOM's POM fiscal years 2024 to 2028 submission through the Army for $12.0 million.

28. Senator WARREN. General Kurilla and General Langley, is there a tail associated with this Unfunded Priorities Lists?

General KURILLA. Some of the capabilities will require sustainment after fielding and integration. Exact costs will be driven by chosen solutions to meet the requirements, and we will incorporate the costs in future budget requests.

General LANGLEY. The return to persistent presence in Somalia will require annual basic life support and communications sustainment. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) and Commercial Satellite Communications (COMSATCOM) UPLs will continue to be a requirement at the increased level, as these services will be required across the Fiscal Year Defense Plan. The Command and Control (C2) Resiliency UPL will have an annual sustainment requirement and an equipment refresh requirement every 3 years.

29. Senator WARREN. General Kurilla and General Langley, is any tail funded in the future years defense plan?

General KURILLA. Once solutions are identified and resourced, we will incorporate the associated costs in future planning and programming.

General LANGLEY. Tails associated with the return to persistent presence in Somalia have not been funded in the future years defense plan due to the emerging nature of the requirement. Tails for our other three Unfunded Priority List (UPL) items, i.e., High-Risk Intelligence, Surveillance, and Reconnaissance (ISR), Command and Control (C2) Resiliency, and Commercial Satellite Communications (COMSATCOM) requirements are included in USAFRICOM's POM fiscal years 2025 to 2029 submission to the Army.

30. Senator WARREN. General Kurilla and General Langley, please describe how much the requirement will cost per year for the next 5 years.

General KURILLA. The breakdown of associated costs will be driven by selected solutions to our required capabilities and how the services integrate those requirements into their budgets.

General LANGLEY. The return to persistent presence requires annual basic life support and communications sustainment is approximately $97.0 million per year. The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) cost per year is $224.0 million. The Command and Control (C2) Resiliency requirement is $600,000 per year with an equipment refresh cost of approximately $14.0 million in fiscal year 2027. The Commercial Satellite Communications (COMSATCOM) requirement is $12.0 million per year.

31. Senator WARREN. General Kurilla and General Langley, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or Unfunded Priorities Lists.

General KURILLA. We have not previously requested funding for the requirements identified in our UPL. The capabilities identified address emerging threats and changes in our operational environment.

General LANGLEY. Given the emergent nature of the return to persistent presence in Somalia, the requirements were not identified within the Department's recently concluded fiscal years 2024 to 2028 Program Budget Review (PBR). The High-Risk Intelligence, Surveillance, and Reconnaissance (ISR) requirement was submitted as an Unfunded Priority List (UPL) item for fiscal year 2023 (Requested: $219.4 million, Funded: $50 million). In addition, the requirement was included in USAFRICOM's fiscal years 2024 to 2028 PBR submission and USAFRICOM's Program Objective Memorandum (POM) fiscal years 2024 to 2028 and fiscal years 2025 to 2029 submissions. The Command and Control (C2) Resiliency requirement was submitted as an UPL item in fiscal year 2023 (Requested: $10.0 million, Funded: $0.0 million). The requirement was included in USAFRICOM's POM fiscal years 2025 to 2029 submission to the Army. The Commercial Satellite Communications (COMSATCOM) requirement was submitted as an UPL item in fiscal year 2023 (Requested: $17.75 million, Funded: $0.0 million). The requirement was included in USAFRICOM's POM fiscal years 2025 to 2029 submission to the Army.

32. Senator WARREN. General Kurilla and General Langley, if the requirement is not included in the future years defense plan, will that be rectified in the next Pro-

gram Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

General KURILLA. If a decision is made to fund any of the capabilities in our UPL, we will incorporate the associated costs in future submissions to the service POMs.

General LANGLEY. USAFRICOM has requested the Services include these requirements in the next Program Objective Memorandum.

33. Senator WARREN. General Kurilla and General Langley, please provide photos of this requirement for visual aid.

General KURILLA. We rely on the Services and Service Support Agencies to select the vendors and let the contract to deliver the capability we require to meet our National Defense Strategy objectives. Because the Services will select the vendors, we do not know who they will select; therefore, do not have pictures.

General LANGLEY.

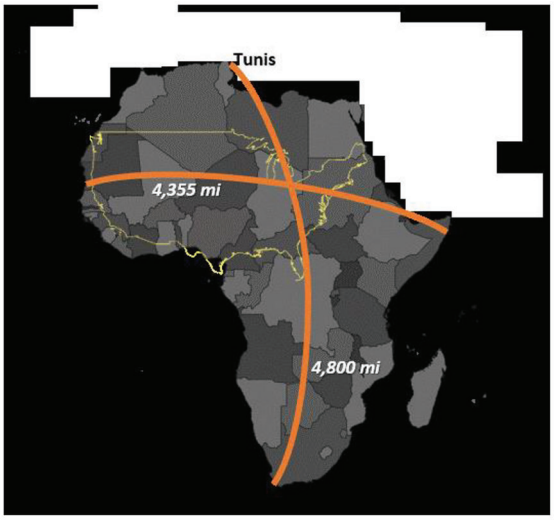
Somalia Persistent Presence:





High-Risk ISR:







C2 Resiliency:



COMSATCOM:





CIVILIAN HARM MITIGATION

34. Senator WARREN. General Kurilla and General Langley, how many subordinate commanders are currently authorized to provide *ex gratia* payments under section 1213 within U.S. Central Command (CENTCOM) and AFRICOM, respectively?

General KURILLA. I have retained approval authority to provide ex gratia payments at my level. However, each of my subordinate commanders at echelon across CENTCOM actively considers ex gratia payment when reviewing each civilian casualty scenario in theater that meets statutory requirements.

General LANGLEY. USAFRICOM has not delegated ex gratia payment authority to any subordinate commanders.

35. Senator WARREN. General Kurilla and General Langley, what training does CENTCOM and AFRICOM, respectively, provide to commanders on providing *ex gratia* payments? Please provide details on what this training consists of, the training length, how often a commander receives an updated training on this, and when this training was last updated.

General KURILLA. In concert with my guidance, all my subordinate commanders receive legal consultation regarding ex gratia payment statutory authority.

General LANGLEY. AFRICOM does not provide training to subordinate commands on providing *ex gratia* payments. The Office of Under Secretary of Defense Memorandum on Interim Regulations for Condolence or Sympathy Payments to Friendly Civilians for Injury or Loss That Is Incident to Military Operations dated 22 June 2022 states that "The authority to approve *ex gratia* payments under section 1213 is delegated to geographic commanders. Geographic combatant commanders may further delegate this authority to subordinate commanders". CDR AFRICOM has retained this authority for AFRICOM, and therefore does not require a training program for subordinate commanders.

36. Senator WARREN. General Kurilla and General Langley, for how many cases did CENTCOM and AFRICOM, respectively, consider providing *ex gratia* payments? If it did not ultimately provide an *ex gratia* payment after considering it, please detail why this was the case.

General KURILLA. My subordinate commanders consider ex gratia payments for all incidents of damage, personal injury, or death that meet the conditions of section 1213 of the National Defense Authorization Act for 2020. To date, during my time as CENTCOM commander, we've not had an event that meets these conditions.

General LANGLEY. Since January 1, 2021, USAFRICOM has conducted six civilian casualty assessments with one being substantiated and five unsubstantiated. The one substantiated assessment was from a U.S. airstrike conducted on 1 January 2021 in support of operations. USAFRICOM works with the Federal Government of Somalia and the United States Department of State to determine the appropriate measures for civilian casualty response, including *ex gratia.*

37. Senator WARREN. General Kurilla, the Department of Defense (DOD) admitted to 12 civilian deaths and 2 civilian injuries resulting from United States military operations in Afghanistan in 2021 in its "Annual Report on Civilian Casualties in Connection with United States Military Operations in 2021". Yet the Department of Defense only made one ex gratia payment in 2021 for the death of a civilian in Afghanistan on January 8, 2021. Why has CENTCOM failed to provide these payments despite an annual $3 million authorization from Congress to do so?

General KURILLA. I intend to offer ex gratia payment to the family from the August 29, 2021 strike in Kabul that tragically killed ten civilians once the entire family has safely arrived in the United States.

38. Senator WARREN. General Kurilla, how much was the ex gratia payment that CENTCOM provided for the death of one civilian in Afghanistan on January 8, 2021?

General KURILLA. An ex gratia payment of $5,000 was delivered directly to the primary beneficiary of the civilian killed in that event.

39. Senator WARREN. General Langley, the Department of Defense admitted to 3 civilian injuries resulting from United States military operations in Somalia in 2021 in its "Annual Report on Civilian Casualties in Connection with United States Military Operations in 2021". Yet the Department of Defense did not make any ex

gratia payments. Why has AFRICOM failed to provide these payments despite an annual $3 million authorization from Congress to do so?

General LANGLEY. In June 2021, USAFRICOM released its Civilian Casualty Assessment Quarterly Report; which substantiated three civilian casualties following a United States airstrike in the vicinity of Qunyo Barrow, Somalia, on January 1, 2021. After a thorough assessment of the information and circumstances following the January 1, 2021, airstrike, USAFRICOM assessed that more likely than not, the airstrike inadvertently injured three (3) civilians. USAFRICOM, working with the Federal Government of Somalia and the United States Department of State, determines the applicable actions for civilian casualty response, including *ex gratia.* To date, no individuals have been identified or organizations representing the victims have come forward. Because al-Shabaab has access to public information about United States military operations, the embassy or partner may determine it is not safe for individuals to receive monetary compensation or public recognition in the media. Al-Shabaab regularly taxes citizens and punishes them for perceived complicity with its enemies, including the United States. USAFRICOM's ability to ensure al-Shabaab would not seize *ex gratia* payments or punish civilians is limited. The limited number of United States military personnel in Somalia and the potential impacts to United States force protection are considered when identifying the feasibility of a U.S. representative meeting with prospective *ex gratia* recipients.

40. Senator WARREN. General Kurilla and General Langley, what steps is CENTCOM and AFRICOM, respectively, taking to use *ex gratia* payments more frequently when there are civilian casualties resulting from U.S. military operations?

General KURILLA. My commanders and I will actively consider *ex gratia* payments for each civilian casualty that meets the statutory and regulatory requirements. When applicable, we also consider beneficiary requests made under the Foreign Claims Act, as well as all other authorized measures to provide redress for any civilian casualties.

General LANGLEY. USAFRICOM's approach and response to civilian harm is based on legal, moral, strategic, operational, and other military considerations. USAFRICOMs response efforts reflect on U.S. and our professional military values, including the importance of preserving human life. Under the law of war, commanders, at all levels, have a great responsibility to exercise the leadership necessary to reduce the risk of harm to civilians and civilian objects. USAFRICOM demands that our leaders demonstrate moral leadership in the conduct of combat operations, maintain the support of partner s and vulnerable populations, and avoid unnecessary civilian harm. An "*ex gratia* payment" may be one of several possible response options that might be appropriate for DOD to take when U.S. military operations injure or kill a civilian or damage or destroy civilian property. Other possible response options could include an acknowledgement of responsibility, medical care, or other appropriate measures that may be consistent with mission objectives and applicable law. Such action help express condolences, sympathy, or goodwill, and are used to support mission objectives. Such actions are not required by law, does not constitute an admission of wrongdoing, and is not for the purpose of compensating the victim or the victim's family for their loss. Any *ex gratia* will be in accordance with Section 1213 of Public Law 116–92 and DOD regulations for implementing the authority in section 1213 to make payments. USAFRICOM adheres to the Office of the Under Secretary of Defense Memorandum on Interim Regulations for Condolence or Sympathy Payments to Friendly Civilians for Injury or Loss That Is Incident to Military Operations dated 22 June 2022. AFRICOM, when allegation is received, considers all the relevant factors, determines the cause of the damage, injury, or death, determines whether the prospective recipient is "friendly to the U.S.", obtains legal advice, and then compiles, maintains, and submits a written record of the decided ex-gratia action.

41. Senator WARREN. General Kurilla and General Langley, how does CENTCOM and AFRICOM, respectively, plan to accurately apply the "more likely than not" standard of credibility for reports of civilian casualties amidst concerns from a RAND Corporation report on "U.S. Department of Defense Civilian Casualty Policies and Procedures" that DOD applies a standard that is "higher than advertised" and "often required having positive proof indicating civilian harm in military information"?

General KURILLA. CENTCOM has fully implemented the August 2022 Department of Defense Civilian Harm Mitigation and Response Plan, to include the standard that civilian casualties were more likely incurred than not. We will have no problem applying this standard to any kinetic situation in our theater.

General LANGLEY. USAFRICOM takes stringent measures to prevent civilian casualties. Protecting civilians remains a vital part of the command's operations to promote greater security for all Africans. USAFRICOM, when it identifies or is notified of a civilian casualty allegation, seeks out and considers all public and classified sources of available information when deciding if civilian casualties "more likely than not" occurred as the result of an USAFRICOM operation.

USAFRICOM leverages information from Non-Government Organizations, public and social media venues, and all-sources of intelligence capabilities available at the time to determine the credibility of the allegation and to as accurately as feasible determine the "more likely than not" standard of credibility. USAFRICOM continues to be as transparent as possible by providing a quarterly civilian casualty report to the public through its public website and provide the public the ability to report any allegations of civilian casualties in their native language. USAFRICOM is confident in their processes and capabilities of their people to mitigate the potential for civilian casualties, but also recognizes the absolute necessity for continuous assessments and improvements of those same processes and capabilities.

42. Senator WARREN. General Kurilla and General Langley, what steps is CENTCOM and AFRICOM, respectively, taking to give proper weight to civilian casualty reporting from outside sources?

General KURILLA. In any report or concern of civilian harm, CENTCOM incorporates and gives weight to credible information provided by Non-Governmental Organizations, eyewitnesses, or media outlets.

General LANGLEY. USAFRICOMs policy is to assess all allegations of civilian casualties regardless of source, especially outside sources. For example, in 2021 all reports of potential civilian casualties that USAFRICOM assessed were from public sources such as news media and social media accounts, with few reports received from NGO's or through the electronic form on USAFRICOM's website. Additionally, USAFRICOM reconsiders existing assessments of civilian causality if new relevant information becomes available through any source to include new information received from NGO's, media reporting, the USAFRICOM Civilian Causality Portal, or other outside organizations.

43. Senator WARREN. General Kurilla and General Langley, what steps is CENTCOM and AFRICOM, respectively, taking to proactively seek out and incorporate information regarding civilian casualties from external sources, such as nongovernmental organizations, in assessing and investigating reports of civilian casualties resulting from U.S. military operations?

General KURILLA. Our leadership in Tampa as well as our operational and component commands across the region have established relationships with international and regional Non-Governmental Organizations that report civilian harm. We also routinely coordinate with regional media outlets on sensitive issues. In the event of a report of civilian casualties we will not wait for information to come in to us; we will activate these networks and aggressively seek analysis, eyewitness reports, and open source information.

General LANGLEY. USAFRICOM investigates allegations of United States military-caused civilian casualties regardless of source. USAFRICOM proactively identifies claims of civilian harm from United States operations by monitoring media websites used in Africa, public social media, and through USAFRICOM's public website. Maintaining channels of communication for engagement with civil society organizations and international organizations, including those that engage in or support humanitarian activities, assist USAFRICOM's efforts to ensure that the Command's assessments are accurate. USAFRICOM encourages these organizations to assist in efforts to reduce civilian harm. USAFRICOM has had several meetings with non-governmental organizations (NGO's) to learn their processes and to establish better lines of communication, which facilitates the discussion of civilian harm prevention. In July 2022, USAFRICOM hosted a Protection of Civilians Working Group with an NGO that operates on the African continent.

44. Senator WARREN. General Langley, according to the "Annual Report on Civilian Casualties in Connection with United States Military Operations in 2021", AFRICOM reopened an assessment regarding reports that a joint Somali-United States military operation caused civilian casualties on May 9, 2018. Please provide an explanation for why AFRICOM maintained its original conclusion that the report was not credible.

General LANGLEY. USAFRICOM reopened this assessment based on information received in 2021 through the USAFRICOM on-line reporting portal. The Command publicly reported the decision to re-open the assessment to illustrate USAFRICOM's

commitment to thoroughness, accuracy and transparency regarding potential occurrences of civilian harm. After a review of the information provided, USAFRICOM's assessment remained unchanged because the further inquiry did not provide any new details that were not considered in the initial assessment. The events that generated the civilian casualty allegation were not a result of USAFRICOM actions.

45. Senator WARREN. General Kurilla and General Langley, what does CENTCOM and AFRICOM, respectively, consider to be "credible" reports of civilian harm resulting from U.S.-origin arms?

General KURILLA. We evaluate each concern of civilian harm with care and sensitivity to the civilian population. Rather than unambiguous evidence, which is not always available after a kinetic strike, we seek the best assessment of the information available in search of a standard that civilian harm was "more likely than not." We will conduct every such investigation with transparency, and we will give weight to credible on-the-ground reports.

General LANGLEY. Presidential Executive Order 13732, which provides the pre- and post-strike measures to address civilian casualty, is only for U.S. operations involving the use of force and the 2018 NDAA requires an annual report on civilian casualties in connection with U.S. military operations. Neither document requires the U.S. military to conduct, or report on, civilian casualty investigations for non-U.S. military operations including those that may have involved U.S.-"origin arms." USAFRICOM does not formally investigate civilian casualty allegations that do not involve U.S. military personnel conducting operations. For allegations that involve USAFRICOM military operations, this Command determines "credibility" using all reasonably available information to make a determination that the potential exists that a civilian casualty could have occurred. Available information can consist of, but not limited to, video surveillance from Intelligence, Surveillance, and Reconnaissance (ISR) assets, other forms of intelligence collection, munition employment and function data, and post-strike assessments.

46. Senator WARREN. General Kurilla, a January Oxfam report found that "that air raids by the Saudi-led coalition, using weapons solely supplied by the UK and U.S., accounted for a quarter of all attacks" on civilians from January 2021 through February 2022. These air strikes resulted in attacks on hospitals, clinics, and ambulances, and forced people to flee their homes. Has CENTCOM looked into this reporting and what steps has it taken to evaluate the civilian deaths and injuries resulting from Saudi-led coalition attacks in Yemen?

General KURILLA. While CENTCOM has no jurisdiction or legal authorization to conduct a proper investigation into strikes by sovereign states such as the Kingdom of Saudi Arabia, we share our concern to the Saudis over any report of civilian casualties. CENTCOM remains engaged with the Saudis on the importance of avoiding civilian harm and the need to constantly improve methodology and procedures for doing so. We are working closely with the Saudis to enhance their civilian harm mitigation and law of armed conflict training. We also share best practices with the coalition on investigations into allegations of civilian casualties.

47. Senator WARREN. General Kurilla, what steps has CENTCOM taken to address findings from the June 2022 Government Accountability Office report on "Yemen, State, and DOD Need Better Information on Civilian Impacts of U.S. Military Support to Saudi Arabia and the United Arab Emirates", that it is likely that United States-origin arms were used by coalition partners to conduct war crimes in Yemen?

General KURILLA. We have reviewed and continue to aggressively address the findings from this report. We are evaluating mechanisms to report on civilian harm caused by United States defense articles used in Yemen by Saudi or UAE forces. We also seek to develop effective training programs regarding civilian harm mitigation for our Saudi and UAE partners. We also assess the effectiveness of that training.

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

WOMEN, PEACE AND SECURITY

48. Senator SHAHEEN. General Kurilla and General Langley, can you provide an update on how CENTCOM and AFRICOM are implementing the 2017 Women, Peace and Security (WPS) agenda?

General KURILLA. Our WPS program is among our most successful in advancing our regional partnerships to reach a sustainable security and stability. Through the

program, we advocate for women's meaningful participation in their nation's security efforts.

We advise our partners on ensuring women serve as critical actors in their national security. We seek to model this kind of behavior and then export it to our partners. Our WPS program managers have established a baseline assessment for each of our 19 partner countries which will allow us to evaluate progress in the years to come.

We've incorporated the principles of the WPS program into both our Theater Strategy and our Campaign Plan. We've highlighted WPS initiatives within each of our Country Security Cooperation Plans. As the program evolves, we observe growing interest from partners throughout the region.

General LANGLEY. At AFRICOM, we are implementing the 2017 WPS agenda through a 3-Phase approach for the fiscal years 2023 to 2026 timeframe, which we are currently in Phase 2 and portions of Phase 3 of our process.

Phase 1 (Planning and Informing)—entails training AFRICOM staff to serve as Gender Focal Points in relevant issue areas, and establishing and updating WPS doctrine, products, and developing 5-year WPS plans focused on Angola (but on hold given bandwidth), Botswana, Zambia, and Niger (but on hold due to coup).

Phase 2 (Implementing and Executing)—entails ongoing training, integrating WPS equities into AFRICOM Campaign Plan and Order, establishing online resources for AFRICOM staff, and implementing the 5-year WPS plans.

Phase 3 (Operations, Activities, and Investments Integration)—entails integrating Command actions across the range of AFRICOM HQ, Component, and Embassy Offices of Security Cooperation activities. This phase also includes assessments.

49. Senator SHAHEEN. General Kurilla and General Langley, what additional support or resources do you need to better integrate WPS within your structures but also in your efforts with partner forces?

General KURILLA. Across much of the CENTCOM region, the accepted male-dominant social construct combined with regional cultural norms often serve as a challenge to a broader, more rapid WPS application. This obstacle may be reduced through a whole-of-government approach across all instruments of American power applying pressure on partner governments to advance and promote women's security efforts.

We are working additional government funding for our WPS program. For fiscal years 2022 and 2023, CENTCOM maintained a $307,000 shortfall against our requested $492,000 for the WPS program.

General LANGLEY. At AFRICOM, a full-time Gender Advisor onsite and within each of our focus countries is needed to significantly implement our WPS agenda. This would enable us to better respond to a range of Partner requirements, including the development of doctrine, inclusion of gender consideration in DOD security cooperation programs, and solutions to address barriers to women's participation in security.

50. Senator SHAHEEN. General Kurilla and General Langley, how are CENTCOM and AFRICOM looking ahead to ensure the WPS agenda is resilient and will see long-term success?

General KURILLA. The key to long-term success of the program is persistent engagement with willing partners. To that end, we've developed long-duration education and training programs built on the WPS guidelines.

Success of the program will ultimately rely on small progress sustained over time. Rather than moving mountains, we're pushing rocks, with an understanding that small advances will manifest in broader social change into the future.

General LANGLEY. At AFRICOM, we published a first-of-its-kind TASKORD at AFRICOM that required every AFRICOM Directorate and component command to integrate gender considerations into the Command's Operations, Activities, and Investments. The TASKORD also tasked four of our components to develop 5-year WPS plans in coordination with their assigned WPS focus country (i.e. ANGOLA/NAVAF, BOTSWANA/SETAF-AF, NIGER/AFAF, ZAMBIA/CJTF-HOA). This was to ensure a long-term relationship was built specific to WPS support and multi-year WPS programming developed for a designated country.

51. Senator SHAHEEN. General Kurilla and General Langley, how can CENTCOM and AFRICOM integrate Women, Peace, and Security into bilateral and multilateral partnerships in the respective Areas of Operation your command covers?

General KURILLA. We integrate WPS into bilateral and multilateral partnerships by modeling the program's principles within our own forces. We also highlight the strategic value of inclusivity in our own formations, demonstrating the prominence

of American women military leaders. Further, we plan targeted engagements wherein we encourage partners to bring women into their planning and command and control operations. Through anecdotes and engagements, we seek to ensure that our partners appreciate the role women can play in regional security and stability.

General LANGLEY. At AFRICOM, in addition to our WPS TASKORD, our full time Gender Advisor at AFRICOM leads our Gender Network to ensure integration of WPS across Operations, Activities, and Investments with our bilateral and multilateral partnerships. Outside of AFRICOM HQ, our Gender Network includes a full time Gender Advisor at Naval Forces Africa to cover the maritime domain, a full time Gender Advisor at Special Operations Command Africa to integrate into special ops objectives, a full time Gender Advisor at Air Forces Africa to cover the air domain, and a full time Gender Advisor at our only base in Africa, Combined Joint Task Force—Horn of Africa (vacant, actively being advertised), to deploy across the continent and integrate gender considerations into CJTF-HOA requirements.

INFORMATION OPERATIONS

52. Senator SHAHEEN. General Kurilla and General Langley how are CENTCOM and AFRICOM addressing the Wagner Group's information operations and what additional support is required to allow CENTCOM and AFRICOM to more thoroughly counter Wagner information operations?

General KURILLA. We seek to counter the Wagner Group's information operations through our Military Information Support Operations program, which counters the group's messaging and highlights the group's malign behaviors.

General LANGLEY. At AFRICOM, our WPS programing aims to fully integrate women as active agents in their respective country's defense and security spheres. We have assessed that women in our focus countries have different access and influence roles than men that positions them as necessary to help counter malign actors that aim to undermine democracy. AFRICOM recognizes that malign actors integrate gender considerations to achieve an objective, which is why we see the recruitment of women by Al-Shabaab. We can counter malign actors by fully integrating both men and women in defense and security to ensure the military reflects its population, has stronger security initiatives, better identifies early warning signals of terrorism and conflict, and can better counter the negative effects of climate change that results in instability. Last, we are aiming to replicate past Military Information Support Operations (MISO) efforts by executing micro-campaigns with thematic content such as women working to defeat Al-Shabaab in Somalia.

QUESTIONS SUBMITTED BY SENATOR MARK KELLY

ARMED OVERWATCH

53. Senator KELLY. General Kurilla and General Langley, both of your theaters have been plagued with conflict from extremists and terrorist organizations for decades. You both have demonstrated leadership providing armed ISR missions through use of remotely piloted aircraft, modified C–12s, multi-role fighters, and any other platform the DOD has to get the job done. You have collaborated with SOCOM to provide an outstanding and lethal capability-defending our Homeland from terrorists and helping reduce the atrocities committed by extremists worldwide. SOCOM awarded a contract to L3 Harris last year for the development of a new light attack aircraft to conduct Armed Overwatch and Close Air Support. Even as we pivot our 4th and 5th generation aircraft for readiness against peer adversaries, it's critical we don't lose site of the very real threat we face every single day from extremists in Africa and the Middle East. Please describe the importance of Armed Overwatch capabilities in your theaters.

General KURILLA. CENTCOM leverages Armed Overwatch capabilities for a range of critical missions. These assets support force protection, allow battlespace awareness for partner and U.S. forces, and provide indications and warning against strategic threats.

We also employ Armed Overwatch assets in tracking the movement of Violent Extremist Organizations. Finally, we employ these assets for the interdiction of material and financial resources for Iran-backed groups.

General LANGLEY. Our ability to provide armed overwatch in support of our personnel and our partners at remote locations in our AOR is critical. When our teams go beyond the confines of our bases and when we support our African partners at the forefront in the fight against violent extremism, we rely on armed overwatch to keep them safe. A mix of short and long endurance armed aircraft capable of per-

forming ISR, find/fix/finish, direct action, response, and strike missions is the optimal solution for the African continent.

54. Senator KELLY. General Kurilla and General Langley, what assets do you have in theater now that support Armed Overwatch mission requirements, and is that enough?

General KURILLA. Our rotary and fixed wing, manned and unmanned Airborne Intelligence, Surveillance, and Reconnaissance assets throughout the region are heavily tasked with a range of mission sets, including Armed Overwatch. While we have sufficient assets in theater now that support our Armed Overwatch mission requirements, these assets are stretched thin.

Additional dedicated armed overwatch aircraft would allow us to focus our MQ–9s on target development, which could increase our ability to target and defeat ISIS leaders in Iraq and Syria. CENTCOM is allocated a set number of MQ–9 sorties per day in Iraq and Syria for fiscal year 2023. These sorties provide armed overwatch for Coalition and Iraqi forces when conducting counter-ISIS operations. For fiscal year 2024, CENTCOM will receive a 10 percent reduction in MQ–9 sorties per day in support of operations in Iraq and Syria.

General LANGLEY. USAFRICOM utilizes both long range-long endurance and shorter-range armed overwatch platforms. Long flight-times enroute to our objectives limit our access and loiter times to provide force protection in most of our locations on the continent. USAFRICOM is not sourced with enough of these platforms and supplements with contractor owned, contractor operated MQ–9s and B–350's. This frees up government owned, government operated platforms, such as the MQ–1 or MQ–9 to provide armed overwatch for our troops. The current limited resourcing of armed overwatch capable platforms constrains USAFRICOM's ability to conduct operations, which includes advise and assist missions with partner forces in multiple locations simultaneously.

55. Senator KELLY. General Kurilla and General Langley, as we continue to pivot to the Pacific, do you think you'll have the resources needed to sustain your Armed Overwatch and ISR requirements with theater assets?

General KURILLA. We currently have the Armed Overwatch and ISR requirements to meet our National Defense Strategy objectives in Iraq, Syria and areas outside of Afghanistan. We are working to increase our ISR in Afghanistan through the introduction of long duration alternative airborne ISR. However, any loss of resources to another theater of operations will introduce strategic risk, risk to force and risk to mission within the region. Given the presence of the persistent threats of Iran and Violent Extremist Organizations within our region, our theater holds the greatest risk of derailment of the National Defense Strategy. Specifically, a flashpoint incident with Iran or an attack by Violent Extremist Organizations on American interests in the West or the Homeland may require unplanned, unscheduled resources from higher priority theaters outlined in the National Defense Strategy.

General LANGLEY. Currently, I cannot cover all my validated ISR requirements. Air Force and SOCOM ISR divestments will exacerbate this issue. Alternative options, such as shorter endurance aircraft such as those under development by L3 Harris will have limited impact in Africa, they will be limited to a handful of bases from which they cannot cover all our teams on the ground, nor will they be able to provide in extremis support to all our high-risk posts.

56. Senator KELLY. General Kurilla and General Langley, how would a dedicated SOCOM Armed Overwatch capability impact your theater?

General KURILLA. A dedicated SOCOM Armed Overwatch capability may benefit the CENTCOM region if it is additive to our requirements vice used to substitute for current platforms that include manned and unmanned Airborne Intelligence Surveillance and Reconnaissance, rotary and fixed-wing attack aircraft, and gunships.

General LANGLEY. A dedicated armed overwatch platform in a country such as Somalia would be of benefit, as much of the support would be reachable from several airfields and forward staging bases. In West Africa, by contrast, it would require more aircraft at more bases closer to the areas of violent extremist activity where our forces are more at risk. This would come at the cost of adding more bases closer to those areas, such as the Chad-Niger-Nigeria tri-border area and/or south of current staging locations in the nation(s) of Ghana, Togo, or Benin, for example.

VIOLENT EXTREME ORGANIZATIONS IN AFRICA

57. Senator KELLY. General Langley, in addition to my concerns about the malign influence of China and Russia in Africa, I'm also concerned about the situation with terrorist groups and violent extremists across Africa. Last year, your predecessor testified that "7 of the 10 countries with the largest increase in terrorism were in Sub Saharan Africa—with Burkina Faso suffering a 590 percent increase." ISIS and al Qaeda-aligned groups remain a potent and growing threat across much of Africa. In the Sahel region, Jama'at Nasr al-Islam wal Muslimin is continuing to spread and destabilize the region. Moreover, al Shabab and the situation in Somalia poses a direct threat to the Homeland—they have capability, and they have intent. This is extremely concerning, and I have several questions on how Congress can best support DOD to reduce threats and stabilize the region. What ISR capabilities do we have in the region to get after these challenges, and is it enough?

General LANGLEY. USAFRICOM and its components have a layered mix of national and tactical ISR capabilities to counter threats and stabilize the region. They are the full spectrum of intelligence collection to include: GEOINT, SIGINT, HUMINT and OSINT.

No, USAFRICOM does not have enough ISR capabilities and can only achieve ~26 percent of our requirements using a combination of Global Force Management (GFM) and contract ISR. This causes the command to make daily decisions about which operations to support, provide overwatch for VEOs to target, Russian and Chinese activities to monitor, and where else we will have to take risk. It also limits our ability to provide timely indications and warnings support to diplomatic facilities.

58. Senator KELLY. General Langley, what type of ISR would best help you capture VEO activity in Africa?

General LANGLEY. USAFRICOM's greatest ISR needs are for additional Signals Intelligence (SIGINT) and Full Motion Video (FMV) collection. However, equally important is the need for additional linguists and analysts to conduct the processing, exploitation, and dissemination (PED) of material collected.

QUESTIONS SUBMITTED BY SENATOR ROGER WICKER

NAVAL SMALL CRAFT INSTRUCTION AND TECHNICAL TRAINING SCHOOL

59. Senator WICKER. General Langley, as you know, the Naval Small Craft Instruction and Technical Training School (NAVSCIATTS) provides training to foreign partners on small boat operations and maintenance, unmanned aerial systems, and other related skills. What is your assessment of the value that NAVSCIATTS provides to United States Africa Command in support of its theater security cooperation requirements and objectives?

General LANGLEY. African partner nations have difficulty maintaining the readiness of their assets and frequently request assistance with ship and small boat maintenance. NAVSCIATTS provides valuable training to our foreign partners in this critical area. In addition to NAVSCIATTS, the United States Coast Guard Deputy Commandant for International Affairs, utilizing Mobile Training Teams, hosts resident and exportable training classes for African Partner Nations. The wide range of training made available by the USCG Mobile Training Teams is vital to continued logistical and operational expertise within our partner nation's maritime forces. The ability to combine maritime law enforcement training, such as Illegal, Unregulated, and Unreported Fishing, small boat operations, and the International Maritime Officer Course in support of theater security cooperation ensure those requirements are met and exceeded. The USCG international training components are small but mighty in meeting USAFRICOM objectives.

AUTHORIZATIONS FOR THE USE OF MILITARY FORCE

60. Senator WICKER. General Kurilla and General Langley, as Congress examines the future of the 2001 and 2002 Authorizations for the Use of Military Force (AUMF), it would be useful to understand how each of your combatant commands have utilized these authorities. Please provide a list of operations and activities that have been conducted under each of these AUMFs, respectively, since 2013.

General KURILLA. Since 2013, CENTCOM has relied on the 2001 AUMF as the domestic legal basis for its operations in Afghanistan, Iraq, Syria and Yemen, and for other counterterrorism operations conducted throughout the region. Meanwhile, the 2002 AUMF has been employed only as an "additional authority" for operations

in Iraq and Syria in certain circumstances. For example, the 2002 AUMF was employed in the targeting of terrorist threats emanating from Iraq.

General LANGLEY.

ODYSSEY RESOLVE
OPERATION EMINENT SHADOW
OPERATION INVERTED LIGHT
OPERATION JUNIPER MICRON
OPERATION JUNIPER SHIELD
OPERATION NEW NORMAL
OPERATION OCTAVE QUARTZ
OPERATION OCTAVE SHIELD
OPERATION RAINMAKER EXORD MOD 1 and MOD 2
USAFRICOM GREY EAGLE EXORD (MOD 1–7)
USAFRICOM JUNCTION SERPENT EXORD
USAFRICOM LOE 1 OCTAVE SHIELD OPORD
USAFRICOM OCTAVE SHIELD EXORD
USAFRICOM OPERATION OCTAVE SHIELD (OOS) ORDER
OPERATION ODYSSEY LIGHTNING
JUPITER GARRET
JUPITER HERRON
JUPITER ARROW

USAFRICOM does not use the 2002 AUMF. Since 2013, USAFRICOM has conducted counter terrorism operations in Africa under OPERATION EMINENT SHADOW, OPERATION JUNIPER MICRON, OPERATION JUNIPER SHIELD, OPERATION OCTAVE QUARTZ, and OPERATION OCTAVE SHIELD. These operations derive their authority, at least in part, from the 2001 AUMF. The activities conducted under these operations include the authority to use force against organizations determined by the President to have planned, authorized, committed, or aided the terrorist attacks that occurred on September 11, 2001 in order to prevent future attacks against the United States by these organizations. Other activities under these operations include working by, with, and through partners and allies and collecting and sharing intelligence with partners and allies.

61. Senator WICKER. General Kurilla and General Langley, please provide a list of the current and ongoing operations and activities for which each of these authorization for the use of military force (AUMFs), respectively, has been invoked as part of the legal justification.

General KURILLA. CENTCOM relies on the 2001 AUMF as the domestic legal basis for its operations in Iraq and Syria, and for other counterterrorism operations conducted throughout the region. We have no ongoing military activities that rely solely or primarily on the 2002 AUMF.

General LANGLEY.

OPERATION OCTAVE QUARTZ
OPERATION JUNIPER MICRON
OPERATION JUNIPER SHIELD
OPERATION NEW NORMAL
OPERATION OCTAVE VIPER

USAFRICOM currently conducts counter terrorism operations in Africa under OPERATION JUNIPER MICRON, OPERATION JUNIPER SHIELD, OPERATION OCTAVE QUARTZ, and OPERATION OCTAVE SHIELD under the 2001 AUMF. The activities conducted under these operations include the authority to use force against organizations determined by the President to have planned, authorized, committed, or aided the terrorist attacks that occurred on 11 September 2001 in order to prevent future attacks against the United States by these organizations. Other activities under these operations include working by, with, and through partners and allies and collecting and sharing intelligence with partners and allies.

62. Senator WICKER. General Kurilla and General Langley, if the 2001 authorization for the use of military force (AUMF) were repealed, what types of current operations or activities would no longer have a legal basis to continue, and would therefore need to be reevaluated or stopped?

General KURILLA. The 2001 AUMF remains the cornerstone domestic legal basis for ongoing CENTCOM operations against Violent Extremist Organizations such as al Qaeda and ISIS. Repealing it without a replacement would significantly limit our ability to counter Violent Extremist Groups operating within our region.

General LANGLEY. If Congress repeals the 2001 AUMF, we would have to reevaluate or stop the following activities: 1) United States direct action in support of allies

and partners who have come under attack by al Qaeda, ISIS, or associated forces; 2) United States intelligence-sharing with allies and partners that may lead to direct action by allies and partners against al Qaeda, ISIS, or associated forces; and, 3) United States unilateral direct-action operations against al Qaeda, ISIS, or associated forces, consistent with Presidential policies. All three types of operations derive their authority from the 2001 AUMF, which permits the President to use all necessary and appropriate force against organizations that planned, authorized, committed, or aided the terrorist attacks that occurred on September 11, 2001 in order to prevent future attacks against the United States by organizations.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

CHINESE INFLUENCE IN AFRICOM AND CENTCOM

63. Senator COTTON. General Kurilla and General Langley, how are each of your commands working to counter China's influence with our allies in your respective Area of Responsibilities (AOR)? Please describe specific programs or actions.

General KURILLA. Strategic competition with China is deeply manifest in the region. The People's Republic of China aggressively expands its informational, military, and economic instruments of national power across the region. With the recent announcement to normalize relations between Saudi Arabia and Iran, Beijing is expanding its diplomatic influence in the region. China, dependent on the region for more than half of its imported crude oil and more than a third of all its natural gas, is also moving beyond energy-based investments to encompass physical and telecommunications infrastructure that advances its Belt and Road Initiative. 19 of 21 CENTCOM countries have signed a Belt and Road agreement with China. So, we are in a race to integrate with our partners before China can penetrate the region.

To compete with China, we invest deeply and aggressively with partners throughout the region. These abiding partnerships are our strategic advantage over China in the region. These include developing Regional constructs that exclude China and promote regional stability.

Additionally, our innovation efforts—including our innovation Task Forces 39, 59, and 99—are helping to connect our partners to cutting-edge technologies and new processes to meet the regional threats we face.

Additionally, as China expands its activities in the region, CENTCOM illuminates those actions that undermine sovereignty and the rules-based order. Through our public messaging, we continue to counter false narratives offered by our competitors.

General LANGLEY. United States Africa Command (USAFRICOM) continues to position the U.S. as a willing and trusted partner, offering alternatives to PRC cooperation. We are reworking our approach to security cooperation, countering transnational threats, and cooperation with the interagency in the context of competition. We offer the most sought-after security cooperation programs and activities, from training and education in the U.S. through the International Military Education and Training Program; complex joint and multilateral exercises; partner-centric grant assistance; foreign military sales, and financing for quality military training and equipment with an eye toward the sustainability of these investments. In fact, the demand for these programs always outstrips supply. Our efforts are not only focused on defense, but on development and diplomacy. On the development front, USAID continues to have a robust presence in Africa. Their efforts are extensive and long lasting, with a focus on economic viability integral to promoting prosperity and progress. On the diplomatic front, we closely coordinate with our Embassy country teams to ensure advancing of our values and democratic governance. We now have Security Cooperation Offices in almost all our embassies across Africa. We welcome and are increasing defense cooperation with our closest allies and partners in Africa and the Indian Ocean Region. Most of USAFRICOM's Western and Indo-Pacific allies do not see the PRC exclusively as a strategic competitor. Most Western allies see China as an economic competitor, but also a partner at times, and, because the West has been inconsistent in providing economic alternatives to the PRC, many of our African partners ask us not to try to force them away from their Chinese economic projects and agreements. However, our allies and partners often express consistent concerns regarding Chinese illegal, unreported, and unregulated fishing, in conjunction with the detrimental impacts to African food security and stability. We assist partners in responding to this challenge through initiatives to build partner capacity in areas such as Maritime Domain Awareness and Maritime Security. Through these and other efforts, we demonstrate U.S. commitment through a responsive, requirements-driven approach. Additionally, the announce-

ment of PRC building a spaceport in Djibouti may become a concern of allies that have bases there.

U.S. SECURITY PARTNERSHIPS IN AFRICOM AND CENTCOM

64. Senator COTTON. General Kurilla and General Langley, please provide a detailed assessment of how the nations in your AOR view the United States as a security partner, focusing on the aftermath of the Chinese brokered rapprochement between Saudi Arabia and Iran and the disastrous withdrawal from Afghanistan. Do the nations in your AOR see the U.S. as a reliable partner? Why or why not?

General KURILLA. Unlike China, the United States has been in the region for over 75 years. We have invested in the security and stability of the region, and developed deep, abiding partnerships. The United States remains the partner of choice; however, that position is not guaranteed and it is something we must continue to work on with our partners. The United States is viewed as a reliable partner but some regional partners are beginning to hedge with a multi-vector policy based on their perceived uncertainty of our long-term commitment.

The National Defense Strategy states that China is the pacing challenge, Russia is the acute threat and Iran and violent extremist organizations are persistent threats. Some partners view the increase in posture to counter China and Russia as coming at the expense of the Middle East and Levant; therefore, they are uncertain as to the future of the United States long term commitment.

General LANGLEY. The United States remains the security partner of choice in most of Africa. United States military training, professional military education, and exercises are still considered the gold standard. United States equipment, on the other hand, is expensive and often takes a long time to procure. Because of cost and procurement delays, some African partners choose to source equipment elsewhere.

Generally, African nations make defense decisions based on pragmatic assessments of their defense needs, the economic value of a transaction, and the overall political relationship with a partner. African nations tend to avoid predicating decisions on the ideology of a partner or the current status of a partner's global military operations—they don't want to get caught up in great power competition. This has been clearly communicated to United States Defense officials and is demonstrated by African nations' widespread reluctance to formally criticize the Russian invasion of Ukraine.

USAFRICOM maintains enduring and substantive defense relationships with many African states, and USAFRICOM always seeks to expand our engagement on the continent. Defense relationships are only one component of broader U.S. Government policies. This carries implications for where and how we engage in Africa. Many countries in Africa lament the United States' perceived lack of interest in engaging with them on areas of mutual interest and bristle at how long U.S. assistance takes to execute and at the restrictions placed on it. In many countries, the security and economic situation is quickly deteriorating in a way that makes navigating the lengthy and bureaucratic nature of U.S. security cooperation untenable, forcing them to seek assistance from alternative actors like the PRC and Russia and, more recently, countries like Turkey and Israel.

65. Senator COTTON. General Kurilla and General Langley, how are your commands working to reassure allies that the United States remains the preferred partner of choice?

General KURILLA. We reassure our allies through our presence and engagement, and a vision of increased capabilities based on innovation and integration. Our basing, extensive training exercises, operations, and leadership visits all reveal our enduring commitment to the region. Our Foreign Military Sales, information sharing, and innovation efforts speak to our deep commitment to the region.

General LANGLEY. We execute Operations, Investments and Activities to support the AFRICOM campaign plan. We work with our African Partners on countering mutual threats and malign actors through building partner capacity with security cooperation. USAFRICOM, through its campaign plans and component commands, places a premium on engaging with and providing assistance to our partner nations across the full spectrum of our capabilities, to remain the partner of choice. Against some threats like al-Shabaab or ISIS—West Africa our assurance and reassurance may look more like conventional military operations, while in most of the rest of continent we work to remain the partner of choice through security cooperation, engagements, and consistent forward presence. Great examples of our ability to demonstrate forward presence include the use of the USS Hershel "Woody" Williams and our Security Force Assistance Brigade mentor teams. Our security cooperation runs the gamut from large scale multilateral exercises on land such as AFRICAN

LION, or at sea through the EXPRESS exercise series to increase our partners' capabilities to respond to threats and build interoperability. USAFRICOM has a robust engagement schedule, including conferences and key leader engagements, both of which seek to synchronize activities and foster regional dialog on issues of importance.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

REGIONAL AIR AND MISSILE DEFENSE COOPERATION

66. Senator ERNST. General Kurilla, what is the implementation status of the air and missile defense architecture for our allies and partners in the Middle East, as required within 180 days of enactment of the James M. Inhofe National Defense Authorization Act for fiscal year 2023?

General KURILLA. Our allies and partners provide opportunities for cooperative air and missile defense regionally during both steady State and crisis situations by leveraging multi-lateral capabilities, the Regional Security Construct (RSC), and Middle East Air Defense (MEAD) initiatives. These programs allow us to take advantage of partner contributions, increase opportunities for international collaboration, distribute financial burdens, deepen interoperability among systems and operators, and better defend U.S. deployed forces.

The current priority we are working is a Common Shared Air Picture that every partner nation can observe. We also work together in sharing information on missile and Unmanned Aerial System (UAS) threats, both before and after launch. Prelaunch information sharing is crucial to understanding adversary missile and UAS capabilities and intentions, ensuring all partners have the most accurate and up-to-date information, and developing response plans to potential attack.

67. Senator ERNST. General Kurilla, will the report be delivered on time? If not, please explain when the report is anticipated to be delivered and the reason for delay.

General KURILLA. I will defer to the Office of the Secretary of Defense and the State Department on the timing of this report.

68. Senator ERNST. General Kurilla, what is the current State of integrated air and missile defense infrastructure in the region? Please describe the key barriers to further implementation.

General KURILLA. Integrated air and missile defense serves as a top functional priority for CENTCOM. Across the region, we've developed a series of programs and exercises to advance this priority. We are making the most progress with C-UAS.

Specific to the UAS threat—we have just established Red Sands, an experimentation center in Saudi Arabia for new tactics, techniques, procedures, processes, and technology to counter Unmanned Aerial Systems. Red Sands is our partnership with the Royal Saudi Armed Forces to test and experiment and ultimately improve tactics, techniques, and procedures to defeat Unmanned Aerial Systems. Our firm, longstanding military-to-military relationship with the Royal Saudi Armed Forces allowed us to quickly develop and implement the program, which serves as a benefit to both military forces.

We conducted our first Red Sands live fire exercise event in mid-March in the Kingdom of Saudi Arabia. During the live fire, we executed a complex multiple Unmanned Aerial System threat against a layered defense that included both United States and Saudi systems.

We will evolve the program in the coming months, with additional capabilities, systems, and technology. During the next iteration of Red Sands in September, we will defend against more complex drone attacks. While Red Sands is currently a bilateral event, both CENTCOM and the Saudis intend to expand the program to other regional partners in the future.

We have also established Green Sands, a 5-day program to certify every Base Defense Operations Center entering the CENTCOM region against complex theater specific threat-based Unmanned Aerial Systems—prior to deployment into theater. Green Sands will ensure all sections are more capable of defeating complex, multi-drone attacks using multiple systems and platforms.

In addition, Task Forces 39 and 99 constantly test and field new counter-Unmanned Aerial System capabilities, working closely with our partners to implement best practices. The aim is to develop an integrated air and missile defense system to defeat adversary drones, inclusive of electronic warfare, directed energy, traditional systems, AI-based systems, and increased sensors and data collection. For

CENTCOM, this is about taking ideas, concepts, and systems from industry, from our partners, in practice in Ukraine, and applying them to the threat we face in the region. We seek an integrated air and missile defense architecture that is ubiquitous within the region, integrated with our partners, and capable of defending our forces and assets.

Key barriers to implementation to integrated air and missile defense are each country's reticence to share relevant data with all regional partners. Almost all are willing to share with the United States and bilaterally and with many other countries. Many countries are unwilling to share multilaterally but that is slowly changing.

Another barrier to implementation is Foreign Military Sales (FMS). If a partner buys Chinese or Russian equipment we will not allow it to operate on our networks. China and Russia are often viewed by regional partners as more accommodating than the United States, offering lower costs, favorable financing, faster delivery times, and no end-use monitoring agreements. During my trips to the region and calls with regional Chief of Defense, I routinely hear how much faster and easier China's foreign military sales program is than ours. While the American foreign military sales process involves multiple steps going through multiple layers of government bureaucracy, the People's Republic of China can move much faster, often making us non-competitive by comparison.

Our partners have real security needs and they want to invest in American systems. They know that when they "buy American," they buy the best equipment, training, sustainment, and upgrades. They also know that they buy into our bureaucracy.

Streamlining our multi-layered Foreign Military Sales program, allowing us to move at the speed of relevance, would drive down Russia and China's opportunities for influence in the region.

69. Senator ERNST. General Kurilla, what is the status and estimated delivery date of the 10 most important approved Foreign Military Sales supporting integrated air and missile defense for allies and partners to the region?

General KURILLA. Our top ten Foreign Military Sales cases relate to the most significant challenges facing our partners as we reduce our footprint in the region—Integrated Air and Missile Defense and Countering Unmanned Aerial Systems. Many of our Middle Eastern Gulf partners live under constant threat of attack from Iran and its proxies. It is a positive indicator that our partners are seeking to counter existential threats with U.S. systems rather than from our competitors. That said, seven of these ten cases are off track. It is imperative that we continue to work to improve our FMS process and make it more responsive. Otherwise, we risk driving our partners to Russia and China.

Saudi F–15SA

- *Status:* This case is on track. Case is for 84 F–15SA (Saudi Advanced) aircraft and conversion of 70 F–15Ss to the SA, a unique, fly by-wire variant of the aircraft. Total case value is $29.4B.
- *Estimated Delivery Date:* All new production and 20 (of 70) conversion aircraft have been delivered; deliveries of conversion aircraft continue. Final delivery is expected in October 2027.

Saudi Terminal High-Altitude Area Defense (THAAD).

- *Status:* This case is on track. The case is for seven THAAD batteries and 360 Interceptor missiles. Total case value is $13.3 billion. While on track, training associated with this case is at risk due to size of program.
- *Estimated Delivery Date:* For interceptors, delivery is planned from the second quarter for fiscal year 2024 through fiscal year 2028. Initial Operating Capability (IOC) is planned over the period of the second quarter of fiscal year 2025 through fiscal year 2027.

Bahrain Patriots.

- *Status:* This case is not on track due to U.S. Army prioritization and production rate limitations. U.S. Army fill level for Patriot Advanced Capability—3 Missile Segment Enhanced missiles has caused worldwide delivery slippage. Bahrain PAC–3 MSEs delivery delayed 6-months. This case is for two Patriot Fire Control Units (FCUs), 60 PATRIOT PAC–3 MSE missiles, 36 Guidance Enhanced Missile—Tactical (GEM-T) missiles. Total case value is $1.15 billion. Bahrain is one of three countries experiencing Patriot delays.
- *Estimated Delivery Date:* Estimated deliveries of two FCUs is on track for July 2023 and November 2023. Delivery for 36 GEM-Ts is scheduled for 31 May

2023. Delivery of PAC–3 MSEs will begin in the fourth quarter of fiscal year 2024.

UAE Patriot Interceptors

- *Status:* This case is not on track due to U.S. Army prioritization and production rate limitations. U.S. Army fill level for Patriot Advanced Capability—3 Missile Segment Enhanced (PAC–3 MSE) missiles has caused worldwide delivery slippage. UAE PAC–3 MSEs delayed 2 years from original projection. Case is for 452 PATRIOT PAC–3 MSE missiles and related support equipment and services. Total case value is $2.5 billion. UAE is one of three countries that is experiencing delays to PAC–3 MSE deliveries.
- *Estimated Delivery Date:* Delivery projected over the period of fourth quarter of fiscal year 2023 through fiscal year 2025.

Qatar Patriot Interceptors

- *Status:* This case is not on track due to U.S. Army prioritization and production rate limitations. U.S. Army fill level for Patriot Advanced Capability—3 Missile Segment Enhanced (PAC–3 MSE) missiles has caused worldwide delivery slippage. Qatar will experience a two-and-a-half-year delivery delay to remaining PAC–3 MSEs. Case is for 10 Patriot Fire Control Units (FCUs) and 146 PAC–3 Missile Segment Enhancement (MSE). Total case value is $7.3 billion. Qatar is one of three countries experiencing delays to PAC–3 MSE deliveries.
- *Estimated Delivery Date:* To date, the 10 firing units and 114 PAC–3 missiles have been delivered to Qatar. Upcoming deliveries are expected from the second quarter of fiscal year 2024 through fiscal year 2026.

Qatar National Advanced Surface to Air Missile System (NASAMs).

- *Status:* This case is not on track due to an industry delay. Cases support Direct Commercial Sales (DCS) of 20 NASAMS including 80 AIM–120C and 100 AIM–120ER Advanced Medium Range Air-to-Air Missiles (AMRAAM). Total case value is $404 million.
- *Estimated Delivery Date:* To date, 40 of 80 AIM–120Cs have been delivered. We anticipate delivery of the remaining 40 AIM–120C's by the second quarter of fiscal year 2024. 50 of 100 AIM–120ERs are prepared to ship.

Qatar F–15QA

- *Status:* This case is not on track due to multiple radar development and ferry issues. Two cases are for 48 F–15QAs, associated equipment, and construction. Total case value is approximately $14 billion. These cases have experienced multiple delays due to radar development and ferry issues.
- *Estimated Delivery Date:* The next ferry of five aircraft is expected to arrive in Qatar July 2023; this will bring the total to 33 aircraft in Qatar, 3 aircraft will be delivered in the United States in Jul 2023 completing delivery of the 36 tranche of aircraft. The next 12 aircraft begin delivery early 2024.

Qatar Fixed Site—Low, Slow, Small Unmanned Aircraft Integrated Defeat System (FS-LIDS)

- *Status:* This case is on track. The case is for 10 FS-LIDS with Coyote Block 2 Interceptor missiles. Total case value is $544.3 million. On 24 Mar 2023, the Army offered the case to Qatar.
- *Estimated Delivery Date:* Initial delivery is expected 64-months after Qatar signs the case.

Bahrain F–16 Block 70

- *Status:* This case is not on track because of multiple industry delays. The current version of the Airborne Integrated Defense Electronic Warfare Suite (AIDEWS) is no longer in production, and the follow-on Advanced-AIDEWS is not available until July 2025. The case is for 16 F–16V aircraft and associated equipment. Total case value is $2.05 billion.
- *Estimated Delivery Date:* Bahrain's first F–16 Block 70 rolled out March 2023. We anticipate delivery of all aircraft through the third quarter of fiscal year 2024 with AAIDEWS available in July 2025.

Jordan F16 C/D Block 70

- *Status:* This case is not on track due to multiple issues. The case is for 12 F–16s Block 70 aircraft and associated support. Multiple delays in pricing and availability (P&A) data resulted in a near doubling of the price. The total case value is $1.97 billion which will be funded by a combination of Foreign Military Financing (FMF) and Jordanian national funds.

- *Estimated Delivery Date:* We anticipate delivery of the first aircraft in the fourth quarter of fiscal year 2026 with additional deliveries through fiscal year 2028.

70. Senator ERNST. General Kurilla, what is the risk of Chinese and Russian arm sales to United States partners to integrated air and missile defense infrastructure?

General KURILLA. Expanding regional arms sales—particularly in the area of integrated air and missile defense—provides China opportunities to expand its influence and interoperability. More importantly, we cannot integrate Russian or Chinese equipment into our Regional Air and Missile Defense construct. We will not allow Russian or Chinese equipment to operate on our networks.

71. Senator ERNST. General Kurilla, what recommendations do you have for mitigating this risk?

General KURILLA. China is often viewed by regional partners as more accommodating than the United States, offering lower costs, favorable financing, faster delivery times, and no end-use monitoring agreements. During my trips to the region and calls with regional Chiefs of Defense, I routinely hear how much faster and easier China's foreign military sales program is than ours. While the American foreign military sales process involves multiple steps going through multiple layers of government bureaucracy, the People's Republic of China can move much faster, often making us non-competitive by comparison.

Our partners have real security needs and they want to invest in American systems. They know that when they "buy American," they buy the best equipment, training, sustainment, and upgrades. They also know that they buy into our bureaucracy.

Streamlining our multi-layered Foreign Military Sales program, allowing us to move at the speed of relevance, would drive down Russia and China's opportunities for influence in the region.

MARITIME DOMAIN AWARENESS

72. Senator ERNST. General Kurilla, what are the barriers to advancing partner-enabled maritime awareness?

General KURILLA. Maritime domain awareness requires the ability to gather, communicate, and process information to provide a common operational picture and act on that information. Partner nations have a variety of sensors including coastal radars and crewed assets which could be augmented with unmanned technology solutions. We enable the sharing of information as a go-between among partners, facilitating the Maritime Threat Network.

There are not many barriers other than cost to advancing partner-enabled maritime awareness.

SAUDI ARABIA AND IRAN DIPLOMATIC RELATIONS

73. Senator ERNST. General Kurilla, in your personal opinion, what is the impact to United States security interests from the agreement negotiated by Iran and Saudi Arabia?

General KURILLA. The impact to U.S. security interests is not yet fully understood. While a reduction of tensions in the region may yield positive benefits, an agreement is not implementation. We do not believe Iran will adhere to the agreement over the long-term. In the 90 days while Iran and Saudi Arabia were negotiating the agreement, USCENTCOM and partner forces interdicted five major shipments of Iranian arms headed to Houthi fighters; some of which were advanced components like inertial navigation systems for short range ballistic missiles.

We are also concerned about China's role as diplomatic mediator. China seeks to undermine American influence in the region. In addition to the economic, informational, and military instruments of power it has employed in the region, China has now demonstrated its ability to influence the security environment with the diplomatic instrument of national power.

74. Senator ERNST. General Kurilla, in your personal opinion, what do you assess is the impact to our partners from the agreement negotiated by Iran and Saudi Arabia?

General KURILLA. If the agreement truly lowers tension in the region it will provide some benefit to our partners in the region; however, Iranian diplomatic efforts and the actions of the Islamic Revolutionary Guards Corps are historically not aligned. That being said, it remains to be seen as this is still in development.

There is little trust in the Middle East that Iran will fully honor agreements, including this one. The agreement may offer us an advantage by serving as a tool to hold Iran accountable for its malign activities. Further, the agreement may demonstrate China's inability to uphold the agreement in that it will not stop Iran's malign behavior.

75. Senator ERNST. General Kurilla, do you assess that Iran has agreed to cease weapon shipments to the Houthis? Please describe any rationale and supporting facts for an assessment.

General KURILLA. We do not believe Iran has completely ceased weapons shipments to the Houthis at this time. This is based on intelligence, pattern of behavior and partner nation feedback.

76. Senator ERNST. General Kurilla, do you assess that China will have increased access to Iran or Saudi Arabia as a result of this agreement? Please describe the level of Chinese penetration in Saudi Arabia and in Iran.

General KURILLA. Chinese influence and interest in Iran is based on its energy needs, while Iran needs economic investment from China. This agreement can assist in securing those needs as it lowers the tension between Saudi Arabia and Iran as well as stabilizing Chinese energy purchases from both counties.

China penetration in Saudi Arabia is based on Chinese economic interest, particularly energy. While Saudi Arabia has purchased some limited Chinese military equipment—Saudi Arabia continues to purchase Western and United States military equipment. FMS delays can cause further facilitate Chinese penetration in Saudi Arabia.

SECTION 702E

77. Senator ERNST. General Langley, could additional resourcing to the 127 Echo program buy-down risk in AFRICOM?

General LANGLEY. Yes, 127e programs allow U.S. special operations forces to mitigate the threat of attacks against the U.S. Homeland and interests abroad by providing a sustainable option to maintain pressure on violent extremist organizations (VEOs). These programs represent a relatively low-cost, low-risk, high-payoff opportunity to achieve counter-VEO objectives while enhancing partnerships, especially when synchronized with Department of State security assistance and Department of Defense security cooperation programs. In alignment with the recently published National Defense Strategy (NDS), 127e programs facilitate the shift from "U.S.-led, partner enabled" to "partner-led, U.S. enabled" counterterrorism operations. Leveraging 127e-resourced foreign forces in a C-VEO role also enhances USSOCOM's ability to balance limited assets in consideration of NDS priorities—gaining efficiencies where C-VEO and Combatant Command Integrated Deterrence Campaigning are complementary.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

PRC REACTION TO IRANIAN ACTIONS IN THE VICINITY OF THE STRAIT OF HORMUZ

78. Senator SULLIVAN. General Kurilla, China imports approximately 47 percent of its oil supply from the Middle East. China-bound oil tankers must pass through the Strait of Hormuz, into the Indian Ocean, through the Straits of Malacca, and up through the South China Sea to reach Chinese ports. In 2018, the Iranian Government threatened to close the Strait of Hormuz in response to United States oil sanctions. In the 1980's, Iran and Iraq both attacked civilian oil tankers in the Persian Gulf, which led to the United States reflagging Kuwaiti tankers as U.S. ships and escorting them with U.S. Navy vessels. China is well aware both of this history and its reliance on the steady flow of oil through the Strait of Hormuz and into Chinese ports. Considering China's economic and military presence in the CENTCOM AOR and the fact that it now has the world's largest navy, what actions do you think China would take in your AOR if it thought its oil supply might be disrupted or cutoff because of a regional conflict?

General KURILLA. China viewed previous Iranian threats to close or restrict access to the Strait of Hormuz as unacceptably provocative. In the event of a regional contingency, Beijing would prioritize efforts to deescalate through diplomacy by asserting itself as an impartial mediator. Beijing would likely frame the conflict as the consequence of failed United States regional policies while promoting China's Global Security Initiative as an alternative basis for stability, dialog, and dispute resolution.

79. Senator SULLIVAN. General Kurilla, could such a Chinese reaction lead to something like the Tanker Wars of the 1980's?

General KURILLA. Given the possible resource cost and associated risk to its influence, the People's Republic of China is unlikely to engage in a protracted conflict at sea in the Middle East.

HOUTHIS

80. Senator SULLIVAN. General Kurilla, on January 19, 2021, the Houthis were designated as a Foreign Terrorist Organization (FTO), which the current administration revoked 1 month later. Subsequent actions by the Houthis have shown the folly of this decision. The administration has argued the Houthis' FTO designation was revoked to avoid exacerbating Yemen's humanitarian situation and to create conditions for peaceful dialog between that group and the Government of Yemen. Two years later, Yemen's famine persists, the cease-fire agreed to on April 2, 2022 has collapsed, arms continue to flow from Iran to the Houthis, some of which have been interdicted by the 5th Fleet and naval forces from the UK and France, and in February 2022 these terrorists attacked our base in the United Arab Emirates (UAE). Do you see the Houthis as a terrorist organization with the means and motivation to attack our servicemembers and allies in the region?

General KURILLA. The Houthis have engaged in terrorist activities in that past. While the Houthis have the means and capability to threaten U.S. troops and partner forces, currently, they likely do not intend to target U.S. troops in the region. They have shown in the past their capability and will to target partner forces in the region.

CHINESE ILLEGAL UNREGULATED AND UNREPORTED FISHING IN THE AFRICOM AOR

81. Senator SULLIVAN. General Langley, according to your testimony, at least a third of the world's ships engaged in illegal, unreported, and unregulated (IUU) fishing are Chinese. The Office of Naval Intelligence estimates the Chinese illegal fishing fleet is between 12,000 to 17,000 ships. Chinese IUU fishing, occurring throughout your AOR, is too big of a problem for any one country to monitor on its own. I recently returned from a Middle East CODEL [congressional delegation] where I met with the Commander of the 5th Fleet and learned about Task Force 59, which is employing unmanned surface vessels at scale to increase U.S. and partner domain awareness in CENTCOM's AOR. Along with building partner capacity through exercises with the United States Navy and Coast Guard presence, how might AFRICOM employ something like Task Force 59 to detect, monitor, and deter Chinese IUU fishing in your AOR?

General LANGLEY. Chinese illegal, underreported, and unregulated fishing (IUU-F) in my opinion is a significant issue with both the West and the East and an issue my Command, in particular United States Naval Forces Africa (NAVAF), is focusing on for capacity-building efforts to counter IUU-F. IUU-F was prevalent in discussions between United States and Africa partner maritime leadership at the recent Africa Maritime Forces Summit. My Navy component, NAVAF, is the lead to garner broad interagency and international support for a Tri-Service enabled multinational effort on counter IUU-F.

The first step in countering IUU-F is detecting it. Learning from Task Force 59, unmanned resources would allow persistent presence, at a relatively low cost, to defect illicit activity and sharing this information with local partners, thereby building maritime domain awareness. Unmanned resources can then be used to monitor illicit actors once found and allow African partners to take appropriate action. Finally, these actions by our African patterns can be communicated in a public manner resulting in a deterrent effect. NAVAF has several unmanned platforms that can assist our African partners with maritime surveillance, to include fisheries surveillance. Each littoral partner in Africa has different capabilities and capacities, but we realize that unmanned technologies are cost-effective and represent an opportunity for Maritime Domain Awareness capability for our African partners.

CHINESE BASING IN THE AFRICOM AOR

82. Senator SULLIVAN. General Langley, as you point out in your testimony, China seeks to expand its military presence on the African continent with a new base on Africa's Atlantic coast in Equatorial Guinea. It already has a military base in Djibouti, which it is expanding to include a spaceport. Can you describe how more Chinese naval and airbases in AFRICOM impact the global military competition be-

tween the United States and China? For example, what could China do with a military base on Africa's Atlantic Coast that it cannot do now?

General LANGLEY. Beijing has pursued additional military bases and logistics facilities in numerous African countries to support the People's Liberation Army's (PLA's) ability to project and sustain military power at greater distances. China's basing outreach in Africa has focused along the continent's vast coastline. A Chinese military base on the Atlantic coast of Africa would change the strategic geography of the AFRICOM area of responsibility and could pose threats to United States operations. We already have observed a similar pattern in Djibouti, where the PLA has interfered in United States operations via suspected lasing events and airspace disputes. Speaking strictly from a military capabilities perspective, a Chinese naval base on the Atlantic coast of Africa could enable persistent PLA Navy power projection in the Atlantic Ocean that spans from the Cape of Good Hope to the Strait of Gibraltar and westward toward the United States East Coast—a significant expansion of the PLA Navy's current capabilities. Equatorial Guinea is a likely location for this goal. During the past few years, we have seen the Equatoguinean press report that China has signed a basing agreement in the country. In 2021, we also observed China and Equatorial Guinea announcing an agreement to adopt joint strategies to counter piracy in the Gulf of Guinea. These developments suggest the distinct possibility of a Chinese military presence on the Atlantic coast of Africa in the coming years.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MARCH 23, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES
Washington, DC.

UNITED STATES NORTHERN COMMAND AND UNITED STATES SOUTHERN COMMAND

The Committee met, pursuant to notice, at 9:30 a.m. in room SD-G50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, Kaine, King, Warren, Peters, Manchin, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. I would like to call the Committee to order. As an initial point of business, since a quorum is now present I ask the Committee to consider 3,059 pending military nominations. All of these nominations have been before the Committee the required length of time.

Is there a motion to favorably report——

Senator WICKER. So moved.

Chairman REED. Is there a second?

Senator SHAHEEN. Second.

Chairman REED. All in favor say aye.

[Chorus of ayes.]

[The list of nominations considered and approved by the Committee follows:]

MILITARY NOMINATIONS PENDING WITH THE SENATE ARMED SERVICES COMMITTEE WHICH ARE PROPOSED FOR THE COMMITTEE'S CONSIDERATION ON MARCH 23, 2023.

1. **In the Air Force there are 27 appointments to the grade of brigadier general (list begins with David J. Berkland)** (Reference No. 196)
2. **Col. Corey A. Simmons, USAF to be brigadier general** (Reference No. 198)
3. **RADM George M. Wikoff, USN to be vice admiral and Commander, US Naval Forces, Central Command/Commander, FIFTH Fleet and Commander, Combined Maritime Forces** (Reference No. 211)

4. **RADM Frederick W. Kacher, USN to be vice admiral and Commander, SEVENTH Fleet** (Reference No. 212)
5. In the Army there are 101 appointments to the grade of major (list begins with Tolulope O. Akinsanya) (Reference No. 238)
6. In the Marine Corps there is 1 appointment to the grade of lieutenant colonel (Jason W. Price) (Reference No. 257)
7. **In the Air Force Reserve there are 11 appointments to the grade of brigadier general (list begins with Sean M. Carpenter)** (Reference No. 290)
8. **In the Air Force Reserve there are 2 appointments to the grade of brigadier general (list begins with Kristin A. Hillery)** (Reference No. 291)
9. **In the Air Force Reserve there are 10 appointments to the grade of major general (list begins with Elizabeth E. Arledge)** (Reference No. 292)
10. **Col. Carlos M. Caceres, USAR to be brigadier general** (Reference No. 310)
11. **RADM Shoshana S. Chatfield, USN to be vice admiral and US Military Representative to the North Atlantic Treaty Organization Military Committee** (Reference No. 311)
12. In the Air Force Reserve there is 1 appointment to the grade of colonel (Shane K. Doty) (Reference No. 312)
13. In the Air Force Reserve there are 9 appointments to the grade of colonel (list begins with Speight H. Caroon) (Reference No. 313)
14. In the Air Force Reserve there is 1 appointment to the grade of colonel (Brandi Barnard King) (Reference No. 314)
15. In the Air Force Reserve there are 3 appointments to the grade of colonel (list begins with Daniel S. McPherson) (Reference No. 315)
16. In the Air Force Reserve there are 10 appointments to the grade of colonel (list begins with Matthew J. Andrade) (Reference No. 316)
17. In the Air Force Reserve there are 10 appointments to the grade of colonel (list begins with Adam James Cole) (Reference No. 317)
18. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Eric K. Wilke) (Reference No. 318)
19. In the Air Force Reserve there are 13 appointments to the grade of colonel (list begins with Kelli M. Bermudez) (Reference No. 319)
20. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Lisa Carol Giugliano) (Reference No. 320)
21. In the Air Force Reserve there are 7 appointments to the grade of colonel (list begins with Joseph Catalino, Jr.) (Reference No. 321)
22. In the Air Force Reserve there are 9 appointments to the grade of colonel (list begins with James M. Bershinsky) (Reference No. 322)
23. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Gary Monroe Boutz, Jr.) (Reference No. 323)
24. In the Air Force Reserve there is 1 appointment to the grade of colonel (John Charles Easley) (Reference No. 324)
25. In the Air Force Reserve there are 37 appointments to the grade of colonel (list begins with Robert M. Acosta) (Reference No. 325)
26. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Nicole Dyan David) (Reference No. 326)
27. In the Air Force Reserve there are 7 appointments to the grade of colonel (list begins with Karrie Megan Bem) (Reference No. 327)
28. In the Air Force Reserve there are 3 appointments to the grade of colonel (list begins with Douglas A. Collins) (Reference No. 328)
29. In the Air Force there is 1 appointment to the grade of major (Marquis A.T. Smith) (Reference No. 329)
30. In the Air Force Reserve there are 61 appointments to the grade of colonel (list begins with James S. Akers II) (Reference No. 330)
31. In the Air Force Reserve there are 31 appointments to the grade of colonel (list begins with David I. Amar) (Reference No. 331)

32. In the Army there is 1 appointment to the grade of colonel (Sashi A. Zickefoose) (Reference No. 332)
33. In the Army Reserve there is 1 appointment to the grade of colonel (Howard F. Stanley) (Reference No. 333)
34. In the Army there is 1 appointment to the grade of lieutenant colonel (Bobby J. Chun) (Reference No. 334)
35. In the Army there are 7 appointments to the grade of colonel (list begins with Joshua G. Glonek) (Reference No. 335)
36. In the Army there are 7 appointments to the grade of lieutenant colonel (list begins with Alex J. Duffy) (Reference No. 337)
37. In the Army there are 4 appointments to the grade of major (list begins with Liza B. Crawford) (Reference No. 338)
38. In the Army Reserve there are 2 appointments to the grade of colonel (list begins with Jeremy S. Stirm) (Reference No. 339)
39. In the Army Reserve there is 1 appointment to the grade of colonel (Renee R. Kiel) (Reference No. 340)
40. In the Army there are 2 appointments to the grade of lieutenant colonel (list begins with Melissa B. Riesterhartsell) (Reference No. 341)
41. In the Army there is 1 appointment to the grade of lieutenant colonel (Kimberly A. Dilger) (Reference No. 342)
42. In the Army there is 1 appointment to the grade of major (Abigail R. Osman) (Reference No. 343)
43. In the Army Reserve there is 1 appointment to the grade of colonel (Andrew J. Archuleta) (Reference No. 344)
44. In the Army Reserve there are 8 appointments to the grade of colonel (list begins with Christopher C. Cross) (Reference No. 345)
45. In the Army there are 37 appointments to the grade of major (list begins with Michael J. Baierlein) (Reference No. 346)
46. In the Army there are 575 appointments to the grade of major (list begins with Austin P. Abarr) (Reference No. 347)
47. In the Army there are 489 appointments to the grade of major (list begins with James H. Abney) (Reference No. 348)
48. In the Army there are 981 appointments to the grade of major (list begins with Mitchell A. Ables) (Reference No. 349)
49. In the Army Reserve there are 9 appointments to the grade of colonel (list begins with Peter B. East) (Reference No. 350)
50. In the Navy there is 1 appointment to the grade of lieutenant commander (list begins with William M. Schweitzer) (Reference No. 351)
51. In the Navy there is 1 appointment to the grade of captain (list begins with Louis V. Scott) (Reference No. 353)
52. **Col. William F. Wilkerson, USAR to be brigadier general** (Reference No. 359)
53. **Col. Evelyn E. Laptook, USAR to be brigadier general** (Reference No. 360)
54. **BG Ronald R. Ragin, USA to be major general** (Reference No. 361)
55. **In the Army there are 37 appointments to the grade of brigadier general (list begins with Brandon C. Anderson)** (Reference No. 362)
56. **In the Marine Corps there are 8 appointments to the grade of brigadier general (list begins with David R. Everly)** (Reference No. 363)
57. **In the Navy there are 2 appointments to the grade of rear admiral (lower half) (list begins with Walter D. Brafford)** (Reference No. 364)
58. **In the Navy there are 16 appointments to the grade of rear admiral (lower half) (list begins with Eric J. Anduze)** (Reference No. 365)
59. **In the Navy there are 2 appointments to the grade of rear admiral (lower half) (list begins with Brian J. Anderson)** (Reference No. 366)
60. **In the Navy there are 2 appointments to the grade of rear admiral (list begins with Casey J. Moton)** (Reference No. 367)
61. **RADM(lh) Rick Freedman, USN to be rear admiral** (Reference No. 368)
62. **RADM(lh) Kenneth W. Epps, USN to be rear admiral** (Reference No. 369) 3

63. **In the Navy there are 13 appointments to the grade of rear admiral (list begins with Stephen D. Barnett)** (Reference No. 370)
64. **Capt. Frank G. Schlereth III, USN to be rear admiral (lower half)** (Reference No. 371)
65. **In the Navy there are 2 appointments to the grade of rear admiral (lower half) (list begins with Joshua C. Himes)** (Reference No. 372)
66. **In the Navy there are 4 appointments to the grade of rear admiral (lower half) (list begins with Thomas J. Dickinson)** (Reference No. 373)
67. **In the Air Force there are 2 appointments to the grade of major general (list begins with Thomas W. Harrell)** (Reference No. 379)
68. In the Air Force there is 1 appointment to the grade of colonel (Maximilian S. Lee) (Reference No. 380)
69. In the Navy there is 1 appointment to the grade of lieutenant commander (Justin J. Reeb) (Reference No. 381)
70. **LTG James W. Bierman, Jr., USMC to be lieutenant general and Deputy Commandant for Plans, Policies, and Operations, Headquarters, US Marine Corps** (Reference No. 389)
71. In the Army there is 1 appointment to the grade of colonel (Matthew J. Clementz) (Reference No. 397)
72. In the Army there is 1 appointment to the grade of major (Samuel T. Kramer) (Reference No. 398)
73. In the Army there is 1 appointment to the grade of colonel (Carla A. Kiernan) (Reference No. 399)
74. In the Army there is 1 appointment to the grade of colonel (John W. Brock II) (Reference No. 400)
75. In the Army there is 1 appointment to the grade of colonel (John D. Horton) (Reference No. 404)
76. In the Army Reserve there is 1 appointment to the grade of colonel (Joel N. Buffardi) (Reference No. 405)
77. In the Army there is 1 appointment to the grade of colonel (Sarah D. Eccleston) (Reference No. 406)
78. In the Army there is 1 appointment to the grade of major (Nicholas P. Fiebke) (Reference No. 407)
79. In the Army there is 1 appointment to the grade of major (Andrew J. Doyle) (Reference No. 408)
80. In the Army there is 1 appointment to the grade of major (William T. Griggs) (Reference No. 409)
81. In the Army there is 1 appointment to the grade of major (Megan L. Maloy) (Reference No. 410)
82. In the Army there is 1 appointment to the grade of major (Kaitlyn M. Hernandez) (Reference No. 411)
83. In the Army Reserve there are 15 appointment to the grade of colonel (list begins with Timothy I. Arcelay) (Reference No. 412)
84. In the Army there is 1 appointment to the grade of major (Sara C. Adams) (Reference No. 413)
85. In the Army there is 1 appointment to the grade of major (Christina G. Nalley) (Reference No. 414)
86. In the Army Reserve there are 7 appointments to the grade of colonel (Andrew Adamczyk) (Reference No. 415)
87. In the Army there is 1 appointment to the grade of colonel (Ashley S. Lee) (Reference No. 416)
88. In the Army there is 1 appointment to the grade of major (Timothy W. Lindeman) (Reference No. 417)
89. In the Army there is 1 appointment to the grade of major (Ebony Q. Star) (Reference No. 418)
90. In the Army there is 1 appointment to the grade of major (Sarah A. Delarosa) (Reference No. 419)
91. In the Army there is 1 appointment to the grade of major (Mark T. Sopkiw, Jr.) (Reference No. 420)
92. In the Army there is 1 appointment to the grade of major (Justin T. Thomas) (Reference No. 421)

93. In the Army there is 1 appointment to the grade of major (Rei T. Israel) (Reference No. 422)
94. In the Army there is 1 appointment to the grade of major (Adam L. Fox) (Reference No. 423)
95. In the Army there is 1 appointment to the grade of major (Jason L. Workman) (Reference No. 424)
96. In the Army there is 1 appointment to the grade of major (Stephen J. Cumby) (Reference No. 425)
97. In the Army there is 1 appointment to the grade of major (Stephen M. Anderson) (Reference No. 426)
98. In the Navy Reserve there is 1 appointment to the grade of captain (Elisabeth Crumpler) (Reference No. 427)
99. In the Navy there are 27 appointments to the grade of captain (list begins with Kyle A. Aduskevich) (Reference No. 428)
100. In the Navy there are 9 appointments to the grade of commander (list begins with Bramwell B. Arnold III) (Reference No. 429)
101. In the Navy there are 34 appointments to the grade of lieutenant commander (list begins with Jeffrey R. Biermann) (Reference No. 430)
102. In the Navy there is 1 appointment to the grade of lieutenant commander (James H. Knight) (Reference No. 431)
103. In the Space Force there are 9 appointments to the grade of major (list begins with Ross M. Boston) (Reference No. 432)
104. In the Space Force there are 38 appointments to the grade of colonel (list begins with Jason M. Adams) (Reference No. 433)
105. In the Space Force there are 68 appointments to the grade of lieutenant colonel (list begins with Christopher John Alban) (Reference No. 434)
106. In the Space Force there are 58 appointments to the grade of lieutenant colonel (list begins with Bridget L. Ajinga) (Reference No. 435)
107. In the Space Force there are 76 appointments to the grade of major (list begins with John W. Anderson) (Reference No. 436)
108. In the Space Force there are 100 appointments to the grade of major (list begins with Christina M. Akers) (Reference No. 437)
109. In the Space Force there are 2 appointments to the grade of lieutenant colonel (list begins with Cassandra R. Hidalgo) (Reference No. 438)
110. In the Space Force there is 1 appointment to the grade of colonel (Edward E. Jones) (Reference No. 439)

TOTAL: 3,059

Chairman REED. The motion carries. Thank you very much.

Good morning. The Committee meets today to receive testimony from General Glen VanHerck, Commander of United States Northern Command and North American Aerospace Defense Command, or NORAD, and General Laura Richardson, Commander of United States Southern Command. I would note that this is General VanHerck's last appearance before the Committee in his current role. General, I would like to express my profound appreciation for your decades of exceptional service to the Nation and the Air Force, including your outstanding leadership of our NORTHCOM forces. Thank you, sir, very much.

On behalf of the Committee, I would also thank the women and men who serve under your respective commands for their selfless service to the Nation.

The global threats to the United States are edging closer and closer to home. The 2022 National Defense Strategy identifies one of the Defense Department's top priorities as "Defending the Homeland, paced to the growing multi-domain threat posed by the People's Republic of China." General VanHerck, your command is responsible for this Homeland defense mission. To be successful,

NORTHCOM will need to re-evaluate its assumptions and plans against the PRC's growing capabilities to threaten us territorially, as well as in cyberspace and space. I understand NORTHCOM has been working to develop a new Homeland Defense Policy Guidance to meet this challenge, and I would ask for an update on its status and how it would transform the homeland defense plans of the Department.

The recent shoot-downs of a Chinese surveillance balloon and three other unidentified aerial phenomena in our airspace have raised concerns that we may have an "awareness gap" that needs to be resolved. America's skies and seas must be secure to protect our citizens, and the Department must pursue technologies that provide 'forward detection' to buy decision time for decisionmakers.

Relatedly, Congress is considering auctioning the "S" band spectrum, which is the spectrum in which NORTHCOM radars operate for early warning around the continental United States, for missile defense on the ground in Alaska, and for maritime domain awareness with our AEGIS weapons system. General VanHerck, the Committee would like to know the impact of curtailing or losing this spectrum with regard to your operations.

Regionally, NORTHCOM provides support to U.S. law enforcement to counter cartels engaged in drug smuggling, human trafficking, and money laundering across the southwest border. General VanHerck, I am interested to know more about your efforts to build the capabilities of the security forces in Mexico and the Bahamas to address these regional threats, and your recommendations for strengthening those efforts.

Turning to Southern Command, General Richardson, your command faces growing challenges from China and Russia in Latin America. The political and economic instability in the region presents a situation that our adversaries are seeking to exploit to increase their own influence. China, in particular, is expanding its presence in the region, primarily through acquisitions and investments in strategically critical locations like Panama, and, reflecting the growing influence Moscow has exerted in the region, most South American countries have been non-committal on Russia's war in Ukraine.

A critical task for SOUTHCOM is to find ways to counter China and Russia's malign, hybrid activities. This challenge includes addressing sources of insecurity among our partners that our adversaries seek to exploit. It is also important to strengthen the capabilities of U.S. partners' security forces, including by building defense institutional capabilities that adhere to the rule of law and respect human rights.

General Richardson, I am interested in your assessment of the challenge from near-peer competitors in the SOUTHCOM area, and how we might work strategically with our partners in the region to build resilience against these activities.

SOUTHCOM, like NORTHCOM, continues to work closely with the U.S. Government interagency to support counternarcotic and counter-transnational criminal organization missions. A critical component of this effort has been the Joint Interagency Task Force-South, which provides a model for the Defense Department to work

with civilian agencies and partner nations to build domain awareness and enhance interdiction capabilities.

To help compensate for its limited resources, SOUTHCOM has sought to leverage "non-traditional" approaches, such as artificial intelligence and machine learning, to serve as a testbed for new tactics and operational concepts. General Richardson, I would like to know how the Department is taking advantage of the SOUTHCOM area as a valuable environment for innovative experimentation.

Thank you, again, to our witnesses. I look forward to your testimoneys, and as a reminder for my colleagues, there will be a closed session immediately following this hearing in room SVC–217.

Let me now turn it over to the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman, and I also want to thank our witnesses for being here and also for their gracious allocation of time to visit with us before the hearing.

We rightly focus a lot of attention abroad, on Russia's unprovoked invasion of Ukraine, the Chinese Communist Party's constant march to dominance in the Pacific. But the dangers we face are not limited to areas like Ukraine and the Pacific. We also face dangers in our own neighborhood.

General VanHerck has been a frequent visitor here recently, and I appreciate his candid briefings on the Chinese surveillance balloon that violated our sovereignty earlier this year.

Unfortunately, Secretary of Defense Austin has declined to answer the simple questions Senator Rubio and I sent regarding the Department of Defense's apparently inaction during the earliest days of the balloon's excursion. In response to the letter Senator Rubio and I sent with questions, we received a very dismissive response from Under Secretary Colin Kahl, which said that all of our questions had already been answered. In fact, they were not answered and have not been answered by the Secretary. I expect General VanHerck will get some questions about that today, and I am grateful for his help in understanding what went wrong and how we can fix it.

The Chinese surveillance balloon is the most public example of our Homeland defense gaps, but it is not the only one. Keeping in mind Putin's threats against our Homeland during the Ukraine war and China's threats of a military conflict with the United States over Taiwan, I hope General VanHerck will explain his requirements for keeping the American people safe.

I am also concerned about the situation on both sides of our southwest border. President Biden's lax border policies have created a major opportunity for the Mexican criminal cartels and an unprecedented humanitarian and security crisis. In 2022, more than 70,000 Americans died of opioid overdoses, largely from Mexican-produced fentanyl. Since President Biden took office, more than 1.2 million illegal migrants have evaded law enforcement and entered our country. Most recently, the cartels murdered two American citizens.

This simply cannot continue and does not have to continue. Given the scale of the current crisis, I hope our witnesses could comment on ways in which the southwest border support mission could be made more effective. I would also like to know whether there is anything Congress can do to work more effectively with the Mexican Government to counter the cartels.

We also have challenges further south, in Central and South America. The implications of the growing Chinese threat continue to concern us. The Chinese Communist Party is following a well-known playbook on SOUTHCOM. It is aggressively using predatory economic and diplomatic practices to bully countries while it sets conditions to buildup the PRC military presence, gather intelligence, and limit United States access and influence. As General Richardson has stated before, proximity matters. We should all be concerned by what China is doing in the Southern Hemisphere and what it means for the stability of our partners and our national security.

Despite the significant and growing security threats in that region, I am troubled to see that SOUTHCOM consistently faces a mismatch between its requirements and its resources. I look forward to General Richardson's candid assessment of SOUTHCOM's most pressing resource and capability shortfalls. I hope to understand how these shortfalls impact our troops' ability to accomplish the mission and defend our Nation. I would also like to hear how the Office of Strategic Capital might be used to help achieve military objectives at a lower cost.

With that, Mr. Chairman, I yield back and thank our witnesses.

Chairman REED. Thank you very much Senator Wicker.

Now let me recognize General VanHerck. Sir?

STATEMENT OF GENERAL GLEN D. VANHERCK, USAF, COMMANDER, UNITED STATES NORTHERN COMMAND AND NORTH AMERICAN AEROSPACE DEFENSE COMMAND

General VANHERCK. Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, thank you for the opportunity to appear today and represent the men and women of the United States Northern Command and North American Aerospace Defense Command.

Today's strategic environment is the most complicated and potentially dangerous in my more than 35 years of service. While the United States military remains the most powerful and professional force in history, we have to account for the recent erosion of military advantage and take actions now to invest in modernization, implement innovative processes, prioritize our personnel and civilian hiring practices, and increase agile decisionmaking at all levels.

Our competitors' actions and ambitions are global and all-domain in nature. It is also clear that they have the capability and intent to hold our Homeland at risk above and below the nuclear threshold and in multiple domains to achieve their strategic objectives. The PRC and Russia have fielded cruise missiles, delivery platforms, and non-kinetic capabilities to hold at risk critical infrastructure of military and civilian in the United States and Canada. Those capabilities allow them to strike with limited warning and significant consequences. Limited warning due to a lack of all-do-

main awareness inherently limits the decision space and options available to our national leaders which increases the risk of miscalculation and escalation.

To address today's strategic environment, for nearly 3 years I have focused on four strategic priorities: domain awareness, information dominance, decision superiority, and finally, global integration. Those priorities are critical to successfully defending the Homeland and to providing our national leaders with the only thing I can never give them enough of, and that is time—time to create deterrence options, and if required, defend and defeat options.

While we have work to do, there has been some notable progress toward these key priorities. I am grateful to the Department and Congress for your support of the over-the-horizon radars that will significantly improve air, maritime, and space domain awareness and the ability to detect and track threats well before they reach North America. But we need to go faster. An acquisition plan based on more than a decade is too long.

Both the Department of Defense and the Canadian Department of National Defense have committed to funding over-the-horizon radar capabilities, and I respectfully urge both governments to ensure this vital and proven capability is fielded as quickly as possible. Likewise, Space Force's investment in advanced space-based warning capabilities and the Navy's commitment to modernizing the Integrated Undersea Surveillance System are vital to my homeland defense mission. Yet again, we cannot wait a decade or longer to field these new capabilities.

Our commands need your continued support to outpace the rapid gains made by our competitors. Continued progress will require the Department and Congress to accept some risk by prioritizing modernization and innovation over maintaining obsolete platforms, organizations, and infrastructure, and occasionally accepting failure as part of the process.

The generational challenges ahead of us require the best minds and expertise we can find, and the Department must also invest accordingly in civilian and military personnel recruiting, hiring, and retention. We must continue to build an enormous advantage that comes through our international alliances and partnerships.

I believe that the greatest risk for the United States stems from an inability to change at the pace required by the strategic environment we are operating in. Homeland defense must be recognized as essential to contingency plans at home and for power projection abroad, and it is vital that all military planning account for that reality. In an era of incredible innovation and technological achievement, inflexible, outdated processes are a greater impediment to success than many of our competitors' advancements.

Finally, I would like to comment on the incursion of the PRC high-altitude balloon into our airspace. The PRC HAB was obviously a significant event that shined light on the PRC's brazen intelligence collection against the United States and Canada. It was the first time NORTHCOM conducted an engagement over United States in our history. From this event, I commit to you that we have already generated critical lessons learned, and I can guar-

antee that we are doing whatever is necessary to keep our country and North America safe.

On behalf of all the soldiers, sailors, airmen, marines, guardians, and civilians of NORTHCOM and NORAD, I would like to thank the Committee for your steadfast support, and I look forward to your questions.

[The prepared statement of General Glen D. VanHerck follows:]

PREPARED STATEMENT BY GENERAL GLEN D. VANHERCK

Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee: thank you for the opportunity to testify, and for the honor of representing the men and women of U.S. Northern Command (USNORTHCOM) and North American Aerospace Defense Command (NORAD). From the day I assumed Command in August 2020, USNORTHCOM and NORAD have worked tirelessly to defend the Homeland and North America in an extraordinarily challenging strategic environment requiring the commands to adapt new approaches to how we plan, prepare, and operate. That innovation and evolution is necessary to outpace our competitors and is a testament to the devotion of our military and civilian personnel who stand constant watch over the United States and Canada.

The commands have made tremendous progress in a short time, yet much work remains. While the United States military remains the most powerful and professional force in history, and our alliances and partnerships provide a vital strategic advantage over any potential adversary, it is clear that our competitive advantage is eroding. The successful defense of North America requires the Department of Defense to move beyond outdated assumptions and plans that do not fully reflect competitor capability, capacity, and intent to threaten the Homeland. Likewise, continued action is required to build enduring advantages and outpace the gains made by competitors around the globe. This will require the Department to invest in modernization, implement innovative processes, prioritize our personnel and improve civilian hiring practices, and increase agile decisionmaking at all levels.

STRATEGIC ENVIRONMENT

Today's strategic environment is the most complicated and potentially dangerous in my 35+ years of service. Our competitors and potential adversaries, particularly the People's Republic of China (PRC) and Russia, continue to challenge the rules-based international order that has provided global stability and prosperity over the last 7 decades. They seek to advance their interests and gain global advantages through political intimidation, economic coercion, cyber and information operations, asymmetric attacks on infrastructure, and the direct threat or actual employment of military force.

The People's Republic of China (PRC)

The PRC remains NORAD and USNORTHCOM's long-term pacing challenge. Beijing continues ambitious military modernization at an alarming pace. It would be naive to think their sprint to develop advanced cyber tools, maritime capabilities, and hypersonic technology has only regional applications, as the PRC continues to develop advanced long-range conventional and strategic capabilities and the infrastructure necessary to project military power at greater distances. Underpinning this growth is a rapid nuclear expansion that is on pace for the PRC to expand their nuclear stockpile from what DOD estimates is over 400 today to about 1,500 by 2035. While less observable, the PRC's aggressive efforts to exploit the information technology sector are accelerating an increasing threat to North America.

The PRC's aggressive actions in the Pacific in mid–2022 following congressional visits to Taiwan illustrate how regional events create geostrategic ripple effects that can quickly reach our shores. President Xi is likely to use his next term in office to double down on the PRC's revisionist foreign policy, and is likely to include global efforts to undermine the United States and bolster partnerships with United States competitors, including Russia. In February 2022, Xi signaled his intent to follow this path when he declared the PRC-Russia friendship would have no limits in a public pronouncement just weeks before Russia's illegal and unprovoked full-scale invasion of Ukraine. The PRC has almost certainly watched the war to draw lessons that will inform its next steps toward Taiwan.

Xi's statement also proved to be more than rhetorical when, in May 2022, the PRC and Russia conducted a combined bomber patrol over the Sea of Japan coinciding with the Quad Leaders' Summit in Tokyo. The May 2022 bomber patrol was

followed by a second bomber patrol in November 2022. The cooperation is not confined to the air domain. PRC and Russian naval forces conducted a combined patrol in the fall of 2022 that covered 7,000 nautical miles in the Pacific, included a first-ever combined naval transit of the Aleutian Islands, and came on the heels of Xi sending scores of troops to Russia to participate in Moscow's largest annual military exercise. For years, the PRC has relied on Russian military materiel to build its armed forces, and I am aware of reports that the PRC has transferred materiel with military applications to Russia during Russia's war against Ukraine. These actions are more than symbolic and demonstrate the PRC's growing power projection capabilities, which will likely encompass the Arctic in the next decade—a region the PRC is eying with its self-proclaimed status as a near-Arctic State.

Russia

As USNORTHCOM and NORAD take necessary measures to defend against a growing PRC threat, the commands continue to defend the United States and Canada every day against Russian aggression in all domains. Russia's brazen and unprovoked full-scale invasion of Ukraine in 2022 proved that Russia has the capability and capacity to inflict significant damage to infrastructure and other critical targets with its all-domain long-range strike capabilities. Russia also has a history of conducting clandestine operations in other nations to achieve its political objectives. While Russia has overplayed its hand, suffered significant losses to the heroic Ukrainian defense forces, and inadvertently helped to unify NATO, it has gained real-world combat experience as it enters its second year of the full-scale invasion. The meager performance of Russia's ground forces in Ukraine should not overshadow other capabilities it has showcased in Ukraine, including air- and sea-launched cruise missiles capable of striking North America, cyber activities, and economic coercion. For the first time, we also saw Russia employ its new KILLJOY air-launched hypersonic missile in combat.

Concurrent with its war against Ukraine, Russia has also continued to conduct major military exercises and test developmental capabilities that will compound the threat to North America once fielded. In April 2022, Russia tested the massive SARMAT ICBM, a highly capable strategic weapon that helps reinforce the critical importance of a modern and reliable United States strategic deterrent. Meanwhile, Russia is testing its special mission Belgorod nuclear submarine, a modern platform capable of carrying the nuclear-capable Poseidon torpedo, designed to hold the Homeland at risk by striking coastal targets from thousands of miles away.

The test of the Belgorod followed Russia's Arctic military exercise that included live-fire cruise missile launches designed to test Moscow's readiness for a conflict in the high north. Last fall, Russia added its first *Severodvinsk*-class conventional and nuclear capable cruise missile submarine to the Pacific Fleet, which poses a new challenge to our defense of the western approaches to North America. In October 2022, in the midst of elevated international tensions stemming from Russian threats to escalate its already brutal campaign in Ukraine, Russia chose to proceed with its annual strategic forces exercise, including demonstrations of multiple nuclear strike capabilities. Finally, in January 2023, a Russian *Gorshkov*-class frigate transited the western Atlantic while armed with Tsirkon hypersonic cruise missiles.

I believe it would be shortsighted to view Russia's war against Ukraine as a limited regional crisis. Russia's actions increase the very real risk of miscalculation and the conflict's expansion beyond its current boundaries—scenarios that could rapidly increase the risks to North America and continental defense. If Russia should seek to compel allies to reconsider their support for Ukraine through escalatory actions or follow through with the desperate threats to use nuclear weapons in Ukraine, the risks to the Homeland would increase.

DPRK and Iran

The Democratic Peoples' Republic of Korea (DPRK) tested at least 65 conventional theater and long-range nuclear capabilities over the last year. That number includes the first tests of a new larger, longer range, and more capable ICBM, adding another missile that can likely reach the entire Homeland and one the regime claims is capable of carrying a hypersonic glide vehicle payload. The DPRK tested more missiles in 2022 than any time in its history, showing that the regime will continue to prioritize military capabilities at the expense of needed food and pandemic relief for its people. Public reports of renewed nuclear test preparations further highlight the grave danger this regime poses to regional and global stability. We must remain ready for multiple contingencies and potential crisis on the Korean Peninsula.

The DPRK's reckless pursuit of advanced nuclear capabilities and robust ballistic missile research, development, and testing threatens regional stability, our allies and partners, and potentially the Homeland. However, today I remain confident in

our current capability to defend the Homeland against a limited DPRK ballistic missile threat. Looking forward, I am concerned about future capacity and capability to respond to advancing DPRK ballistic missile threats, making it crucial to field the Next Generation Interceptor (NGI) as funded in the Fiscal Year 2023 Consolidated Appropriations Act (P.L. 117–328).

Iran has not shied away from pursuing malign global activities, including in North America; the regime continues to pose a significant threat to the United States, as well as our partners in the Central Command region. The August 2022 disclosure of an Iranian plot to assassinate a former senior United States official on United States territory illustrated the brazenness of the Iranian Government. The regime's decision to provide Russia with unmanned loitering munitions used to attack civilian infrastructure in Ukraine provides further evidence of Iran's embrace of destabilizing activity. A future decision by the regime to pursue an ICBM-class missile would add yet another threat vector capable of striking North America.

Regional Security Threats

I remain concerned about transnational organized crime in Mexico and the Western Hemisphere and the unrelenting violence it spawns and insecurity it creates, as cartels vie for control of lucrative illicit markets. Cartels control fentanyl, cocaine and methamphetamine trafficking as well as other drugs, and are demonstrating the capability to use improvised explosives and small-unmanned aerial systems against Mexican security forces in Mexico, which will likely embolden the cartels and challenge our partners. As USNORTHCOM supports our law enforcement and international partners in countering transnational criminal organizations in our area of operations, I remain steadfast in my commitment to our military partners in Mexico and The Bahamas.

I commend Mexico's arrest last summer of the cartel member who brutally murdered a DEA agent decades earlier, as well as the recent arrests of Ovidio Guzman Lopez, the son of Sinaloa Cartel leader Joaquin "El Chapo" Guzman, and Jose Rodolfo Villareal-Hernandez, a Mexican cartel leader known as "El Gato." These arrests are examples of a shared commitment to justice, buttressed by shared values and our decades-long partnership, which stands in stark contrast to PRC and Russian malign and self-serving activities in the Western Hemisphere.

I am committed to deepening the already strong partnership with the Mexican and Bahamian militaries to advance our mutual goals, from upholding human rights to ensuring hemispheric defense. I was proud to host my counterparts from the Mexican Department of National Defense (SEDENA) and Department of the Navy (SEMAR) in early 2022 and visit The Bahamas in late 2021, and we will continue to work with Mexico and The Bahamas to stamp out attempts by the PRC or Russia to divide our countries and our partnerships.

Transnational challenges

USNORTHCOM's 20th anniversary offered a reminder of the transnational challenges that have shaped the Command from its inception. Foremost is the enduring transnational terrorist threat to North America, led by Sunni extremist groups and their supporters in North America. The arrest in August 2022 of an ISIS-inspired individual in New Mexico who had surveilled a United States military base is a stark reminder that military facilities remain attractive targets to terrorists. More broadly, the Taliban's return to power in Afghanistan and violent extremist groups' ongoing presence in the region indicate a renewed threat to the region that we cannot discount. This extremist threat transcends south Asia and extends to other regions with security challenges, including the Middle East and sub-Saharan Africa, where terrorists continue to operate, train, and plan.

Where We Are Today: 20 Years of USNORTHCOM and 65 Years of NORAD

USNORTHCOM was established on October 1st, 2002, in the immediate aftermath of the 9/11 terrorist attacks against the United States, marking the first time since the colonial era a single commander was responsible for the defense of the U.S. Homeland. Twenty years later, the likelihood of a major attack inside the United States by a foreign violent extremist organization has diminished following a generational, whole-of-nation effort. However, the primary threat to the Homeland is now far more significant and consequential. Multiple peer competitors and rogue states possess the capability and capacity to threaten our citizens, critical infrastructure, and vital institutions. These competitors possess, or are developing, the modern capabilities that limit the time and options available to decisionmakers responsible for defending our interests. In addition to destructive kinetic and cyber capabilities, malign actors actively exploit our democratic society by spreading disinformation that drives wedges between our citizens, undermines democracy, and weakens our alliances.

In crisis or conflict, potential adversaries will likely seek to interfere with the Department's ability to project power abroad. Disruptions of military and civilian transportation infrastructure in North America could impede the ability of the United States and Canada to project combat power. Today I assess, as I have for nearly 3 years, that homeland defense is a potential limiting factor to ensuring rapid and effective implementation and execution of global contingency plans. This is due to my lack of domain awareness, limited timely access to forces that are ready to operate throughout my areas of responsibility, including the Arctic, and a lack of resilient infrastructure enabling the Joint Force to fight in and from the Homeland while ensuring forward power projection.

Defending the Homeland against an ever-growing array of kinetic and non-kinetic threats will continue to require a collaborative, whole-of-nation approach to assessing vulnerabilities and developing appropriate deterrence, denial, and defense strategies. Cyber risks to critical infrastructure remain a significant concern and a domain awareness gap. DOD is tasked only with defending defense networks, but military facilities and missions frequently rely on civilian lifelines such as energy grids, transportation infrastructure, and other critical infrastructure. USNORTHCOM, due to law and policy, has limited insight into potential risks to commercial networks, which could lead to uncertainty in planning for consequence management. DOD's establishment of policy regarding the defense of critical infrastructure is a necessary step forward, and USNORTHCOM will continue to work with the Department and key mission partners, to include agencies with critical infrastructure security and cybersecurity responsibilities, to ensure key defense infrastructure is defended from attacks.

NORAD, the unique United States and Canadian bi-national command, was established in May 1958 to defend North America from cold war-era Russian strategic bombers entering United States and Canadian airspace from the Arctic approaches. Sixty-five years later, Russia has restored its capability to threaten North America with modernized bombers, surface ships, and submarines armed with long-range, highly precise nuclear and conventional cruise missiles. The PRC is making rapid progress in developing similar capabilities, which will further complicate NORAD's warning missions and affect national strategic decisionmaking.

While NORAD's missions to provide aerospace warning, aerospace control, and maritime warning remain critical to homeland defense, action and investment are needed to keep pace with competitors that clearly seek to hold North America at risk above and below the nuclear threshold. For decades, NORAD has relied heavily on the North Warning System arrayed along the Arctic coasts of Canada and Alaska to detect potential airborne threats to North America. It is clear that our competitors possess long-range strike capabilities that could be used to attack the United States and Canada from outside the detection range of legacy sensors.

In order to maintain domain awareness and ensure integrated threat warning and attack assessment to national leadership, the United States and Canada must continue to move swiftly to field Over the Horizon Radar (OTHR), as funded in the Fiscal Year 2023 Consolidated Omnibus Appropriations Act (P.L. 117–328). OTHR is a proven, affordable technology that will ensure our ability to detect threats from surface to space in the approaches to North America. I commend both the Department of Defense and the Canadian Department of National Defence for their commitment in fiscal year 2023 to investing in OTHR, and I respectfully urge both Governments to ensure this vital capability is fielded as quickly as possible.

NORAD's contributions to Homeland and continental defense will remain vital for many years to come, and will continue to rely on strong cooperation and shared investment between the United States and Canada. The United States and Canadian continental defense framework has an unrivaled legacy of success and serves as an international model of defense cooperation. I remain encouraged by the bi-national commitments to modernizing the platforms, sensors, and capabilities necessary to execute NORAD's missions; this collaborative approach to deterring and defending against threats to North America is critical. NORAD must continue to look to the future and take necessary measures today to counter the threats of tomorrow, and investments by the United States and Canada must address kinetic and non-kinetic threats to our nations.

Potential threats to North America routinely transit international borders and the boundaries between U.S. geographic combatant command areas of responsibility. NORAD's ability to provide timely aerospace warning and control and maritime warning will be bolstered by the United States and Canada's joint commitment to improving global domain awareness, modernizing command and control systems to provide faster, better-informed decisionmaking, and continuing collaborative research, development, and innovation. These efforts will ensure NORAD's ability to

compete with the PRC and Russia for years to come while clearly signaling a lasting commitment to a robust, modern, and effective defense of North America.

USNORTHCOM and NORAD Priorities

My priorities for NORAD and USNORTHCOM directly reflect the need to inform the rapid, agile decisions required of senior leaders in this dynamic and complex strategic environment. Our competitors continue to field capabilities specifically intended to strike with limited warning, which decreases the time and options available to national leaders in a crisis. Continuing to trust legacy processes and capabilities increases risk to the Homeland and compounds the risk of miscalculation and inadvertent escalation. USNORTHCOM and NORAD are working urgently to increase the domain awareness, information sharing, and global integration necessary to ensure national leaders have as much time and as many options as possible.

As competitors and potential adversaries continue to field advanced all-domain capabilities with the potential to create significant effects in the Homeland, it is imperative that the United States and Canada move quickly to improve domain awareness from the seafloor to space and cyberspace for all approaches to North America. The Over-the-Horizon Radars (OTHR) funded in the Fiscal Year 2023 President's Budget, along with the OTHRs announced by the Government of Canada as part of NORAD modernization, will leverage proven technology and will significantly improve the ability of USNORTHCOM and NORAD to detect and track potential threats to North America and the Homeland from the Earth's surface to space. That capability, in turn, will directly correlate to more time available to leaders at all levels, enabling the creation and employment of better deterrence options and if required, defeat options.

U.S. Space Force investments in advanced space-based missile warning sensor capabilities show great promise with particular regard to hypersonic and advanced missile threats. These future systems will detect, track, and identify threats, including hypersonic threats, enable better warning and assessment, and develop actionable targeting solutions, at a much faster pace than we currently experience, while also delivering an inherent operational resilience. Given our competitors' advanced maritime domain capabilities, I fully support the Navy's investment in a modernized Integrated Undersea Surveillance System. These capabilities, in turn, will directly correlate to more time and options available to produce a favorable outcome for the United States and Canada.

Canada's plans to fund a layered surveillance system that will improve shared domain awareness in the northern air and maritime approaches to North America will have significant, long-term benefits for both NORAD and USNORTHCOM's missions. Planned Canadian investment in Arctic and Polar radars and spaced-based surveillance systems, along with advanced munitions, communications, and infrastructure clearly demonstrates shared commitment to NORAD and the combined defense of the United States and Canada.

In addition to the investment in OTHR, NORAD and USNORTHCOM have also demonstrated the potential for linking existing platforms and sharing data with multiple commands, interagency and international partners. By sharing data previously trapped in bureaucratic and organizational stovepipes through innovative programs like Pathfinder, Northstar, and the Global Information Dominance Experiments (GIDE), USNORTHCOM and NORAD have proven that it is possible to rapidly improve domain awareness and streamline global information sharing without the costs associated with fielding exquisite new capabilities. It is crucial that the Department of Defense and the Services, as well as the Canadian Department of National Defence, continue the work to unlock the remarkable potential of these initiatives.

I am encouraged by the establishment of the Department's Chief Digital and Artificial Intelligence Office (CDAO), and I believe that the CDAO must be empowered to rapidly integrate systems, software and platforms in order to maintain our competitive advantage across the Joint Force. Over the past several years, actions by each of our competitors and potential adversaries have made it clear that regional actions have global diplomatic, economic, and military ramifications. It is simply unrealistic to assume that crises will remain confined by artificial boundaries, and we must adapt plans and perspectives to account for that global reality.

The feasibility of every other Geographic Combatant Command's plans will require active campaigning in and from North America, and successful defense of the Homeland is necessary to deter adversaries and assure allies and partners. Therefore, I have also directed that USNORTHCOM and NORAD prioritize homeland defense campaigning to demonstrate our readiness, capabilities, and resiliency. I am also operationalizing the commands to accelerate the flow of information from sen-

sor to decisionmaker. Our competitors and potential adversaries have shown that they will hold the Homeland at risk in a conflict, and USNORTHCOM and NORAD are acting today to ensure homeland defense plans are understood, exercised, and resourced.

While USNORTHCOM and NORAD have made strides in the homeland defense mission, building a resilient Joint Force is a fundamental element of all Department planning, exercises, and operations. The DOD's worldwide missions and responsibilities must evolve from regionally focused approaches to globally integrated efforts that account for finite resources and associated risks. At present, I am concerned for the commands' ability to execute assigned missions—including contingency and operations plans in support of homeland defense. I am limited by a lack of timely access to forces that are organized, trained, and equipped to operate throughout the NORAD area of operations and the NORTHCOM area of responsibility, as well as by insufficient supporting infrastructure.

A strong homeland defense is the foundation of our Nation's ability to project power globally while deterring aggression and achieving our strategic objectives in competition, crisis, and conflict. As such, every plan, exercise, and policy decision must consider the necessity of defending the Homeland when evaluating competing demands for forces and threats to global campaigning. That, in turn, will require the Department of Defense and the Canadian Department of National Defence to place greater focus on developing the depth, flexibility, advanced technologies, and supporting infrastructure required to respond to future challenges while addressing growing threats to the Homeland.

Defense Support of Civil Authorities (DSCA)

When directed by the Secretary of Defense, USNORTHCOM provides Defense Support of Civil Authorities (DSCA) in the Continental United States, Alaska, and Puerto Rico. In preparing for and responding to major natural and human-caused disasters, USNORTHCOM serves as the DSCA synchronizer to support assessment and recovery while simultaneously acting as the supported combatant command in the command's area of operations.

USNORTHCOM often supports Federal, State, tribal, territorial, and local (FSTTL) disaster relief efforts. These collaborative, whole-of-government efforts demonstrate national resilience that should reassure the American public, while also making clear to potential aggressors, that the United States routinely executes interagency domestic relief operations that allow our Nation to recovery quickly following even large-scale disasters. It is equally important for our FSTTL partners to identify and address their capabilities and capacity gaps to fully perform the roles, missions, and operations under their authorities. This kind of response, particularly when it is accomplished with little or no military support, can generate a deterrent effect by casting doubt in competitors' minds about their ability to produce significant effects from an attack on the Homeland.

USNORTHCOM is uniquely suited to support our Federal partners in the aftermath of a chemical, biological, radiological, or nuclear (CBRN) attack. The Department must remain committed to this crucial mission to ensure these highly trained, specialized elements stand ready to respond immediately in the event of a weapon of mass destruction event in the United States.

I continue to stress the importance of USNORTHCOM's defense support of civil authorities, as rapidly executed, well-planned, multi-agency responses to wildfires, hurricanes, pandemics, and other significant disruptions are perhaps the most visible demonstration of the military's support to the American people. USNORTHCOM works year-round with our mission partners at every level to strengthen relationships, improve communications, and incorporate lessons learned from previous responses in order to deliver rapid and effective support to lead Federal agencies. Our command takes tremendous pride in supporting our FSTTL partners, while helping to highlight the resourcefulness and solidarity of the American people in the face of adversity. It should be clear to competitors and potential aggressors that the United States routinely responds to and recovers quickly from large-scale disruptions—and USNORTHCOM is always ready to support those efforts with military capabilities as directed by the Secretary.

USNORTHCOM support to civil authorities includes the command's ongoing support of Federal law enforcement efforts to counter the transnational criminal organizations (TCOs) that have caused so much harm to our Nation. Illicit drugs trafficked by transnational criminal enterprises kill more than one hundred thousand U.S. citizens each year, and the number of fatal overdoses have risen dramatically as cartels have increased the volume of fentanyl smuggled into the United States. As directed by the Secretary of Defense and in accordance with my direct guidance, USNORTHCOM's subordinate command, Joint Task Force North (JTF-N), provides

U.S. Federal law enforcement partners with intelligence and counter-threat finance analysis and other support as requested to disrupt the sophisticated financial and physical networks used to infiltrate illicit goods and exploited human traffic into the United States. The important work done by USNORTHCOM and JTF-N in countering transnational criminal organizations and disrupting the flow of illegal drugs into the United States is a national security imperative that directly supports homeland defense.

Natural disasters, public health threats, and transnational irregular migration will likely continue to require DOD support for our lead Federal partners. Environmental change will also continue to have a direct impact on military readiness and resources, as was made clear by the massive destructive power of Hurricane Ian in September 2022 and by western wildfires that are growing in scale and frequency as fire seasons now extend throughout most of the year. It is necessary to plan and account for the growing likelihood of natural disasters that disrupt military operations and damage critical infrastructure, while units involved in response operations require time to reset and recover after completing their missions. The long-term consequences of extreme weather, rising sea levels, and increased flooding will continue to affect DOD missions, infrastructure, and personnel, especially those in the Homeland.

Security Cooperation

In addition to our more visible homeland defense and DSCA operations, USNORTHCOM continues to reap tremendous benefits from our military-to-military relationships with our allies and partners in Canada, Mexico, and The Bahamas. Security cooperation with our neighbors is crucial to regional security, countering the influence of peer competitors, and addressing shared challenges. Security cooperation provides a critical and lasting advantage over our more isolated competitors, and I am grateful to the Department and to this Committee for your ongoing support of USNORTHCOM's vital work with our allies and partners. I am proud to work with my military counterparts in Canada, Mexico, and The Bahamas as we support one another's efforts to defend our nations and stand united against malign actors seeking to expand influence and presence in the Western Hemisphere.

The military-to-military relationship between the United States and Canada remains extraordinary and vital. In addition to standing side by side as partners in NORAD for nearly 65 years, Canada has been a stalwart ally in continental defense and operations overseas for decades. The unique trust between our militaries is immediately apparent within the USNORTHCOM and NORAD headquarters, as United States and Canadian personnel work side-by-side in pursuit of shared missions and objectives. The Canadian Armed Forces' shared commitment to improved domain awareness, information sharing, and modernization of the capabilities necessary for deterrence and continental defense is essential to our united efforts to defend North America, and I am fortunate to serve alongside such steadfast and trusted allies.

The Mexican Department of National Defense (SEDENA) and Department of the Navy (SEMAR) continue to meet daunting internal and external security challenges with professionalism and resiliency. Keenly focused on enhancing regional defense, our Mexican military partners continue to make major investments in a modern, capable, and reliable force capable of interoperability with the United States and other partners. In light of that important effort, USNORTHCOM strongly supports SEDENA and SEMAR modernization initiatives, including the potential divestment of their fleet of MI–17 helicopters in favor of Western helicopters.

In April 2022, it was my honor to host the Secretaries of SEDENA and SEMAR at USNORTHCOM for the Bilateral Military Cooperation Roundtable (BMCR). During this important annual dialog, USNORTHCOM and our Mexican military partners conducted a candid and highly productive assessment of our mutual security challenges, associated requirements, and shared commitment to addressing threats to our nations. Over the course of 3 days, Secretary General Sandoval, Secretary Admiral Ojeda, and I reaffirmed our military-to-military relationship and committed to a number of concrete steps that will have significant and lasting positive impacts on regional security.

Our partners in the Royal Bahamian Defence Force (RBDF) continue to punch above their weight as they continue to provide important contributions to regional security. USNORTHCOM and the RBDF operate maritime surveillance systems at Great Inagua and Coral Harbour, and plans are on track to add a third site in the coming years. That shared capability has significant benefits for domain awareness in the southern approaches to North America and demonstrates The Bahamas' ongoing commitment to security cooperation with USNORTHCOM. Our collaboration has taken on added importance as the PRC's diplomatic corps in Nassau continues to

produce anti-United States public statements while highlighting Chinese economic investment and humanitarian relief efforts in The Bahamas.

USNORTHCOM is strongly committed to a long-term partnership with the RBDF, and continued whole-of-government engagement and investment by the United States. As you know, the United States has been without a confirmed Ambassador to The Bahamas since 2011. No action was taken on the President's nominee last year, and the nomination was resubmitted in January 2023. This senior diplomatic position is critical to demonstrating the importance of the relationship between the United States and The Bahamas and to mitigating the PRC's efforts to gain a foothold only 50 miles from the United States east coast.

The Arctic

The ability of the joint force to operate and campaign in the Arctic remains a pressing concern for USNORTHCOM and NORAD. The PRC and Russia continue to invest in Arctic capabilities as both seek to increase presence and influence in the region while shifting the rules-based international order to their advantage. More than 50 percent of USNORTHCOM's area of operations is in the Arctic, and USNORTHCOM and NORAD's priorities in the region continue to focus on increased presence, campaigning through joint training and exercises, and close collaboration with allies and partners.

The effects of environmental change in the Arctic will have significant impacts on accessibility, infrastructure, and competition for the foreseeable future, and the region remains the most unforgiving operational environment on earth. As the Department balances the demands of global mission requirements with difficult budgetary choices, USNORTHCOM and NORAD require access to trained and ready forces capable of operating throughout the commands' areas of responsibility—to include the Arctic. The Joint Force must keep sight of the fact that special training and purpose-built equipment are necessary to operate in a region in which extreme climate, distance, and geography quickly overtake the unprepared.

Over the last year, USNORTHCOM and NORAD collaborated with USEUCOM, USINDOPACOM, USTRANSCOM, USSOCOM and the military Services while conducting joint exercises in Alaska, Greenland, and northern Canada. These demanding events expose Joint Force participants to the demands of the Arctic operating environment and help to reinforce the necessity of a force trained and equipped to survive in the extreme cold and remoteness that defines much of the region. I am encouraged by the strategic objectives stated in the U.S. National Strategy for the Arctic that support better understanding of the region, exercising presence, and capitalizing on the definitive advantage of our international alliances and partnerships.

While the military Services' respective Arctic strategies acknowledge the importance of the Arctic and the need to develop the capabilities needed to operate and compete in the region, direct investment in Arctic-capable platforms, training, and infrastructure continues to lag. It is necessary that the Joint Force has the ability to compete, fight, and win in the Arctic in the coming years, and the time for the Services to invest in the required equipment, infrastructure, and training is now. The PRC and Russia have clearly demonstrated their intent to expand their Arctic presence and operations, and I urge the Department of Defense, the Services, my fellow combatant commanders, and the Canadian Department of National Defence to move faster toward improving our collective ability to succeed in this strategically vital region.

Conclusion

Homeland defense remains the core mission of both USNORTHCOM and NORAD. The one constant throughout my time in command has been the extraordinary pace at which our competitors have advanced their capabilities to threaten the Homeland. Despite those clear risks, the processes used by the Department of Defense and the Canadian Department of National Defence for planning, acquisitions, personnel hiring, technology development, and other activities necessary to the success of the defense enterprise remain largely unchanged from when I received my commission nearly 36 years ago.

As competitors develop greater capability, capacity, and intent to challenge the United States, Canada, and the rules-based international order, I believe that the greatest strategic risk for the United States stems from our own inability to adapt at a pace required by the changing strategic environment. In an era of incredible innovation and technological achievement, inflexible, outdated processes are a greater impediment to success than many of our competitors' capability advancements. We cannot continue to rely on Industrial Age practices and legacy platforms to compete in a digital age, and if we fail to evolve at the pace demanded by the strategic environment, our competitive advantage will continue to erode.

The Department and Congress must also be more willing to accept the relatively low risks associated with retiring legacy platforms in order to ensure our ability to fight and win against advanced and well-resourced competitors. Over the last decade, the PRC and Russia have made extraordinary technological advancements while the Department remains encumbered by obsolete capabilities and associated costs. To defend the Homeland, USNORTHCOM and NORAD require a modern force with the capacity and capability to deter and if required defeat advanced peer competitors. Retiring systems that have exceeded their operational lifespans—to include fighters and command and control platforms at the end of their service lives—is necessary to accelerate the arrival of next generation capabilities.

Along with faster, more flexible development and acquisitions, the Joint Force requires predictable and timely funding to maintain readiness and increase capability, capacity, and resilience. The Continuing Resolutions that have become commonplace over the last decade have direct and lasting adverse consequences for military readiness, modernization, and planning. Predictable, on-time annual budgeting and appropriations, along with streamlined Department processes and greater tolerance for risk in developing and testing new capabilities, are essential to maintaining our competitive advantage.

The need to move faster is clear. The PRC and Russia have already fielded highly advanced hypersonic capabilities, while the United States' hypersonic program, although accelerating, still languishes well behind our competitors' efforts. Further, DOD faces operational challenges with civilian hiring processes for recruiting and hiring the innovative and experientially diverse workforce needed to drive innovation and advancement on pace with the civilian tech sector. Simply put, the Department must continue to strategically tackle hiring and personnel management improvements to move its workforce goal of being an employer of choice forward.

Finally, the PRC high altitude balloon (HAB) incursion into our national airspace was obviously a significant event that shined a light on the PRC's brazen intelligence collection against the United States and Canada. It was the first time USNORTHCOM conducted an engagement over the United States in our history, and it made it clear that our competitors have the capability and intent to reach the Homeland. The three Unidentified Aerial Phenomena (UAPs), also shot down days later by USNORTHCOM and NORAD, clearly demonstrated the challenges associated with detecting and identifying unmanned objects in U.S. airspace. As for NORAD and NORTHCOM, I commit to you that this event has already generated critical lessons learned for my commands and our mission partners, and I can guarantee that NORTHCOM and NORAD are going to continue to learn from it and do whatever is necessary to keep our country safe.

While we face significant challenges, there should be no doubt we have the finest military on the planet and that the commands will defend our nations with tenacity and resolve. In what is likely my final appearance before this Committee, I remain deeply humbled and immensely proud to lead the noblest mission of any Combatant Command—defending the Homeland. I am grateful to the Committee for your longstanding support of our missions and of the men and women who stand watch over our Nation every day. I thank you for the honor of representing our soldiers, sailors, airmen, guardians, marines, and civilians.

Chairman REED. Thank you very much, General VanHerck.

General Richardson, please.

STATEMENT OF GENERAL LAURA J. RICHARDSON, USA, COMMANDER, UNITED STATES SOUTHERN COMMAND

General RICHARDSON. Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, thank you for the opportunity to appear before you with General VanHerck. I am honored to represent the men and women of United States Southern Command to discuss the challenges we share with our neighbors in Latin America and the Caribbean.

As stated in the National Security Strategy, "No region impacts the United States more directly than the Western Hemisphere." Last year I testified before this Committee and stated, "This region, our shared neighborhood, is under assault from a host of cross-cutting, trans-boundary challenges that directly threaten our Homeland." This is still true today, and is a call to action.

In the last year I have spent time in the region, meeting with leaders to better understand these challenges and the threat they pose to our mutual interests. The world is at an inflection point.

Our partners in the Western Hemisphere, with whom we are bonded by trade, shared values, democratic traditions, and family ties, are feeling the impacts of external interference and coercion. The People's Republic of China, our pacing challenge, continues to expand its economic, diplomatic, technological, informational, and military influence in Latin America and the Caribbean. The PRC has the capability and intent to eschew international norms, advance the brand of authoritarianism, and amass power and influence at the expense of these democracies.

The PRC has expanded its ability to extract resources, and gets 36 percent of its food imports from the region and 75 percent of its lithium from South America. The PRC also leads the hemisphere in illegal, unregulated, unreported fishing, raiding the fish of coastal countries, costing a profit loss of about $3 billion.

The PRC has also established ports in multiple countries, manipulated governments through predatory investment practices, and built potential dual-use space facilities, the most space facilities in any combatant command region.

Russia, an acute threat, bolsters authoritarian regimes in Cuba, Nicaragua, and Venezuela, and they continue its extensive disinformation campaign and has media agreements with 11 countries in the region. There are over 30 million followers of Russia Today en Espãnol and nik Mundo. These activities undermine democracies and challenge our credibility.

Both China and Russia exploit the presence of transnational criminal organizations and amplify their destabilizing impacts on democratic governments. TCOs spread violence and corruption throughout the region and beyond. Their fentanyl-laced cocaine contributes to the deaths of Americans in cities and towns across the country.

The good news is by working with our very willing parts this leads to the best defense. We must use all available levers to strengthen our partnerships with the 28 like-minded democracies in the region who understand the power of working together to counter these shared threats. Our partners look to us to lead in the hemisphere. We have an obligation to meet them where they are and continue to aggressively address our common security challenges.

We must continue to maximize the effectiveness of important tools like security cooperation programs to train and equip our partner militaries and security forces; conduct multilateral exercises; and build interoperability, and increase the State Department's international military, education, and training, foreign military sales programs to educate, train, and build capacity that our partners put to immediate use to stand shoulder-to-shoulder with us.

As the National Defense Strategy stages, the United States derives immense benefits from a stable, peaceful, and democratic Western Hemisphere that reduces security threats to the Homeland. USSOUTHCOM is putting integrated deterrence into action every day, using innovative methods to work seamlessly across all

domains with the other combatant commands, the Joint Force, allies and partners, Congress, the U.S. interagency, NGO's, and the private sector to help build a hemisphere that is free, secure, and prosperous for our generation and generations to come. I call this Team Democracy, and we need to field a resourced team.

Thank you, and I look forward to your questions.

[The prepared statement of General Laura J. Richardson follows:]

PREPARED STATEMENT BY GENERAL LAURA J. RICHARDSON

Chairman Reed, Ranking Member Wicker, and distinguished Committee Members, 2022 marked two important milestones for U.S. Southern Command (USSOUTHCOM): the 25th anniversary of our move from Panama to Miami in 1997, and the 25th anniversary of our Human Rights Initiative. For a quarter of a century, the brave women and men of USSOUTHCOM have called Miami home, while working with allies and partners to improve security, advance democratic ideals, and promote peace and prosperity throughout our shared neighborhood.

At the end of the cold war, the United States, its allies, and partners believed that democracy would displace authoritarianism around the globe. Twenty-five years later, the strategic environment in Latin America and the Caribbean (LAC) has changed significantly. The 2022 National Security Strategy (NSS) states, in no uncertain terms, that "autocrats are working overtime to undermine democracy."[1] We see this right here in our own hemisphere that external malign actors like the People's Republic of China (PRC) and Russia are aggressively exerting influence over our democratic neighbors.

The NSS also states "no region impacts the United States more directly than the Western Hemisphere."[2] Presence and proximity absolutely matter, and a stable and secure Western Hemisphere is critical to homeland defense. After traveling across LAC and meeting our partners face to face, I can confirm our security at home is directly impacted by the challenges facing this strategic region.

Our adversaries use a multidisciplinary and multidomain approach to counter democracy and SOUTHCOM, our allies, and partners must use the full weight of integrated deterrence, leveraging the whole-of-government, industry, private sector, and academia, in order to effectively respond. With shared purpose and mutual trust, we must collectively act with a much greater sense of urgency to ensure this hemisphere remains a stronghold for democracy.

Today, the PRC has both the capability and intent to eschew international norms, advance its brand of authoritarianism, and amass power and influence at the expense of the existing and emerging democracies in our hemisphere. This is a decisive decade and our actions or inactions regarding the PRC will have ramifications for decades to come.

While the PRC remains our pacing challenge, other malicious actors erode regional security. Russia continues its extensive disinformation campaigns and bolsters authoritarian regimes in Cuba, Nicaragua, and Venezuela. Transnational criminal organizations (TCOs) spread violence and corruption throughout the region and beyond. These TCOs traffic drugs that contribute to the deaths of thousands of Americans in cities and towns across the country, from Alabama to Washington, from Rhode Island to Mississippi and everywhere in between. TCOs foment violence and instability that contribute to irregular migration, forcibly displacing hundreds of thousands of people who risk their lives to reach U.S. territory each year. TCO corruption creates insecurity, deteriorates rule of law, and leaves partner nations susceptible to the actions of malign State and non-State actors.

We aren't alone in our efforts to create a stable and peaceful hemisphere. Integrated Deterrence includes campaigning with our partners and allies as force multipliers for achieving success in this resource-constrained reality. With our partners and allies from the United Kingdom, Canada, France, and the Netherlands, we recently adopted the Framework for Western Hemisphere Collaboration. The framework commits us to more frequently share information, and work more closely together on our aligned strategic interests.

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[1] *https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy–10.2022.pdf*

[2] *https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy–10.2022.pdf*

Our USSOUTHCOM lines of effort in the face of these challenges are clear: by strengthening alliances and partnerships, collectively countering threats, and building our team, we are working to preserve democracy in our shared neighborhood. While doing so, we are pioneering ways to outcompete even our most innovative adversaries and address these transnational challenges.

EXPANDING CHALLENGES IN THE REGION

Strategic Competition with the People's Republic of China—A Decisive Decade

When regional leaders and experts discuss the PRC's engagement in the Western Hemisphere, they focus largely on trade and investment. In 2002, PRC trade with Latin America and the Caribbean was just $18 billion; in 2022 it ballooned to $450 billion. That number is expected to increase to $700 billion by 2035. Conversely, current United States trade within the region amounts to $700 billion, which suggests that the United States' comparative trade advantage is eroding.[3] [4]

What concerns me as a Combatant Commander is the myriad of ways in which the PRC is spreading its malign influence, wielding its economic might, and conducting gray zone activities to expand its military and political access and influence in the AOR. The PRC is investing in critical infrastructure, including deep-water ports, cyber, and space facilities which can have a potential dual use for malign commercial and military activities. In any potential global conflict, the PRC could leverage strategic regional ports to restrict United States naval and commercial ship access. This is a strategic risk that we can't accept or ignore. These activities are heavily subsidized through PRC state-owned enterprises (SOE), allowing them to underbid on infrastructure projects, quickly displacing local and international competitors. SOEs are developing deep-water ports in 17 countries, particularly around strategic maritime chokepoints in this region. In Asia, Africa, and the Middle East, PRC SOEs abused commercial agreements by conducting military functions at host-country ports. What's to keep them from doing the same right here in this hemisphere?

In Panama, PRC-sponsored companies are engaged in, or bidding on, several projects related to the Panama Canal—a global strategic chokepoint. These projects include port operations on both ends of the canal, water management, and a logistics park. Meanwhile, in Argentina, a PRC SOE is attempting to secure the rights to build dual-use maritime installations near the southern port city of Ushuaia, which would support sustainment and power-projection while providing proximity to the Strait of Magellan, Drake Passage, and Antarctica. This would be a potential game-changer for the PRC, dramatically improving its access to Antarctica.

The PRC also sees this region as key to expanding its space domain awareness and improving its military space capabilities. There are at least 11 PRC-linked space facilities across five countries in this region, more than any other geographic combatant command's AOR, that provide Beijing with space tracking and surveillance capabilities. This includes a joint space-monitoring facility in Chile and a deep space station in Argentina that is managed by an agency subordinate to the People's Liberation Army (PLA).[5]

Our Nation's leaders have expressed concern about the insidious nature of the PRC-sponsored 5G technology providers for years now. In our region alone, five countries adopted Huawei's 5G technology, and 24 countries have existing Chinese telecommunication infrastructure (3G/4G), increasing their potential to transition to Chinese 5G. There are also 12 countries using PRC-created Safe City programs that provide persistent surveillance and give PRC SOE technicians access to government networks. These actions, among others, create a potential counterintelligence threat to the United States military, our civilian personnel, and our regional partners. The proliferation of this technology has also led even more partner nation military personnel to travel to China to receive training on cybersecurity and military doctrine.

The PRC relies heavily on resources, including food sources and minerals from the USSOUTHCOM AOR. This region is one of the richest in the world in critical rare earth minerals. The PRC's efforts to extract South America's natural resources to support its own population of 1.9 billion people are conducted at the expense of our partner nations and their citizens. These actions have the potential to destabilize the region and erode the fundamental conditions needed for quality private sector investment.

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[3] *https://www.cfr.org/backgrounder/china-influence-latin-america-argentina-brazil-venezuela-security-energy-bri*

[4] *https://www.atlanticcouncil.org/in-depth-research-reports/china-lac-trade-four-scenarios-in-2035/*

[5] https://features.csis.org/hiddenreach/china-ground-stations-space/

Environmental crimes such as illegal, unreported, and unregulated fishing (IUUF), illegal logging, and illegal mining continue to have devastating impacts on the region and the PRC is the largest perpetrator of these biodiversity crimes. Every year, there are between 350 and 600 Chinese Communist Party (CCP)-subsidized vessels fishing off the coast of South America. These vessels severely deplete fish stocks, disregard environmental safeguards, destabilize the economies of coastal states, and exacerbate security challenges at a cost of nearly $3 billion in lost revenue annually.[6] When I meet with our partner nations, IUUF, along with transnational criminal networks and cyber security, is consistently among their top national security concerns. As a result, their militaries are increasingly being asked to play a leading role in combating this illegal activity.

Russia as an Acute Threat

The impacts of Vladimir Putin's illegal, unprovoked invasion of Ukraine reverberated around the world, worsening a global energy and food crisis. The USSOUTHCOM AOR has not been spared. Families across the region are struggling to put food on the table and gas in their cars because of the sharp rise in prices, compounding the negative impacts in this region from COVID–19.

Through military engagements and gray zone operations, Russia colludes with authoritarian regimes in the region to undermine United States influence. In the past year, Russia continued its military engagements with both Venezuela and Nicaragua. Last year Venezuela hosted *Sniper Frontier 2022,* a shooting competition and subcomponent of Russia's International Army Games. Nicaragua has publicly supported the Russian invasion of Ukraine, voting—along with only North Korea, Syria, and Belarus—against a U.N. resolution condemning Russia for its invasion. These engagements increase Russian influence with nations who are destabilizing forces in the region.

Russia uses disinformation to further its malign influence, sow instability and undermine democracy in the region, activities that promote Russian geopolitical goals and undermine United States national security interests. For example, Russia spreads false narratives about its invasion of Ukraine through its Spanish-language media arms, RT en Español, Sputnik Mundo, and its various social media sites. RT en Español's Facebook page has 18 million followers, more than its English-language site or even CNN's Spanish-language channels.[7] Despite efforts by Facebook and Twitter to take down accounts spreading disinformation, Russian operators continue to generate bot accounts to spread falsehoods quickly. We are in a constant fight to counter and remove the disinformation spread by fake accounts and correct the misperceptions this disinformation propagates. It is in our interest to help develop our partner nations' knowledge and understanding of these tactics and false information before this malign activity permanently erodes this hemisphere's confidence in democracy.

Transnational Criminal Organizations

Although many partner nation leaders recognize the threats the PRC and Russia pose to democracy in the region, they see TCOs as their primary security challenge. The number one cause of death among citizens ages 15 to 49 years old in Latin America and the Caribbean is violence and more than 60 percent of the world's most crime-stricken cities are in this region.[8]

USSOUTHCOM estimates that there are 200 TCOs and four terrorist groups operating throughout the region. TCOs such as the Sinaloa Cartel and Jalisco New Generation Cartel in Mexico are spreading their reach to the region. The National Liberation Army (ELN), Revolutionary Armed Forces of Colombia—People's Army (FARC-EP), Segunda Marquetalia, and Sendero Luminoso continue to operate along primary cocaine trafficking corridors. First Capital Command (PCC) operates in Brazilian urban streets, the Amazonian jungle, in neighboring Paraguay, Bolivia, and in the United States. In Haiti, gangs control roughly 60 percent of the country, blocking roads for much-needed food and fuel.

TCOs are engaged in a wide variety of illicit activities, including drug smuggling, arms dealing, illegal logging and mining, human trafficking, IUUF, and manufacturing counterfeit goods. They are also invested in numerous legitimate enterprises,

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[6] (U) Online Publication: American University Center for South America and Latino Studies; 12 July 2022; (U) Latin America-Caribbean: Illegal Fishing is Environmental Security Challenge; *https://aulablog.net/2022/07/21/latin-america-caribbean-illicit-fishing-is-environmental-security-challenge/*

[7] *https://www.nytimes.com/2022/08/09/business/russia-propaganda-spanish-social-media.html*

[8] *https://www.maplecroft.com/insights/analysis/latin-america-hosts-over–60-of-worlds-most-crime-stricken-cities—global-ranking/*

including, but not limited to, commercial banking, manufacturing, agriculture, consumer sales, and real estate. The diverse activities amount to a war chest of roughly $310 billion annually, 5 times the combined military budgets of every nation in Latin America and the Caribbean. TCOs are better funded, equipped, and manned than the security forces trying to fight them and increasingly rely on PRC-connected criminal organizations to launder billions of dollars around the world.[9]

Drug trafficking originating from this region contributes to the deaths of more than 100,000 Americans every year. Interdicting the flow of drugs directly saves lives by removing product from the pipeline. It also reduces TCO revenue. The type of contraband or destination is irrelevant as the money remains in the Western Hemisphere and TCOs use their illicit funds to exacerbate regional corruption, insecurity, and instability. This in turn disrupts legitimate economic opportunity, compromises the rule of law, allows malign State actors the opportunity to make inroads, and drives irregular migration. TCOs victimize migrants, by extorting them, forcing them into human trafficking, and saddling them with debt. The human toll TCOs cause is heartbreaking.

Iran

Iran is focused on rebuilding its economic and diplomatic ties in the region and pursuing opportunities to circumvent United States sanctions. Tehran's intelligence and security activities continue to be a concern and over the past 2 years Iran has increasingly used Venezuela to assert its presence in the region.

Regional Humanitarian Crises

Fragility. The COVID–19 pandemic severely impacted the economies of Latin America and the Caribbean, driving 170 million people into poverty.[10] Countries in the region suffered disproportionately from the pandemic. While accounting for only 8 percent of the world's population, Latin America and the Caribbean suffered nearly 29 percent of the world's COVID–19 deaths. Fragility and instability drive irregular migration and create an environment ripe for corruption and exploitation.

Haiti. In recent years, Haiti has suffered an onslaught of setbacks including corrupt leaders and political assassinations, rampant gang violence, disease, and devastating natural disasters. Violence in Haiti is at its worst level in decades, according to the United Nations, characterized by gender-based violence, homicides, and kidnapping for ransom. Civil unrest, inter-gang fighting, and road blockages hinder commerce and humanitarian access. Today, Haitian citizens are suffering, and its government faces a myriad of challenges to include insecurity, limited governance capacity, and health concerns. The chaos caused more than 69,000 Haitians to seek refuge in the United States in fiscal year 2022.[11]

Nicaragua. President Daniel Ortega's regime continues to detain and prosecute political opponents, even targeting clergy and shutting down hundreds of civil society organizations and independent media outlets.

Since switching diplomatic allegiance from Taiwan to the PRC in December 2021, Nicaragua has engaged with the PRC in bilateral talks for a comprehensive Free Trade Agreement. In September 2022, PRC Foreign Minister Wang Yi met with Nicaraguan Foreign Minister Denis Moncada on the sidelines of the U.N. General Assembly, highlighting that the new bilateral relationship has already yielded "early harvests."[12]

Cuba. President Miguel Diaz-Canel's government continues to repress all Cuban citizens critical of the regime. The government engages in arbitrary detention, including children, and limits access to information and freedom of expression, and incarcerates political dissidents. The Cuban Government's oppressive tactics have forced more than 230,000 Cubans to seek refuge in the United States in fiscal year 2022.[13] In September 2022, Hurricane Ian struck Cuba, devastating homes, causing flooding, and knocking out power to many communities.

Venezuela. The humanitarian crisis caused by the Maduro regime in Venezuela remains one of the most severe in the world. President Nicolas Maduro's regime and security forces continue to target and deny access to critical services to any citizen who speaks out against them. His regime continues to engage in extrajudicial killings, forced disappearances, torture, and prosecution without due process. The

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[9] *https://www.propublica.org/article/china-cartels-xizhi-li-money-laundering*

[10] *https://www.bloomberglinea.com/english/number-of-latin-americans-living-in-poverty-expected-to-surpass-one-third-of-total/*

[11] *https://www.cbp.gov/newsroom/stats/nationwide-encounters*

[12] *https://www.fmprc.gov.cn/mfa_eng/topics_665678/kjgzbdfyyq/202209/t20220921_10769061.html*

[13] *https://www.cbp.gov/newsroom/stats/nationwide-encounters*

International Criminal Court is currently investigating possible crimes against humanity in Venezuela.

The Maduro regime's oppressive tactics and gross economic mismanagement have caused more than seven million Venezuelans to seek refuge elsewhere, causing instability and deepening challenges for those nations that have welcomed them. United States Customs and Border Protection statistics show that more than 187,000 Venezuelan migrants were encountered at the United States-Mexico border in fiscal year 2022.[14]

Levers: Overcoming Threats and Challenges in the AOR

The pervasive threats and challenges highlighted above pose significant risks to U.S. and regional security interests. We cannot accept such risks so close to home and we confront them by strengthening partnerships, countering threats, and building our team.

Strengthen Partnerships

As the Secretary of Defense said, "you can't surge trust at the eleventh hour; trust is something you have to work on every day."[15] We need to continuously engage our partner nations to build and sustain that trust and be their preferred partner. As we campaign in strategic competition to enable integrated deterrence and build enduring advantages, our engagements, presence, and policies must be flexible, consistent, and responsive to counter malign influence in the region.

The best way to outcompete our adversaries is to help partner democracies deliver for their populations at the speed of relevance. We achieve this by improving partner nation capability, capacity, and resilience through security cooperation, exercises, and training programs while upholding democratic values to ensure malign influence and autocratic alternatives do not further take root in this region.

The main priority in our USSOUTHCOM Campaign Plan is to expose and mitigate PRC malign activity. Ultimately, strategic competition with the PRC is an ideological one between democracy and authoritarianism. Presently, the majority of nations in the Western Hemisphere are democracies, and 8 of the 14 nations that still recognize Taiwan are located in USSOUTHCOM's AOR. Beijing is seeking to reduce that number and increase influence throughout the region while putting the defense of the United States Homeland at risk.

Security Cooperation. Building Partner Capacity (BPC) programs are my main lever for engaging partners in this posture-limited theater. These programs allow us to be on the field and engaged, to strengthen our partnerships, and develop military capabilities to counter a broad spectrum of threats and challenges. From high-end technical training that keeps partner intelligence, surveillance, and reconnaissance (ISR) assets in the air, to building institutional capacity that develops logistics and lifecycle management disciplines, to professional military education, we are developing trust and interpersonal linkages. USSOUTHCOM's BPC programs aim to make our partners resilient to the adversaries operating in this hemisphere.

Our embedded Ministry of Defense Advisors and field service representatives within partner nation security ministries, such as those in Colombia, support modernization and innovation efforts in such areas as personnel, defense intelligence, and doctrine development to help our partners meet threats to their national security.

The United States Colombia Action Plan enables Colombia to provide training and readiness directly to several countries, including Panama, Honduras, El Salvador, Costa Rica, the Dominican Republic, Ecuador, and Paraguay in Spanish, and at a fraction of the cost of United States-provided training. We really appreciate congressional support of this program.

These security cooperation programs offer a huge return on investment as they build trust and enhance capabilities and security throughout the region—a little goes a long way here.

Department of State Security Assistance. State security assistance programs increase interoperability with our partners while meeting their individual security requirements. Foreign Military Sales (FMS), Foreign Military Financing (FMF), and Excess Defense Articles (EDA) programs produce an exponential return in this AOR. Brazil recently made an FMS purchase of $15.8 million of 12 Joint Light Tactical Vehicles as part of the Brazilian Marine Corps modernization plan, strengthening its ability to counter threats and enhancing interoperability with United States Forces. The former United States Coast Guard cutters Albacore, Cochito, and Gan-

[14] *https://www.cbp.gov/newsroom/stats/nationwide-encounters*

[15] Secretary of Defense Lloyd Austin, speech to United States and NATO troops in Bulgaria, 18 March 2022.

net were delivered to Uruguay on November 12, 2022. These ships greatly enhance the maritime security of Uruguay and demonstrate that the United States is the preferred partner in the region. The Colombian Army received 86 armored vehicles in 2022 via the EDA program, giving Colombia a more modern capability to counter threats facing the country.

USSOUTHCOM executes State's International Military Training and Education (IMET) program that provides professional military education to personnel from 28 countries in the region. In 2022, USSOUTHCOM countries were allocated $13.9 million for the IMET program. On average, this allocation provides professional military education for approximately 800 international students in United States schools. The IMET program is one of USSOUTHCOM's strongest levers for countering the PRC and other malign actors in the region by acquainting international students with democratic ideals and professional military doctrine. Partner nation personnel who attend these schools often go on to become senior military leaders in their countries. The relationships built at these schools last a lifetime.

Joint Exercise Program. Our Joint Exercise Program continues to provide an outsized return on investment not only in building readiness, but also in strengthening partnerships that allow us to counter malign influence. In 2022 we had over 11,000 participants from 34 nations take part in our exercises, demonstrating once again that the United States has the convening power to bring nations together. These complex training events were multi-domain in nature and provided us year-long engagement opportunities across the AOR, to include engagements with key leaders.

USSOUTHCOM's exercise program in the counter-TCO realm also brings together the Drug Enforcement Administration, the Federal Bureau of Investigation, the Bureau of Alcohol, Tobacco, Firearms and Explosives, the Department of State, and Department of Homeland Security (including the U.S. Coast Guard), along with partner nation and allied military forces to enhance readiness, interoperability, and domain awareness, and to increase intelligence and information sharing.

Additionally, our exercises include training on human rights and on Women, Peace, and Security, which helps to enhance professionalism and advance democratic principles.

USNS Comfort. The USNS *Comfort* hospital ship deployed to five countries in the region from October to December 2022—Guatemala, Honduras, Colombia, the Dominican Republic, and Haiti—taking part in a humanitarian assistance, readiness building, and goodwill mission. The USNS *Comfort's* crew included military and civilian personnel as well as personnel from non-governmental organizations and partner nation militaries. Since its inception in 2007, the Continuing Promise mission has treated more than 580,000 patients overall and conducted over 7,000 surgeries. The USNS *Comfort* mission to the USSOUTHCOM AOR historically lasts approximately 159 days, but even during this year's reduced mission of 52 days, the *Comfort* managed to treat over 30,000 patients, conduct 350 surgeries, and positively impact 100,000 people with its outreach activities. This tremendous soft power asset will have lasting effects not just on the individuals who were treated, but also on the entire region.

Operation Health Engagement Assistance Response Team (HEART). During Operation HEART, a team of 34 medical professionals and 17 support personnel conducted orthopedic, ophthalmology, and dental surgeries in Guatemala and Honduras. In just 56 days, Operation HEART treated 993 patients and conducted a knowledge exchange with medical residents and doctors from Honduras, Guatemala, Nicaragua, Costa Rica, and El Salvador.

Key Leader Engagements. Since I last addressed this Committee, I have visited 13 countries and conducted over 90 key leader engagements with ministers and chiefs of defense. Increasingly, I have also met with heads of State and vice presidents as the appetite grows amongst our partners to engage at senior levels with the United States. To date, I have engaged eight presidents, three vice presidents, and two prime ministers, and I have a full calendar of engagements planned throughout 2023. Establishing and cultivating these relationships is vital and we must step up our presence in the region to maintain relevance. Relationships absolutely matter, and our partner democracies are desperate for assistance from the United States, but if we're not there in time, they have no choice but to take what's available, creating opportunities for the PRC to expand its influence. Just like with the COVID–19 vaccine, they wanted a United States vaccine, but some partner na-

tions had to take the Chinese Sinopharm or Russian Sputnik vaccines at 50–60 percent effectiveness because we weren't there with our Pfizer or Moderna vaccine.[16] [17]

U.S. Army Corps of Engineers. Infrastructure is one of our partners' critical needs, and the PRC is leveraging that need to achieve influence overmatch in the region. We need to step up with much greater responsiveness in our processes if we want to address our partner nation requirements and outcompete the PRC in this domain. The U.S. Army Corps of Engineers (USACE) works with USSOUTHCOM and partner nations to advance security, preserve environmental sustainability and climate resiliency, and protect at-risk indigenous populations. USACE is providing technical support to the Panama Canal Authority to help ensure the canal operates successfully for the next 50 years. It also supports Ecuador to mitigate the negative effects of a substandard PRC construction project at the Coca Coda Dam. In January 2023, at the request of the embassy and the government of the Dominican Republic, USACE assigned a subject-matter expert embedded within the Dominican Republic's Agency of Mines and Minerals to assist with developing efforts to preserve rare earth materials.

From a defense and security cooperation perspective, USACE's recent agreement with the Peruvian Navy to build out Peru's port facilities, and its continued construction efforts on Tolemaida Air Base in Colombia, facilitating the development of the largest rotary wing training and maintenance facilities in the region, will increase our partners' capacity to counter TCOs in the region.

State Partnership Program. Through the State Partnership Program (SPP), the National Guard continues to develop relationships with our partner nations. Eighteen United States states, Puerto Rico and the District of Columbia have active partnerships with defense and security forces from 30 nations in the Caribbean, Central America, and South America. By providing long-term and consistent support and building trust and teamwork, National Guard servicemembers give us the presence on the field that is so critical. For example, this year, the South Dakota National Guard worked with its partner Suriname to renovate a school for 450 children and provide medical and dental care to three separate rural and underserved communities, impacting approximately 2,500 civilians. This year, the Regional Security System (RSS), consisting of seven Eastern Caribbean nations, conducted 25 events across the RSS and in the continental United States.

SPP's success is enhanced through National Guard participation in partner nation exercises like those in Brazil and Colombia. The National Guard also provided medical servicemembers from Puerto Rico, Louisiana, Arkansas, and South Carolina to our successful Continuing Promise operations through the USNS *Comfort* deployment.

Humanitarian Assistance and Disaster Response (HA/DR). Latin America and the Caribbean are susceptible to hurricanes, earthquakes, droughts, and other extreme natural disasters. The United States is there with assistance before, during, and after disaster strikes. USSOUTHCOM engages our partner nations regularly, encouraging and assisting them to take positive steps toward disaster risk reduction, mitigation, preparedness, and resiliency. Several of our annual exercises, including TRADEWINDS and CENTAM GUARDIAN, have a HA/DR component to help build resiliency and readiness related to climate change and natural disaster response.

A recent example of our support is our response to Haiti's widening political and humanitarian crises. Supporting a whole-of-government effort led by the U.S. Agency for International Development and the State Department, USSOUTHCOM delivered thousands of gallons of much-needed fuel and 300,000 cholera treatment packets to Haiti. This operation relieved strain on the local healthcare system and enabled the U.S. Embassy to remain open to facilitate life-saving assistance.

Humanitarian assistance activities also address basic needs of the population and build partner capacity to maintain a healthy population. Activities emphasize public health capacity building, such as improving medical facilities, disease surveillance systems, and providing basic medical equipment, education, prevention, and training. Basic infrastructure activities focus on building partner capacity to provide essential services, like potable water. Finally, we recently joined with 12 other countries to identify logistics processes, procedures, and protocols that are required to improve the military logistics support to HA/DR activities in the Western Hemisphere.

Confronting Climate Change. This is one of the regions most impacted by climate change. Hurricanes, rising sea levels, flooding, and drought are causing grave harm

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[16] *https://apnews.com/article/china-gao-fu-vaccines-offer-low-protection-coronavirus-675bcb6b5710c7329823148ffbff6ef9*

[17] *https://absolutelymaybe.plos.org/2022/04/20/did-we-ever-find-out-how-effective-sputnik-v-vaccine-actually is/*

to the region's health, food, water, energy, and socioeconomic development. Extreme weather events impact our partners' national security, displacing populations and increasing irregular migration already accelerated by TCOs and insecurity.

These calamities know no borders. In 2022, Hurricane Fiona slammed into the Dominican Republic and Puerto Rico, Hurricane Ian ravaged western Florida and Cuba, and Hurricane Julia caused landslides and wiped-out crops in Central America. To help address threats from climate change and support humanitarian assistance, USSOUTHCOM works to strengthen our partners nations' ability to address more demanding disaster response roles, mitigate the effects from climate change, protect the environment, and enable the transition to clean energy through subject-matter expert exchanges and by incorporating energy security scenarios in exercises. Successfully confronting this complex issue requires a true integrated approach. For example, USSOUTHCOM partners with the Pacific Disaster Center in Hawaii to facilitate disaster response training and conduct National Disaster Preparedness Baseline Assessments with our partner nations. These assessments promote a multi-agency approach to disaster risk reduction and national disaster preparedness, in collaboration with partner nations' national disaster management agencies.

Countering Threats

Countering PRC malign efforts. In alignment with the 2022 National Defense Strategy's integrated deterrence approach, we strive to use all levers through campaigning to deny the PRC the perceived benefits of aggression. USSOUTHCOM leverages the expertise of the Executive branch, to include the Departments of State and Commerce, to improve partner nations' knowledge of effective legal frameworks to develop reliable and secure telecommunication infrastructure and cyber resilience, while highlighting state-of-the-art substantive alternatives to counter PRC state-owned enterprise expansion in the region.

By methodically identifying and synchronizing separate initiatives, from building cyber capability to exposing PRC malign activities, we can strengthen critical infrastructure to improve our collective ability to operate in the face of multi-domain threats posed by the PRC. Information sharing with our partners on the malign activities of the PRC in other nations and regions that have undercut sovereignty is critical to ensuring our partners can make informed decisions on their engagements with the PRC. However, information sharing alone is insufficient. Collectively, in a whole-of-nation integrated approach, we must also provide viable alternatives for partnerships and offer significantly more incentives through campaigning for critical infrastructure investment and port development in the region.

While the PRC consistently works to expand its network of military space infrastructure across the AOR, we are focused on strengthening relationships with our allies and partners through sustained engagement and investment with what we currently have, including by assisting our partners to build capability to conduct space operations to meet their needs. By focusing on strengthening relations, the United States demonstrates what a true partner looks like, which stands in stark contrast to the transactional nature of PRC engagements. This strategy, coupled with continued exposure of the military purpose of the PRC's scientific or academic space sites in the region, may slow and possibly reverse the expansion of the PRC's space network in our neighborhood.

Illegal, Unregulated, Unreported Fishing. IUUF is another area where we must leverage diverse capabilities and authorities. We have teamed up with the Department of State, partner nation stakeholders, the private sector, civil society, international organizations, and an interagency team of U.S. Government experts to confront this issue head on. The U.S. Coast Guard is conducting various IUUF missions in the AOR, and USSOUTHCOM has four ongoing IUUF initiatives that are complementary in nature.

Enhanced Domain Awareness is a secure, unclassified, virtual environment where USSOUTHCOM, interagency, and foreign partners can leverage commercially and publicly available information and analytics. This allows us to collaborate on diverse security challenges including strategic competition and IUUF as well as issues like migration, human trafficking, and illegal mining.

USSOUTHCOM has signed a memorandum of understanding with Global Fishing Watch and has a longstanding relationship with Florida International University through which we partnered to create the Security Research Hub—a virtual research community that brings together the United States, partner nations, academic institutions, civil society, and the private sector to foster shared understanding of the most pervasive security issues, to include IUUF.

USSOUTHCOM is also exploring areas of cooperation and opportunities to provide technical assistance and support to the Eastern Tropical Pacific Marine Cor-

ridor, a voluntary regional cooperation mechanism created by the coastal states of Ecuador, Costa Rica, Colombia, and Panama.

Finally, working with 14 partner nations and the National Maritime Intelligence-Integration Office, U.S. Navy South leads the way for an intergovernmental approach to information-sharing efforts. When fully implemented, they will collectively foster timely, actionable information sharing, multifunctional collaboration, and multinational trust. This collaboration will illuminate nefarious actors negatively impacting our partner nations' economies and populations.

Countering Russian malign influence. USSOUTHCOM is postured to compete with Russia through the coordination and application of information-related capabilities. While Russia may seem distant, its presence and influence is felt in our hemisphere, actively undermining the security and stability of our partner nations. Our multifaceted approach aims to bolster partner efforts and expose malign activities, with the goal of blunting Russian exploitation in the information environment.

Our partners are inclined to support efforts that impose costs on Russia. Some are willing to exchange their Soviet-era equipment for NATO-interoperable, United States-made equipment. However, as our partners agree to support efforts against Russia, the United States must have responsive mechanisms in place to rapidly provide replacement assets to maintain partner nation readiness—if not done right, we could lose this opportunity.

Cyber. Cyber is an all-encompassing domain capable of affecting every sector of society, not just defense. USSOUTHCOM partners with other U.S. agencies and organizations such as the Departments of State, Commerce, Homeland Security, and Justice along with U.S. Cyber Command, our National Guard SPP teammates, and the U.S. Coast Guard, to deliver the right support at the right time to assist our partners with their cyber-related challenges.

Through our cyberspace advise and assist efforts, including subject-matter expert exchanges and leveraging the expertise of our Joint Combatant Command Cyber Assistance Teams, we support our partners' efforts to advance their defensive cyber capabilities and develop cyber resiliency. These programs are enablers that help our partners tactically defend against the threats posed by Russia and its proxies in the cyber domain. However, with the significant increase in nation-State cyber attacks and hacktivist attacks in the region, our partner nations are struggling to protect their citizens in the cyber domain, and we are in a race to help them protect their cyber assets before they choose competitor solutions. [18]

Competing in the Information Space. Additionally, our information operations team shapes pro-U.S., pro-democracy narratives, counters disinformation by promoting fact-based information, and works aggressively to reduce U.S. adversary influence in the information environment. This team highlights democratic ideals such as respecting human rights and protecting the rule of law. This capability is postured to provide accurate, timely, and valid information to support reasonable decisionmaking, resulting in better outcomes and ultimately decreasing the effectiveness of propaganda.

Agile Processes. To outcompete our adversaries and win through campaigning, we need to be agile and support our partners at the speed of relevance. While we are committed to transparent processes, we must be faster and more innovative to outcompete our adversaries. Right now, our partner nations are quickly losing confidence in the U.S.'s ability to deliver capability. At a recent event when I spoke about what I call "Team Democracy," a term I use to describe integrated deterrence and working together to counter adversary malign activity, a head of state responded that there aren't very many on "Team Democracy" anymore, citing multiple examples of countries turning away from democracy because the U.S. overpromises and underdelivers. FMF, FMS, and Security Cooperation are great levers that can make huge inroads in the AOR when delivered at the speed of relevance for our partners. However, these programs are only as good as the processes by which we execute them. While a little goes a long way in this AOR, we need to do better to support and react at the speed of need, armed with the capabilities our partners can implement quickly and sustain for the long term. When we don't support our partners at the speed of need, our competitors willingly fill the gap.

To help improve processes, the Office of the Under Secretary of Defense for Policy has established two working groups to break down barriers to our success. The Campaigning in the Western Hemisphere Group brings together entities within the Department of Defense that play a role in building partner capacity, and the Defense Opportunities Group convenes interagency partners that have a stake in a stable and secure Western Hemisphere. We aspire to quickly gain efficiencies across

[18] *https://www.recordedfuture.com/latin-american-governments-targeted-by-ransomware*

the U.S. Government so we may apply all levers of national power in this vital strategic competition.

Countering TCOs. Our Joint Interagency Task Force-South (JIATF-S) conducts the statutorily directed mission to detect and monitor illicit drugs transiting toward the United States in the maritime and air domains, delivering a high return on modest investments. In fiscal year 2022, JIATF-South facilitated the disruption of 371 illegal smuggling events, including a total of almost 300 metric tons of cocaine and over 140,000 pounds of marijuana, with a combined wholesale value of $7.5 billion and saving an estimated 2,976 American lives. In addition to saving U.S. lives and reducing TCO revenue, JIATF-South-facilitated drug trafficking disruptions produce evidence in the form of contraband, detainees, and other information. Our interagency and international law enforcement partners use this evidence, to help affect judicial end states that degrade and dismantle TCOs.

I want to highlight our international partners' participation in these operations, as they are key to overall mission success. Our international partners participated in 76 percent of the JIATF-South-facilitated disruptions (up from 62 percent last year) and were responsible for removing 475,000 kilograms of transit zone cocaine headed toward the United States. This is a testament to their commitment to support this regional effort and build their capability and capacity.

United States-led, multinational counternarcotics operations ultimately result in our international partners taking the lead on their own operations, as Colombia does via their Operation Orion. Colombia executed two iterations of Orion in 2022, leading a coalition of 41 countries, resulting in the disruption of more than 180,000 kilograms of cocaine and seizing dozens of conveyances. This is an excellent example of integrated deterrence return on investment—gained by combining willing and able international partners with a committed U.S. presence in the Western Hemisphere. Each of these operations was only successful because of the United States investment to train and equip our Colombian military and security partners.

Notwithstanding our significant achievements over the decades in this mission space, there is still more to do. As U.S. resources against this threat decline, we will continue to innovate—both in strategy, like re-examining current authorities, and unconventional resourcing, like contract assets, commercial data, and artificial intelligence and machine learning.

Combating Money Laundering. Systemic political corruption and lack of strong anti-money laundering policies make the region a permissive environment for illicit financial activity. USSOUTHCOM continues to identify TCO financial support networks, providing direct analytic support to U.S. Treasury Department and other interagency partners that facilitate sanctions, arrests, and prosecutions against TCOs. Recently, USSOUTHCOM supported Treasury's designation of Ecuadorian national Wilmer Emilio Sanchez Farfan, one of the most significant drug traffickers in the world and a major cocaine supplier to the Sinaloa cartel.[19] While continued disruptions of illicit drug movements toward the United States remain critical, to truly disrupt these billion-dollar conglomerates, we must also support interagency efforts to follow the money.

Coast Guard Support. The U.S. Coast Guard is one of USSOUTHCOM's strongest partners, with its National Security Cutters and Fast Response Cutters providing the bulk of our counterdrug forces. U.S. Coast Guard assets enhance operations with unique capabilities and authorities which, when used in conjunction with the U.S. Navy and partner nation platforms, maximize the effectiveness of a variety of missions. The Coast Guard is executing its largest fleet recapitalization since World War II. These recapitalization efforts will provide capabilities that support three USSOUTHCOM strategic initiatives: enhancing Theater Security Cooperation, countering IUUF, and combating TCOs. Additionally, the Coast Guard provides valuable humanitarian mission support across the region, saving lives and delivering much-needed aid when natural disasters suddenly strike the region.

Building our Team—People First

Housing. Our servicemembers and families are our strength and foundation. While having our headquarters and two subordinate commands in South Florida offers a great synergy with our AOR, our team faces extraordinary pressures with the expensive, competitive, and volatile housing market. In September 2022, Secretary Austin announced immediate and long-term actions to help strengthen the economic security and stability of servicemembers and their families. We benefited with automatic increases in the Basic Allowance for Housing (BAH) for the Miami-Dade and Broward County areas that have carried forward in the calendar year 2023 BAH rates. We are seeking similar relief for the Key West area. We are also continuing

[19] *https://home.treasury.gov/news/press-releases/jy0592*

our work with the Department of the Army and the Office of the Secretary of Defense (OSD) on a housing solution to address servicemember concerns about cost and availability of housing in the Miami area.

JIATF-South Resiliency. JIATF-South is currently operating out of 70-year-old facilities that are severely degraded. We received full fiscal year 2023 planning and design funding to complete the design for a new command and control facility. We appreciate this continued support as we look to finalize the design and request the military construction funding to construct a resilient facility for this critical mission for the Nation.

Women, Peace and Security (WPS). At USSOUTHCOM, we deliberately integrate gender perspectives throughout all ranks into our operations, activities, and investments, exemplifying a truly diverse joint force and encouraging our partner nations to do the same. Our main objective is to maximize the talents of the force through recruitment, retention, training, and advancement. We also highly encourage partner nation leaders to increase their numbers of women who participate in IMET and other special programs. We are seeing results. In August 2022, the Florida National Guard and Guyana's Defense Force hosted the first Caribbean Regional WPS conference with leadership from 12 partner nations—including Guyana's First Lady Arya Ali and the AOR's first female Chief of Defense, Jamaica's Staff Rear Admiral Antonette Wemyss-Gorman, advocating for gender inclusivity and advancing regional influence in ways that our adversaries cannot. In September 2022, Colombia appointed its first female Senior Enlisted Leader of the Colombian Military Services, Command Sergeant Major Consuelo Diaz Alvarez, and in October 2022, for the first time in its history, the Colombian Navy promoted two female Navy Captains, Beatriz Helena Garcia Restrepo and Carolina Gomez de Castillo, to the rank of Rear Admiral. Although much work remains, these are just a few of the examples that demonstrate USSOUTHCOM and its partners' commitment to provide opportunities for women to become leaders in the defense and security sectors.

Total Force. The United States military is the most powerful in the world, and USSOUTHCOM leverages all available personnel, making us flexible and agile to counter any challenges we may face. Of the servicemembers at USSOUTHCOM, up to 20 percent at any given time are Guard or Reserve members conducting operations in more than 20 locations throughout the AOR.

One such total force mission has been ongoing for a decade. Since 2003, Air National Guard Airmen have supported JIATF-South's detection and monitoring mission through the Host Nation Rider Program. This program provides technical language support and translation/interpretation that has been instrumental in achieving successful detection and monitoring of air operations within the AOR. In fiscal year 2022, this program was involved in the seizure of over 49,000 kilograms of cocaine, 24,000 pounds of marijuana, and the apprehension of 154 detainees.

The Reserve component is a force multiplier used in a cyclic manner to provide predictability, operational capability, and as a strategic force, providing depth to support a full spectrum of conflicts. Guard and Reserve support is critical to USSOUTHCOM's mission continuity and success.

What Resources Does USSOUTHCOM Need?

In this region, a small investment—whether in time, physical resources, funding, or collaboration—goes a long way. We don't have to outspend the PRC to outcompete, but we must be present on the field and deliver at the speed of relevance. This requires having a timely budget—continuing resolutions are disruptive to United States and partner nation efforts to defend against threats. If we don't, China and Russia will fill the void.

Security Cooperation is our main tool for building the capability of our very willing partners. These partners take our small investments and immediately employ them against the threats and challenges that affect our entire hemisphere. Our partner nations are a force multiplier in a posture-limited theater. The support Congress provided for the fiscal year 2023 budget toward making our partners more capable makes us all stronger. We look forward to putting those funds to good use to support both our fiscal year 2023 and fiscal year 2024 programs for security cooperation in our region.

Security Assistance goes hand-in-hand with security cooperation. The security assistance we provide to countries like Colombia, Ecuador, and Panama is a game-changer for our partners who are working every day to counter illicit trafficking, address irregular migration, and secure our region. However, in contrast, Honduras, Guatemala, and El Salvador are currently not eligible for FMF. We will work with the Department of State to consider tailored solutions to advance regional policy goals.

Domain Awareness is key to countering PRC, Russia, and TCO malign activities that threaten hemispheric security, as well as assisting our partners during disaster relief. Air, maritime, land, space, and cyber domain awareness projects in the region fill debilitating coverage gaps and enable our partners to counter drug smuggling, IUUF, money laundering, human smuggling, weapons trafficking, and illegal trade in natural resources. These projects reveal shared problems, illuminate opportunities, foster enhanced collaboration, and enable us to export security regionally. The ability to sense, make sense, and share data with our partners is critical. Maintaining a comprehensive threat picture with our allies and partners through our Enhanced Domain Awareness platform enables us to react quickly to threats and to collaborate in real time as we engage in combined operations and activities. Critical to building this shared picture is commercial imagery, open-source intelligence, and off-the-shelf bulk data analytics that allow us to harness this data in the public and commercial space to address critical gaps.

Aerial ISR is also paramount to maintaining domain awareness. To stay ahead of the growing pernicious threats that State and non-State actors pose, we require long-range, long-dwell, next-generation aerial ISR, such as solar-powered aircraft with a greater range and time over target. Aerial ISR aircraft have been critical to our ability to detect and deliver actionable information to other U.S. agencies and partner nations that enable their counternarcotics and counter-TCO operations. In fiscal year 2022, information provided by airborne ISR assets operating overland accounted for the seizure of 322 metric tons of cocaine and deprived TCOs of over $9 billion in profits. To further enhance our ability to enable counternarcotics and counter-TCO operations, we are pursuing ISR technologies with a greater ability to detect active drug production laboratories. When deployed, this capability will allow us to collect over a four times larger area with twice the sensor resolution of any comparable platform in the U.S. Government's inventory.

The National Geospatial-Intelligence Agency (NGA) also remains a key intelligence provider in meeting U.S. Southern Command's priorities. Warning decision-makers of the breadth and depth of challenges in the Western Hemisphere requires geospatial analysis at speed and scale. We appreciate Congress's continued support for NGA's budget request and for their personnel supporting the Combatant Commands.and scale. We appreciate Congress's continued support for NGA's budget request and for their personnel supporting the Combatant Commands.

Innovation, Science, and Technology. Today we face a more level playing field in technology, and we need to rapidly adjust how fast we get technology to the warfighter to maintain dominance and confound the adversary. The USSOUTHCOM AOR provides a permissive environment that has a high tolerance for technology experimentation, willing partners, and diverse climates and geography, all close to the U.S. Homeland. This affords us great opportunities to conduct innovative activities with our partners that help gain and maintain a strategic advantage over the PRC, Russia, and other malign actors.

We take every opportunity to capitalize on these benefits. We are developing green energy capabilities, working on the first unmanned persistent solar-powered aircraft with a 300-pound payload, creating small-scale autonomous low-profile vessels, and developing laser communications systems with a low probability of detection and faster speeds than conventional solutions on the market.

A good example of this innovation is our collaboration with the Office of Naval Research, which has designed an experimentation series known as SCOUT. SCOUT's inaugural cycle automates antiquated processes and places capabilities into warfighters' hands faster. The SCOUT team, comprised of warfighters, engineers, academia, and industry partners, executes small-scale, discovery-focused events that provide multiple opportunities to test and measure technologies. This year we will conduct our first main event in JIATF-South to integrate prototype solutions focused on enhancing counternarcotics operations.

Information Related Capabilities. To compete in the information environment, USSOUTHCOM needs an adequate force structure with the requisite skills to counter the overwhelming threat from malign State actors in the information domain. Our adversaries are dedicating significant effort and resources with unrestrictive policies to undermine democracy in this region. We must do better to keep pace with them and outcompete them.

NAVSCIATTS. While considering modern warfare, we tend to focus on five domains: the high seas, inland regions, air, space, and cyber. However, littorals and rivers are the lifeblood of maritime commerce, large population centers, and bustling seaports for most of the 31 LAC countries. Ensuring security in these vital areas is essential to good governance, economic growth, and long-term prosperity. Malign State and non-State actors know the significance of littorals and rivers and routinely use them to transport bulk currency and illegal drugs, smuggle people and

a vast array of illicit commodities, and enable illegal mining and logging activities that imperil the environment.

We appreciate the support Congress offered last year for the Naval Small Craft Instruction and Technical Training School (NAVSCIATTS) in Stennis, Mississippi. The maritime training and education programs at NAVSCIATTS generate outsized return on investment, providing invaluable opportunities to military and law enforcement personnel from the United States and our allies and partners, most of whom operate smaller craft. Expertise shared at NAVSCIATTS generates reciprocal trust, shared knowledge and understanding, collaboration, and multifaceted technical skills that enable integrated deterrence against the PRC and other malign actors. They also reduce environmental damage and protect natural resources.

Ambassadors. We truly appreciate Congress's efforts to confirm additional Ambassadors in the Western Hemisphere last year. Having a confirmed Ambassador in country is critical to maintaining strong relationships and, conversely, not having one in place can have a detrimental effect and opens the door to our adversaries in the region. We look forward to Congress's continued support in the effort to strengthen diplomatic ties in our neighborhood.

Conclusion

The defense of the United States Homeland is directly linked to the resilience, stability, and security of the Latin America and Caribbean region. Proximity places us on the frontline of strategic competition, as we share transboundary challenges and global threats. This requires the USSOUTHCOM team to be a trusted partner and pursue efforts that meet our partners where they are, maximizing our efforts where their priorities align with our own national interests. Meeting these challenges requires campaigning through an integrated approach to utilize all available levers across the DOD, U.S. interagency, Allies and Partner Nations to establish the desired conditions of security, peace, and prosperity throughout our neighborhood.

Chairman REED. Thank you very much, General Richardson.

General VanHerck, as you know, Congress is considering disposing of the S-band or auctioning parts of it to the commercial sector. I want to personally commend Senator Rounds and Senator King for the very effective work they have done in making sure the military and the Department of Defense has an opportunity to look at this.

But this is a spectrum in which your early warning system is there, your missile defense system, the Aegis system, which you use for defense. Could you tell the Committee what the impact of curtailing, selling, or compromising this spectrum would have on your operations?

General VANHERCK. Chairman, absolutely. I am concerned about the potential national security impacts of auctioning or selling off that spectrum. It is my assessment there will be impacts, as you pointed out, to our domain awareness capabilities. What I think is good is a study that we understand the national security impacts before we make any decisions on auctioning or selling off any spectrum.

Chairman REED. Thank you, sir. I understand there is a study ongoing with the support of the Secretary of Defense and the Secretary of Commerce. Are you participating in that?

General VANHERCK. I have not been asked to participate directly in that. I would welcome the opportunity to discuss impacts to homeland defense.

Chairman REED. Thank you very much, sir.

General Richardson, you have indicated the growing competition with China and Russia in South America and Central America. China is using economic leverage at ports and other infrastructure. They are trying to introduce 5G telecommunications. They have set up a network of space tracking stations which are probably doing

more than space tracking. Russia is acting through proxies like Venezuela, Nicaragua, and Cuba, and as you pointed out and which I think comes as an interesting surprise to many of us, institutional investors very active with the media, with Sputnik Mundo and RT en Espãnol.

Do you have the resources to counter these efforts?

General RICHARDSON. Thank you, Senator. I could use additional resources in order to counter. We can do a lot more in this region and a little goes a long way with our partners. This region is fraught with critical infrastructure by the PRC that has been invested in. As you aid, Senator, the deepwater ports, space, telecommunications, Safe City/Smart City, which is really surveillance of the populations, and things like that.

So with the disinformation, I mean, we play by the rules. We have rules to follow. We have the rule of law that we follow in the United States, and our adversaries do not follow any laws, and they do not play by the rules. So the answer is yes, Senator.

Chairman REED. One of the areas that I think you are probably deficient in is ISR, and that requires additional equipment and also might be an opportunity to test autonomous vehicles. Is that something that you are suggesting to the leadership?

General RICHARDSON. Absolutely. This region and in the SOUTHCOM AOR, where our adversaries might not be watching so closely, is to be able to test in a real-world mission the innovation, the technology, and things like that. We work with our partners. They are very much involved with wanting to advance their ability to see and have domain awareness, just like us at SOUTHCOM.

If we can see more and spot this malign activity, expose the malign activity, we are able to better counteract the adversaries and that malign activity in the region.

Chairman REED. Thank you.

General VanHerck, the threats to the Homeland have changed dramatically and suddenly. The models we used, the systems we used in the cold war, and in the interim between the cold war and the present situation, do not seem to be applicable, with hypersonics, with long-range precision cruise missiles, with a host of different threats to the United States. You are looking at sort of the assumptions and the plans that we have had and tried to reconstruct for this new threat, new world.

How are we doing in terms of getting a new plan in place and also new weapon systems? You commented that one of our problems is speed, and that is a function of not only getting new equipment in place but putting aside legacy equipment. Can you just comment, General, on those points?

General VANHERCK. Chairman, yes. So after 2 years I got policy on what to defend. I cannot go into that in this forum. But the task that came back to me was to develop a plan on that defense-critical infrastructure. It is inside the Department of Defense critical infrastructure. I have provided that back to the Department on what I recommend.

Where we are now is further assessment on my recommendations. I provided a list of options from the status quo to also including future types of systems. I think the future of homeland defense

is vastly different than what we see today. It is likely including autonomous platforms, airborne and maritime platforms, unmanned platforms with domain awareness sensors, and effectors that are kinetic and non-kinetic.

We also need to take those over-the-horizon radar capabilities that I discussed and take that data and information and fuse it into an integrated picture, a globally integrated picture that allows us to see, globally, threats before they become threats here in the Homeland, and tie that to an integrated air and missile defense system and also into effectors, which are non-kinetic and also kinetic.

I see the future likely being much less kinetic. There will be some areas that we should defend kinetically that could bring us to our knees, but also non-kinetic such as deception, denial, and the use of the electromagnetic spectrum.

Finally, that policy needs to expand beyond defense. Those discussions are ongoing within the Department and the interagency and the Security Council, and I look forward to hearing back on that.

What I would just point out—sorry my time is up—but much of the critical infrastructure that I defend, and to ensure that we power project from the Homeland, is not solely held inside the Department or even Federal entities. It relies on commercial entities, states, municipalities, and we need to ensure that is part of the discussion.

Chairman REED. Thank you, sir.

Senator Wicker, please.

Senator WICKER. Thank you, Mr. Chairman.

First of all I have a unanimous consent request. I mentioned in my opening statement that Senator Rubio and I sent a letter to the Secretary of Defense and received a very dismissive, non-answer from Under Secretary Colin Kahl. I would like to ask unanimous consent to insert those two letters into the record at this point.

Chairman REED. Without objection, so ordered.

[The information referred to follows:]

United States Senate

WASHINGTON, DC 20510-0908

February 8, 2023

The Honorable Lloyd Austin
Secretary
U.S. Department of Defense
1000 Defense Pentagon
Washington, D.C. 20301

The Honorable Avril Haines
Director
Office of the Director of National Intelligence
1500 Tysons McLean Drive
McLean, VA 22102

Dear Secretary Austin and Director Haines:

Since it became public knowledge on Thursday, February 2, that a high-altitude Chinese surveillance balloon was traversing our nation, the Senate Armed Services Committee and Senate Select Committee on Intelligence have requested information on the timeline of events and the Biden Administration's response to this serious matter.

We are grateful to our men and women in uniform and our intelligence community who did their duty at the tactical level. However, there are a number of outstanding questions about what happened and why the Administration allowed an adversarial intelligence platform to move from Alaska to the Carolinas uninterrupted. We also lack a clear understanding of our senior national security leaders' response to the Chinese surveillance balloon's trajectory from first detection to January 28, when the Commander of U.S. Northern Command and NORAD Gen. Glen VanHerck notified his chain of command of the balloon, and until February 1, when President Biden finally ordered the Department to shoot down the balloon over water.

The appropriate Congressional committees need to understand better what President Biden and other senior officials knew about the Chinese surveillance balloon, when they knew it, what options were presented at different points in time, and why our government did not take action sooner. This incident is only the latest in a series of increasingly brazen violations of our nation's sovereignty by the Chinese Communist Party. It is also hard to separate Beijing's intent to conduct new forms of reconnaissance over our most important nuclear weapons sites from the recent news that Chinese ground-based nuclear launchers now outnumber ours.

We are also requesting an explanation of why the Department of Defense has failed repeatedly to propose relevant investments to enhance air domain awareness capabilities for Northern Command – especially in the Alaska air defense identification zone – in its budget requests. We want to know what opportunities exist for Congress and the Department of Defense to partner in accelerating such investments.

Finally, in light of the Biden Administration's recent acknowledgement of previous Chinese surveillance balloons that have entered U.S. airspace, we need to understand whether the Administration had developed any options to counter this threat prior to the latest balloon and what changes to air defense procedures may be necessary. We also need to understand why the Administration chose to disclose intelligence publicly during this incident in a manner that

served no public warning purpose and generated a climate of partisan recrimination that placed our intelligence agencies at the center of it.

It is of paramount importance that we receive a full accounting for these questions. We respectfully request answers, in a classified form if necessary, to the questions in the attached document by February 17.

Thank you for your attention to this urgent matter.

Sincerely,

Roger Wicker
U.S. Senator

Marco Rubio
U.S. Senator

Questions

NORTHCOM has indicated that Gen. VanHerck notified the Secretary of Defense and the Chairman of the Joint Chiefs of Staff of the high-altitude Chinese surveillance balloon on Saturday, January 28.

1. When did Gen. VanHerck receive his first indication of the balloon, and how?
2. At what point did Secretary Austin first become aware of the balloon and its trajectory?
3. At what point did the Chairman of the Joint Chiefs of Staff become aware of the balloon and its trajectory?
4. At what point did either the Department of Defense or the Joint Chiefs of Staff notify the President's national security adviser of the balloon and its trajectory?
5. At what point was President Biden notified of the balloon and its trajectory?
6. At what point did the Department of Defense present options to the Secretary of Defense and the President, respectively, for addressing the Chinese surveillance balloon?
7. Please provide a full accounting, with date and time stamps, of Gen. VanHerck's electronic, written, and verbal communications regarding the balloon both within NORTHCOM and to his chain of command.
8. Please provide a full accounting, with date and time stamps, of the Chairman of the Joint Chiefs' engagements with the National Security Council and the President of the United States, regarding the balloon and its trajectory.
9. Please provide a full accounting, with date and time stamps, of the Chairman of the Joint Chiefs' engagements with the National Security Council and the President of the United States, regarding the balloon and its trajectory.

- Since the Chinese surveillance balloon became public knowledge, the Biden administration has said that multiple balloons had entered U.S. airspace during the

previous administration. However, Gen. VanHerck said publicly that those balloons were discovered by the intelligence community "after the fact," and not known to senior officials at the time.

10. At what point did the intelligence community and/or the Department of Defense become aware of the Chinese high-altitude balloons that had previously entered U.S. airspace?
11. How many balloons does the intelligence community and/or the Department of Defense assess entered U.S. airspace, when did they enter U.S. airspace, and what were the capabilities and trajectories of those balloons? Please provide a full list and account with the known details.
12. Given the Department's awareness of these prior Chinese high-altitude balloons, did the Department develop any options for countering those balloons before they entered U.S. airspace, upon entry into U.S. airspace, or soon after entering U.S. airspace?
    a. If so, what were those options?
    b. If so, why were those options not presented to the Secretary of Defense and/or President when Gen. VanHerck notified the chain of command of the most recent balloon on January 28?
13. Please provide a full account of the Department's engagements with the press regarding Chinese high-altitude balloons' entry into U.S. airspace during the previous administration.
14. Have senior DOD officials spoken with the press about these previous high-altitude balloons, whether on- or off-the-record? Please provide the dates of his press engagements on this matter.

- General VanHerck stated that Northern Command did not possess the requisite air domain awareness capabilities to detect prior airspace incursions by Chinese high-altitude balloons.
    15. In General VanHerck's independent assessment, what capabilities would be required to reliably detect and track high-altitude balloons across U.S. airspace?
    16. Are there any unfunded requirements proposed by Northern Command over the past five years that would have assisted in mitigating this air domain awareness gap?
    17. Does the Department of Defense assess that any capabilities currently in the Department of Defense acquisition system process or resident in the Global Force Management Allocation progress that could help to mitigate air domain awareness gaps at Northern Command?
    18. After the intelligence community (IC) reportedly began tracking the Chinese high-altitude balloon at Hainan Island, how was this intelligence passed to the relevant combatant command, US Indo-Pacific Command (USINDOPACOM)? Was USINDOPACOM able to maintain custody of the Chinese high-altitude balloons?
    19. At any point on their trajectory, did these balloons traverse Guam or any of the Hawaiian Islands?
    20. Did USINDOPACOM produce any intelligence reports or finished intelligence regarding the Chinse high-altitude balloons traversing their area of responsibility?
    21. How was the IC able to assess that the Chinese high-altitude balloon that entered US airspace through Alaska was not an intelligence threat?
    22. Since the IC was able to identify the Chinese high-altitude balloon's origins, when did the IC begin collection and/or exploitation against its payload?

UNDER SECRETARY OF DEFENSE
2000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-2000

POLICY

FEB 2 7 2023

The Honorable Roger F. Wicker
United States Senate
Washington, DC 20510-0908

Dear Senator Wicker:

Thank you for your February 8, 2023 letter on the Chinese high-altitude surveillance balloon (HAB). I am responding on behalf of Secretary of Defense Lloyd Austin.

Senior officials from the Department of Defense, including the Office of the Under Secretary of Defense for Policy, the All-domain Anomaly Resolution Office, the Joint Staff, and U.S. Northern Command, provided briefings for all senators on February 9, 2023, and February 14, 2023, on the HAB and other Unidentified Anomalous Phenomena (UAP). The Department has also provided additional briefings to committee and leadership staff since February 2, 2023, to update the Senate on our approach to recent events. We hope these briefings have answered the questions raised in your letter. If you have additional questions regarding the HAB, please let us know.

The Department is modernizing our surveillance capabilities paced to the current and future geopolitical environment. In the near term, we are augmenting the existing North Warning System, including deployment of a new system of sensors that will enhance our ability to detect approaching airborne objects. We also are working closely with Combatant Commanders, the All-domain Anomaly Resolution Office, intelligence community, interagency, and the Military Departments to understand and advocate for the resources necessary to protect our nation. The Department looks forward to working with Congress to advance these efforts.

We appreciate your continued support of the men and women of the Department of Defense.

Sincerely,

Colin H. Kahl, PhD

cc:
Senator Marco Rubio

Senator WICKER. Thank you very much.

Now General VanHerck, with regard to these letters, I have received quite a bit of information from talking to you about this balloon incident, and you mentioned it in your statement, so let me just go through some quick questions so we can understand who knew what about the Chinese balloon.

You first learned about this on January 28 of this year. Is that correct?

General VANHERCK. Senator, I learned about it on January 27th. We first detected it by radar, my sensors, on January 28th, in the vicinity of St. Matthew Island, Alaska.

Senator WICKER. Okay, and that is United States territory, right?

General VANHERCK. That is correct, sir.

Senator WICKER. You notified your chain of command on that day, January 28, right?

General VANHERCK. I had a conversation on the evening of the 27th with the Chairman of the Joint Chiefs of Staff about my plan to intercept and identify and make an assessment, which we did on the 28th of January.

Senator WICKER. You sent that notification to Secretary of Defense Austin, Chairman of the Joint Chiefs of Staff General Milley, via classified email. Correct?

General VANHERCK. I sent it to the Chairman of the Joint Chiefs of Staff and to Secretary Austin's military assistant. I am assuming that the military assistant passed it to the Secretary.

Senator WICKER. Okay, and you still are not certain at what point President Biden or Secretary Austin were made aware of the balloon. Is that right?

General VANHERCK. I do not know when the President was made aware.

Senator WICKER. Fine, and when you confirmed the balloon's existence on January 28, you tasked NORTHCOM, your command, with preparing options to counter the balloon. That is correct also?

General VANHERCK. I tasked my NORAD team to develop options, and Senator, what I would point out is I have options every single day to defend our Homeland. In this case, the balloon did not meet the requirement or the authority for me to engage it because it was not demonstrating hostile intent or committing a hostile act. Hostile intent would be maneuvering to an offensive advantage on a platform, an airplane, or shooting missiles or weapons would be a hostile act.

Senator WICKER. You prepared options, you asked NORAD to prepare options in that instance?

General VANHERCK. I directed my team to be ready with options, just as we are every day. That is correct.

Senator WICKER. Okay, and had the Secretary of Defense requested options for shooting down the balloon on January 28, while the balloon was still over Alaska, you would have been prepared to provide him those options. Is that correct?

General VANHERCK. Senator, I am prepared every single second of every day to defend our Homeland. That is correct.

Senator WICKER. Ultimately you did not get a chance to provide those options to the Secretary until February 1st. Is that correct?

General VANHERCK. On February 1st at 0700 I was in DC, and that was the first time we had a discussion.

Senator WICKER. Okay. So there is January 28, 29, 30, 31, February 1st. So on the fifth day—it is apparent you took the right steps, but it is also clear that you received no direction from the President of the United States or the Secretary of Defense until the fifth day of this crisis, by which point the balloon had traversed Alaska and Canada and then reentered the United States.

So I would publicly call on the Secretary of Defense to answer the questions which the Vice Chairman of the Intelligence Committee and I have asked him.

You have already talked about kinetic and non-kinetic dangers in case we are in a major war in China. Do we have the capabilities you need to defend our Homeland from a kinetic or non-kinetic attack by Russia and China?

General VANHERCK. Senator, what I would like to do is talk about that in a closed session in detail. I have concerns, as I have articulated for 3 years, about my ability to provide threat warning and attack assessments with the threats to our Homeland. Why that is crucial is threat warning and attack assessment are crucial for continuity of government and our nuclear force posture. That increases the risk of escalation and strategic deterrence failure. Those are significant challenges for me.

I also have concerns about the time it would take me to set the theater in the AOR [area of responsibility] to meet potential threat timelines from oversea threats.

Senator WICKER. Okay, and quickly—we are being a little lax on the time today—if the border control agents that we have now, and ICE personnel, employees of the U.S. Government, were allowed simply to do their statutory jobs along the Texas-Mexico border, would we be in a much better situation now, and are they being restrained from fully enforcing the law as they have in the past?

General VANHERCK. I would have to defer to Customs and Border Protection and Border Patrol whether they are being restrained or not. I do think that the best solution here is to fully resource Homeland Security and their entities to conduct their law enforcement mission for the laws of our Nation. I do not see this as an enduring mission, long-term. We are happy to supported, as directed, to each and every day.

Senator WICKER. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Wicker.

Senator Shaheen, please.

Senator SHAHEEN. Thank you both, General VanHerck and General Richardson, for being here this morning and for your service to the country.

I would like to start with asking both of you about drug trafficking. General Richardson, I am very concerned, as I know you are, about drugs flowing into the United States through Latin America. In 2022, illegal drugs killed over 100,000 Americans, so this is a significant threat to the country, and fentanyl and the access to fentanyl has made it much worse. While I recognize that some of those precursor chemicals are not coming from Latin America, too many of the drugs are.

General VanHerck, I understood that we are also seeing an increase in drug trafficking coming across the northern border. Is that something that you have seen?

General VANHERCK. Senator, I understand there is a slight increase, along with migration, coming across the north border as well, but ultimately I defer to Border Patrol and Customs and Border Protection.

Senator SHAHEEN. Well, that is really the question I wanted to ask both of you is how your commands are coordinating with other

U.S. interagency partners, and have you seen any particular initiatives that have been effective? General Richardson, I will start with you.

General RICHARDSON. Well, thank you, Senator, and to comment on the ability to be able to see and with domain awareness, as the urgency is at an all-time high and the drug flow is at an all-time high, my ability to see and my allocated resources is at an all-time low. The P–8s that I used to have provided the long dwell, being able to see the capabilities that I have for vessels, for maritime flow of counternarcotics mission is also degraded because of the migration and the assets being needed for that.

But in terms of the capabilities that I have within my own headquarters and Joint Interagency Task Force South as well, I have a whole host of interagency and law enforcement. We work together to provide that synergy and sharing of information, so it is quick and immediate. Then also our partner nations that are inside of JIATF South as well, because our partner nations have been able to participate in 76 percent of the interdictions and disruptions of the counternarcotics flowing to the United States.

Senator SHAHEEN. So if you were going to get all of the resources that you need, do you have any estimate of what that would mean, in terms of equipment, assets, dollars?

General RICHARDSON. I would say a little goes a long way, as I have said before, and the ability to be able to see. I have about 2 percent of the DOD ISR, which gets after about 17 percent of my requirement. I do not need 100 percent, but I need a little bit more than the 2 percent, I would say, Senator.

Senator SHAHEEN. We had a hearing in the Foreign Relations Committee yesterday with Secretary Blinken, and one of the issues that was raised was the potential to designate drug cartels in Latin America as foreign terrorist organizations rather than just TCOs. Do you have any view about what that might enable you to do differently? Would that provide any other authorities to address drug interdiction?

General RICHARDSON. I think the more that we can do to get after this problem with the transnational criminal organizations, the better. I have 42 of the 40 most violent cities in the world. The TCOs create that instability and that insecurity within our partner nations, and that is what they are dealing with every single day. That is at the top of their lists.

I also am very concerned about the PRC and the long-term strategic competition that we have with the PRC, but what our partner nations are facing every single day are the transnational criminal organizations and how much more powerful they are getting, the ability to do the money laundering around the globe, we have really got to get after that.

Senator SHAHEEN. So I interpret that answer is a yes, it might be helpful, that designation.

General RICHARDSON. Yes, Senator.

Senator SHAHEEN. I am going to switch topics because I am almost out of time. General VanHerck, what do you think is the most significant threat to our security in the Arctic Region?

General VANHERCK. I think the most significant threat is the growing Russia influence, the illegal influence, and also the Chi-

nese influence right on the back of that, as we develop capabilities. I used the analogy last year, you have got to be on the field to play the game, in a football analogy, and we are in the locker room, still developing a game plan. We need to develop additional capabilities.

I am encouraged that the Department and the services have a strategy. We just have not funded those strategies.

Senator SHAHEEN. If we entered the Law of the Sea Treaty, would that give us any additional ability to address the challenge there?

General VANHERCK. I think it gives us more credibility to sit at the table and have that discussion, and I would absolutely support that.

Senator SHAHEEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shaheen.

Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. Thank you, General VanHerck, for your many, many years of service to this country. It is deeply respected and also appreciated.

On your unfunded priorities list you included several requests for programs to strengthen domain awareness, allowing us to better detect and also to track potential threats. Can you describe in detail some of the capabilities you have requested and why they are so vital for your needs?

General VANHERCK. Thanks, Senator. Absolutely. Over-the-horizon radar capability acceleration would procure a test asset—it is $55 million—to go faster to give us the capability rather than fielding capabilities in 8 to 10 years. Maybe we could shorten that to 4 to 5 years to enable me to get after the hypersonics that I described earlier, the cruise missiles, etc. By the way, I need Canada to do the same thing. A fielding of a capability in a decade from now is not where we need to be. So those are some of the dollars there. There is $55 million.

There is $211 million in the nine long-range mobile radars that would help me plug the gaps when we have radar failures or to get after critical defense infrastructure if tasked to do that. As we move around the country I can move those radars to give me additional domain awareness.

That is a couple of examples.

Senator FISCHER. Okay. Thank you. I know that NORTHCOM is required to track all kinds of threats to the Homeland, from the Chinese spy balloons to hypersonics that you mentioned. Do you have tools you need right now to be able to defend against them, not just to track them but to defend?

General VANHERCK. Yes, so for the high-altitude balloon I think we are in a good place for that. For hypersonics and cruise missiles, hypersonics specifically, the U.S. base forces proliferated low-earth orbit capability in satellite constellation will get us there, along with the HBTSS, the MDA is working on. But we cannot wait decades to field these things. So any way that we can accelerate those capabilities.

Let me give you an example. We are stuck in an industrial age process for acquiring and we field things in serial processes. In today's digital and information environment we can virtually test, we

can virtually and do things in parallel. These are things we should do differently to field capabilities faster.

I would also ask for your help here in Congress. When we go faster, we may have some failures. Let us not take a 2-year investigation of those failures. Let us jump back on the horse and ride and move forward. We have to be as transparent in the Department with Congress as possible and make sure that you are part of the discussion.

Senator FISCHER. We always learn from failures too. In fact, in many cases we learn more.

General Richardson, you made the comment that you have 2 percent of the ISR right now in SOUTHCOM. How does that lack of ISR limit your options as a commander?

General RICHARDSON. So it does limit. I have got a very large AOR when you look at Central America, South America, the Caribbean as well, and all the counternarcotics or the narcotics flow out of the region and the ability to see malign activity and be able to expose it. That is really what we need the ISR and the domain awareness to provide.

Senator FISCHER. You do not necessarily need the very high-tech 5-Gen ISR at this point in time for your AOR, do you?

General RICHARDSON. I need a little bit of that, but some of the lower capable platforms work very well in this region, and then the long-dwell duration works well.

Senator FISCHER. So you would encourage us to look at considering keeping those other platforms?

General RICHARDSON. Well, as we talked about, Senator, it is always trying to turn over and get the next wave of technology, to be able to have that while keeping some legacy going. But certainly we have some low-end type things that we could utilize in the SOUTHCOM AOR.

Senator FISCHER. Okay. Thank you. General VanHerck, have you seen any advances or movements from China or Russia in the Arctic lately?

General VANHERCK. Absolutely, Senator. Russia has modernized their fleet of icebreakers. They have modernized their strategic defenses along there, their submarine forces. China is sailing into the Arctic under the guise of research vessels, and we know they are doing military options, surveying the seabed. You have seen that recently as Canada released their recovery of a Chinese buoy. Those are all things that are ongoing in the Arctic right now.

Senator FISCHER. General Richardson, do you see China presently working even harder to build access and influence in Latin America?

General RICHARDSON. Absolutely, Senator.

Senator FISCHER. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Fischer.

Senator Kaine, please.

Senator KAINE. Thank you, Mr. Chair, and thank you to our witnesses for your service.

General Richardson, I would like to start with you on sort of this resource shortage issue that you have testified to and other colleagues have asked you about. One of the bits of testimony that I recall pretty vividly from last year was when you were talking

about SOUTHCOM's cyber capacity. You have got partners in the region that have cyber threats just like we do, and I think you testified that the cyber capacity you have in SOUTHCOM is just what is provided through your State partnerships with State Guard units. Is that correct?

General RICHARDSON. Yes. I have a small capability within my headquarters, but we do rely a lot on the National Guard State Partnership Program as well and their cyber teams.

Senator KAINE. I think those are really good programs but I was shocked to hear that you did not have a more robust in-house capacity in addition to the partnerships with our cyber teams from the National Guard.

One of the potent things that the United States can do is joint exercises with other nations' militaries, and this is something that we do and that China, for example, is not yet doing in the Americas. Is it my understand that a common exercise that you have been doing with Southern Cone nations you are not able to do this year?

General RICHARDSON. Right, and we have that on my unfunded priority list. We really need to get down to the Southern Cone. That area, tyranny of distance, Chile, Argentina, Paraguay, Uruguay, all want to continue to do exercises. So I want to be able to put that Southern Star Exercise back into play. Our exercises bring together like over 20 partner nations, and that is absolutely what the PRC is not able to do is to convene all these countries to come together and work through exercises.

Senator KAINE. This Southern Star Exercise has been common in the past but you are not resourced currently to be able to do that.

General RICHARDSON. Correct, and I have put that forward to put that exercise back on the plate so we are able to do that.

Senator KAINE. Let me ask you about Colombia. Colombia has been a very strong military partner of the United States in recent years. It has been a success story. Colombia participates in global peacekeeping exercises. I have seen Colombian troops in the multinational force of observers in the Sinai, and they do a lot of good work together with the United States. I think there were some concerns after the Colombian elections last year about whether that would continue.

Describe for us the mil-to-mil cooperation with Colombia currently.

General RICHARDSON. Our relationship with Colombia is very, very strong and continues to be very strong. We have not canceled anything. All the exercises, all the military-to-military cooperations is absolutely continuing, and that relationship could not be any more stronger than it is now.

Senator KAINE. Have you met personally with President Petro of Colombia?

General RICHARDSON. Yes, Senator. Twice.

Senator KAINE. Thank you.

General VanHerck, you had some questions about the Chinese balloon incident. I want to ask you questions about the following week, when your mission was involved in taking down some other unidentified or kind of not completely described aerial assets. They were generally described as commercial or benign, but they were

in civilian airspace, so they were not completely, even if they were not hostile, they were not completely benign if they are in commercial airspace where they could pose challenges to civil aviation.

So talk a little bit about how things get into commercial airspace without us being aware of them, and are there rules of strategies we need to put in place to be more careful about even benign assets in commercial airspace.

General VANHERCK. Yes, ultimately the airspace is the Federal Aviation Administration. They do have policy and regulation in place for objects that fly within the airspace structure. If you are flying objects—and I believe the number is if it weighs more than four pounds it is required to have an identification device. In the case of the three unidentified objects you are talking about, the FAA was not tracking, was not aware of those objects, and when we assessed them they were assessed to be of a size and potentially a safety threat to aviation hazards. So we did not know exactly what they were.

I have talked to the acting FAA administrator about being more aggressive of messaging the requirements and also putting out and enforcing those requirements as well. Those are not mine to do, but I will identify and respond to anything that is in our airspace the we need to potentially assess as a potential threat.

Senator KAINE. General VanHerck, you indicated that the FAA was not tracking them. Did that mean that these devices did not have the identifier that they are supposed to have if they are in that band?

General VANHERCK. I cannot confirm whether they had it or not. We did not recover them, due to the locations that they were. But my assessment would be it was likely they did not have a device if the FAA was not tracking them.

Senator KAINE. All right. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Kaine.

Senator Cotton, please.

Senator COTTON. Welcome, General VanHerck, General Richardson. Thank you for coming back and for your service.

General VanHerck, I want to return to the topic of the Chinese spy balloon. You were discussing it with Senator Wicker earlier. You had said your radars first picked up the balloon on Saturday, January 28th. Is that right?

General VANHERCK. That is correct, Senator.

Senator COTTON. But you were aware of it on Friday, January 27th.

General VANHERCK. The intel community made me aware on the 27th.

Senator COTTON. On Friday, January 27th, you communicated—is that when you communicated to General Milley, the Chairman of the Joint Chiefs, and to Secretary Austin's military assistant?

General VANHERCK. I communicated with the Chairman only on the 27th, and conveyed my plan to intercept, ID, and assess the balloon when it became a radar capability we could do.

Senator COTTON. When did you communicate with Secretary Austin's senior military assistant?

General VANHERCK. I did that on the 28th.

Senator COTTON. The 28th. Did you ever speak with Secretary Austin about this balloon?

General VANHERCK. I spoke with Secretary Austin on the 1st of February.

Senator COTTON. Wednesday, the 1st of February.

General VANHERCK. To the best of my recollection, that is the first verbal discussion with the Secretary. There were emails transmitted back and forth. I set up a battle rhythm, Senator, and updated the Department every 12 hours beginning on January 28th, the location, threat, projected flight path, and intent.

Senator COTTON. Is it your customary practice to speak to Secretary Austin's military assistant and not Secretary Austin?

General VANHERCK. No. Verbally I routine speak with the Secretary of Defense. Email communication typically goes through his assistant and provides it back that way.

Senator COTTON. Okay. On what date did you have fighter aircraft in the air that could have shot down this balloon?

General VANHERCK. I had fighter aircraft in the air on the 28th of January. They were armed. I sent two F–35s and two F–16s.

Senator COTTON. They were armed on the 28th?

General VANHERCK. Yes. The F–16s were armed. They flew off of alert. In Alaska I have aircraft on alert, and they were armed.

Senator COTTON. So all that was needed on January 28th was to pull the proverbial trigger.

General VANHERCK. So to say pull the proverbial trigger, yes, had they had hostile intent or hostile act. I had the authority and I would have made that decision. So you are exactly correct. After that point it was not my decision to pull the trigger, as you say.

Senator COTTON. There has been publicly released pictures, maybe and video, I think one pilot taking a selfie with this balloon behind him. Were you confident, on January 28th, what the payload on that balloon was?

General VANHERCK. Based on the intel community's assessment I would say I had 80 percent confidence level we knew exactly what we were going to see. That was further developed over the next several days as we were able to collect additional intelligence before finally downing the balloon off the South Carolina coast.

Senator COTTON. I am aware of that assessment and I k now we cannot talk about it here, but I cannot say that I would have had the same level of confidence that it did not have some kind of offensive capabilities. Are you aware of at what point the President was personally aware of this balloon?

General VANHERCK. Senator, I am not.

Senator COTTON. Why was it okay to shoot the balloon down off the coast of South Carolina but not off the coast of Alaska?

General VANHERCK. Well, I think there are many things that go into that decisionmaking. First is originally we did not really have a good model for what the payload would look like when it fell or potentially threatened anybody on the ground. Now you can look at population density for various places where the balloon flew over.

Senator COTTON. I am not talking about anyplace over the continental United States. I do not dispute that. I am talking about the coast of Alaska versus the coast of South Carolina.

General VANHERCK. There is nothing that physically prevents us from shooting that down on the 28th to the 1st.

Senator COTTON. If the Administration's policymakers thought they had legal justification to shoot it down off the coast of South Carolina surely they had legal justification to shoot it off the coast of Alaska, right?

General VANHERCK. Senator, my assessment is the legal basis would have been the same for either place.

Senator COTTON. That is what I think too.

Well, I am glad that you had fighter aircraft in the skies that were ready to shoot it down. I think that would have been the right call. I know it was not your call, that it goes up higher than you, but I think it was a bad mistake to let a Chinese spy balloon float all across America and only to leak it to The New York Times once some rancher or amateur photographer in Montana spotted it. I suspect if they had not it would have floated on its merry way all across America and this would have never become public. I think that is a dangerous precedent to set, not just with China but with all of our adversaries. But I am glad you had fighter aircraft from your command in the sky that were ready to act.

Again, thank you both for your service, and since this is your last hearing, thank you for many years of service. I know that you will not regret missing these appearances in the future, but we have always enjoyed having you here. Thank you, General. Thank you, General Richardson.

Chairman REED. Thank you, Senator Cotton.

Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. Thank you very much to both of you for your years of service and commitment to our country.

General VanHerck, you are responsible for homeland defense, and you noted this morning that you have concerns about attack assessment and threat warning, and that brings me to concerns I have about the missile defense of Hawaii, concerns that I have been expressing for a number of years now. I do remain concerned that the Department of Defense does not have a plan to address the current and future missile defense needs of Hawaii. We did have HDR-H Hawaii that is no longer on the table, and int appears to me that between NORTHCOM, INDOPACOM, SPACECOM, STRATCOM, and the Missile Defense Agency there is no single commander entirely responsible for coordinating the DOD's defense of Hawaii.

So just as we saw in the crisis at Red Hill, when no single leader has ultimately responsibility for the coordination and execution of the mission, there is room for issues to fall through the cracks, and adding to the concerning lack of trust that Hawaii's communities have regarding the military.

General VanHerck, do you have the authority to coordinate across the Department of Defense to ensure there is a plan for missile defense of Hawaii?

General VANHERCK. Senator, I am the authority for ballistic missile defense such as an ICBM from DPRK, and I am confident in my ability to defend Hawaii from those ballistic missiles. Admiral Aquilino is responsible for the defense of Hawaii, and in the

INDOPACOM AOR, and I would say he is the coordinating authority for that region. But I am the authority for ballistic missile defense of Hawaii.

Senator HIRONO. I think that is the concern that we have, is ballistic defense, so that would fall to you then. I am assuming that of course you are going to talk with Admiral Aquilino.

General VANHERCK. Absolutely. We do coordinate, and in many ways I will coordinate in real time with him for the need to defend Hawaii from ICBMs potentially from North Korea.

Senator HIRONO. And China.

General VANHERCK. I am not tasked to defend against China or Russia for ICBMs. That is the nuclear deterrent, Senator. Admiral Aquilino has a responsibility in the INDOPACOM AOR for further defense of Hawaii.

Senator HIRONO. You see, this is where I begin to have concerns, continuing concerns about who exactly is responsible, who is going to come and tell me that the missile defense of Hawaii is going to take place, because as I said, for years HDR-H Hawaii was going to be the way that we were going to provide missile defense. That is no longer on the table, and to date I have not gotten any clear information. I am going to get a briefing on Monday, and General, I do not know if you have someone who is doing that briefing with me and my staff on Monday. Are you involved?

General VANHERCK. I am not aware of that. But let me just talk about the Homeland Defense Radar Hawaii. First of all, I do not need Homeland Defense Radar for Hawaii for the mission I am tasked to do, for ballistic missiles that emanate from North Korea. Homeland Defense Radar for Hawaii would be a contributor to an underlayer, which Admiral Aquilino could certainly use, which could tether to *Aegis*-class ships or other ballistic missile defense capabilities in the region.

Senator HIRONO. Well, but then Admiral Aquilino has said that he too is not looking to HDR-H Hawaii for the missile defense of Hawaii. General, do you know if there is missile defense for Hawaii that is going to take care of your area of responsibility as well as his? Because we are talking about missile defense against intentions from North Korea as well as China.

General VANHERCK. Senator, I——

Senator HIRONO. HDR-H Hawaii was North Korea.

General VANHERCK.—I am confident in my ability to defend Hawaii from ballistic missiles from DPRK. From China, I am not tasked, and I will defer to Admiral Aquilino. That is his responsibility.

Senator HIRONO. Thank you. I think that provides some level of better clarification.

General VANHERCK. I want to add one thing, Senator. General Cotton is responsible for the nuclear deterrent, and ballistic missiles such as nuclear ballistic missiles from China toward Hawaii, that is the nuclear deterrent that does that. Conventional, I will defer to Admiral Aquilino.

Senator HIRONO. So again, I am talking about nuclear deterrent, not conventional. Nuclear deterrent. It is the missiles emanating from China and North Korea that I want Hawaii to be defended from, and yes, the shooters are not in Hawaii. We are not talking

about putting shooters on Hawaii. Those are in Alaska and in California.

So again, you know, all my attempts to get clarification as to who is the one agency, one entity, that is responsible for missile defense of Hawaii writ large. You know, I am not talking about any particular, whether it is ICBMs or whether it is the ballistic missiles. You can sense my frustration, so I will continue to pursue my line of questioning.

I am sorry. I will add some questions for the record relating to the impact of climate change on your AORs. Thank you.

Chairman REED. Thank you, Senator Hirono.

Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman, and to both of you I want to thank you both for your service to our country and your teams' as well.

I would like to begin by following up with General VanHerck with regard to the same line of questioning that the Chairman began with, with regard to spectrum. I do have real concerns about the loss of any portion of the spectrum to sales to commercial operations, and I recognize that, General VanHerck, your role in defending the Homeland is critical. I just wanted to clarify or at least better understand part of your response to the Chairman's question.

There is a study, which is underway, which has been recognized by both the Secretary of Commerce and the Secretary of Defense, specifically regarding the sensitivity or the need to maintain, or the impact of the sale of the 3.1 to 3.45 GHz portion of the spectrum, which currently is under DOD control. Could you share with us, in this unclassified setting, the significance of that portion of the spectrum to the defense of our country at this time? Do we use all of that in the defense of our country today?

General VANHERCK. Senator, absolutely we do. There are multiple platforms, to include maritime homeland defense platforms, airborne early warning platforms, ground-based early warning platforms that enable me to provide threat warning, attack assessment, defend from potentially airborne assets, et cetera. So we need to understand the national security impacts of selling or auctioning, and make a conscious decision before we do so.

Senator ROUNDS. I also understand, and what I wanted to followup with in particular was, it would seem to me that if we are doing a study, a legitimate study, that there would be some participation by NORTHCOM since this is part of the spectrum that they rely on. Confirming you are not aware of being involved in that particular study at this time?

General VANHERCK. Senator, I have not personally been involved. I will confirm the coordination with my staff, but I have not personally been involved in that discussion. I would welcome the opportunity to be personally involved.

Senator ROUNDS. I would imagine that you probably would, sir, seeing as how it is a critical part of the defense of our country. I thank you for, when you have provided this Committee with your professional military advice it really does ring true that there is a very serious concern with the loss of any part of that spectrum. So I appreciate that.

I did want to just followup a little bit as well. Senator Cotton laid out a very clear line of questioning with regard to the timing and the decisionmaking process with regard to the observation balloon from the PRC. If this was a communications-gathering or an intelligence-gathering unit you did have the ability and you could see it coming from a long way off, several days in advance, not just with intelligence recognition but also with radar catching it.

But during that time period there was a point at which, as you have indicated, it was not identified as being hostile or trying to gain an offensive position, therefore, still in international air, no reason to, or any purpose for taking it out at that point. That is correct, is it no?

General VANHERCK. There is no legal basis in international airspace to take action. That would actually undermine our position globally by taking action in international airspace.

I would like to clarify one thing. I did not have the capability to see that days away. That came through intel community channels. I could not see it until it got within radar, and I will talk to you in a classified environment. But that was not days away. That was the 28th only.

Senator ROUNDS. On the 28th, though, on the 28th it was still outside of our legal operating area in terms of protecting our borders.

General VANHERCK. So it passed within sovereign territory on the 27th, at the end of the Aleutian Island chain, and then back into international airspace, until the 28th, where it passed within our sovereign space near Saint Matthew Island, Alaska, and then transited over Alaska.

Senator ROUNDS. During that time in which it had passed out in international waters you were aware of it and knew that it had the possibility of coming back into our airspace again. But by then pretty clear on your part that it was not an offensively armed balloon or object.

General VANHERCK. That is correct, Senator. The intel community assessed that. That was what I verified on the 28th, when we intercepted and I had fighters get their visual on it and their targeting pods to be able to make that assessment. That is not a 100 percent guarantee, but my assessment at that time, based on all the info, was there was no physical military threat to the Homeland at that point.

Senator ROUNDS. The reason why I am bringing this out and going back through it again with you is, number one, I think the American people have to understand that if it would have been viewed as a threat our armed forces would have protected and we would have taken it out prior to the point of getting in and damaging any property or individuals within the United States at that time. But the second piece on this is it became a decision, not necessarily yours, but somewhere farther up the chain of command as to not to take it out, even though it was entering our airspace. It was not your decision because it was not deemed a threat, or to become an offensive threat at that time. Fair to say?

General VANHERCK. So if it was a threat I am delegated the authority by the President, through the Secretary, and I would have

taken that out. In this case I did not assess it as a threat, and therefore I did not have the authority.

Senator ROUNDS. The authority would have rested with someone above you in the chain of command.

General VANHERCK. Depending on the legal basis for assessment it would have resided either with the Secretary of Defense or the President.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rounds.

Senator King, please.

Senator KING. Thank you, Mr. Chairman. I am going to ask both of you about unfunded priorities. General Richardson, we are under attack—110,000 people died last year of overdoses. That is 300 a day. Twelve people have died in America since we have been sitting here in the last hour, and yet your ISR capability to at least assist in detecting and helping us to interdict this dread attack is on an unfunded priorities list. Why is it not in the base budget? This seems to be one of the most serious and intensely important responsibilities that you will have in order to help us to deal with this scourge. Why is it an unfunded priority and not base budget?

General RICHARDSON. Senator, I do not think any commander will say they have enough ISR, and so certainly as we look across the——

Senator KING. But 2 percent of the ISR that is dealing with this brutal attack that is killing our citizens just does not seem to me to pass the straight-face test.

General RICHARDSON. I could do more with a little bit more, and our partner nations, with the capabilities and building their maritime domain awareness and being able to share air tracks and things like that, all of us working together. We have very willing partners.

I would like to, if I might, Senator, behind me in the audience we have part of our Inter-American Defense College, and part of their instruction is to come here and watch us testify as commanders to our Congress and talk about the challenges——

Senator KING. It is a lesson to them of what to avoid, I would think.

General RICHARDSON. If they would raise their hands back there, so you can see all of them.

Senator KING. Thank you.

General RICHARDSON. They are in that whole group right there.

Senator KING. Let me followup.

General RICHARDSON. Yes, Senator.

Senator KING. We have established that you do not have enough ISR. The ISR that you have, previous testimony by your predecessors has been we do not have the resources to interdict but something like 25 percent of the drug shipments we know about. Is that still true?

General RICHARDSON. I have the detection and monitoring mission for the Department of Defense through JIATF South, Joint Interagency Task Force South, and so——

Senator KING. But when you detect and notify——

General RICHARDSON.—we pass that right over to law enforcement or partner nations to do the interdictions.

Senator KING. What percentage is interdicted, as far as you know?

General RICHARDSON. We believe that we are getting after about 10 percent of what we know is the known flow of narcotics flow.

Senator KING. We are only getting 10 percent of what we know.

General RICHARDSON. Correct, Senator.

Senator KING. That is appalling, and I realize it is not your responsibility but it is a collective responsibility that we are just simply not meeting in this country, to have, number one, inadequate ISR on this problem, and number two, to not make effective use of the ISR we do have.

General VanHerck, let me turn to you about unfunded priorities. One of your major unfunded priorities, again, is essentially ISR, capability to observe what is going on. We know the Russians are heavily militarizing their shore of the Arctic Ocean. Again, my question to you is, it seems to me you have made a powerful case in your unfunded priority list. Why is it not in the base budget?

General VANHERCK. I will have to defer to the Department in the present budget why it did not come across, Senator. I am asking for it. I would also point out I asked for $38 million for additional support for transnational criminal organizations, to lead Federal agencies that I am short as well. There is additional money in my unfunded priority list for that as well.

Senator KING. Well, I am starting to think what we should do is fund your unfunded priority list instead of the base budget because you have articulated priorities that are so important to us.

Talk about—well, perhaps this has to be in a classified setting, but the lack of visibility, of domain awareness as the Arctic is fundamentally changing and becoming one of the most strategic places on Earth.

General VANHERCK. Yes, Senator, thank you for the opportunity to talk about that. The National Defense Strategy tasked me to monitor and respond in the Arctic.

I am encouraged with the monitor piece. We have got some over-the-horizon radars. We need to go faster there. Canada is committed to that. Again, we need to go faster. But under monitor we need to think about the use of SpaceX and Starlink capabilities and buying terminals that gives us data and information sharing. I am encouraged by the Jobs and Infrastructure Bill. There is $250 million in that to modernize the Port of Nome. We need to move forward to give us some capability to be persistent in the Arctic for the monitor piece as well.

But you need icebreakers as well, so we have got to go faster there.

Senator KING. You have just listed, basically we have an Arctic gap. Is that correct?

General VANHERCK. That is my assessment.

Senator KING. Not geographically. I mean, national security wise.

General VANHERCK. That is my assessment. As I mentioned earlier on the respond side, we are not organized, trained, and equipped to operate and respond in the Arctic. Infrastructure is a big concern for me, whether that be runway lengths, whether that be building, whether that be weapon storage, whether that be fuel storage. When you only have a few days' worth of fuel and that fuel

is shared with indigenous local communities, those are challenges that we will face in a crisis.

My homeland defense design is a layered defense. It starts forward, and we need the Arctic to do that.

I would point out that Thule Air Base in Greenland is crucial. There is some money in the budget for Thule, but not to support my homeland defense design, which I am tasked to do a layered defense of the Homeland by the Department.

Senator KING. Thank you both, and thank you for your candid testimony today and for your service to the country.

Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator King.

Let me also, on behalf of the Committee, recognize the Inter-American Defense College. Bienvenidos.

Senator TUBERVILLE.

Senator TUBERVILLE. Thank you, Mr. Chairman. Thanks to both of you for being here and your service.

General VanHerck, just to followup on Senator King's question how would Maxar and Saildrone help you in the Artic? Would it be, you know, commercially, and how would that help you?

General VANHERCK. Can you say that again?

Senator TUBERVILLE. Maxar and Saildrone. Would it help you in the Arctic?

General VANHERCK. I am not familiar with specifically. I am familiar with the OneWeb efforts, Starlink, satellite communications, anything that gives me additional domain awareness, data, and information-sharing will absolutely help in the Arctic. It is very challenging above 65-North to communicate, to share data, to share information.

Senator TUBERVILLE. Thank you, and I do not want to pound on this balloon nonsense but how would you assess your relationship with your Canadian counterparts through this entire scenario?

General VANHERCK. I think my relationship with our Canadian counterparts—by the way, I have a boss in Canada, General Wayne Eyre, is exceptional.

Senator TUBERVILLE. He runs NORAD, right?

General VANHERCK. No. I run NORAD. He is the Chief of the Defense Staff——

Senator TUBERVILLE. Okay.

General VANHERCK.—in Canada. He is the CHOD. He is their senior military member.

Senator TUBERVILLE. So your relationship was good through this whole scenario?

General VANHERCK. Absolutely. Yes.

Senator TUBERVILLE. If that same balloon took off today, same path, loaded the same way, now that we know what was on it and that we brought it down, should or would we shoot it down?

General VANHERCK. That is a policy decision. My job is to maintain options. I did that. I am very comfortable that we had options from the moment we detected it until the moment we shot it down. Ultimately "should" is a policy decision. That is not a military decision.

Senator TUBERVILLE. Okay. Thank you.

General Richardson, thanks for being here today and thanks for the hospitality last week, coming to SOUTHCOM. You have got a great organization. The people working for you, they are outstanding. We learned a lot. I would hope that we have more people come down that way would look at your new program that you are building, quarters for your personnel, through lend/lease, which I think we should look at through the Air Force and through the Navy, because I think we need to privatize more things on basis to cut back on costs. But I look forward to seeing how that turns out.

Could you comment on that?

General RICHARDSON. Thank you, Senator. That is for our family housing for our servicemembers in Miami and certainly a really tough housing market. This will absolutely get after being able to counter all of those really high prices in a big city like Miami. So we are very thankful that we are able to get that off the ground, and with the support of Congress we have been able to do that, so thank you very much.

Senator TUBERVILLE. Yes, and we are looking forward to seeing how that works out. I was very impressed with the people, after I go to Panama, that were there, actually from my State of Alabama, Mobile. The Corps of Engineers are down there working, and we have got a lot of good people.

Just tell us how important, in your eyes, the Panama Canal is to us here in the United States, in your eyes, since you have been there.

General RICHARDSON. Well, Senator, more than 70 percent of our global goods go through the Panama Canal for the United States. So the importance to the global economy, though, it is not just about what the United States gets, but that is the give-back through that canal being open as the exchange of goods across the world. I talked about trade before, over $740 billion in trade, and so very, very important to the global economy for the Panama Canal.

Senator TUBERVILLE. On top of that, recently, over the last few years, China has signed 30 contracts with the Panamanians, some of it to do with the canal, and the Panamanians are now trying to get out of some of those contracts because the Chinese have breached some of those contracts, which we need, as the United States of America, to protect Panama, because that is how important it is to all of us. But really good people down there.

Could you talk a little bit about the two Iranian ships that are parked outside the Panama Canal and the process that we need to look at. Do they need to be able to use the Panama Canal?

General RICHARDSON. So in terms of the Iranian warships that transited into the SOUTHCOM region and since departed, but as part of their announcing their global voyage to go around the globe, and certainly some of the countries that were able to deny port calls and things like that. But very concerning because they were just in the region 2 years ago with missiles and with launchers on those same two ships. So very, very concerned that they are transiting again. We did not have the intelligence that they had this cargo on board this time, but still the fact that they came into the region again, and doing a global voyage, is concerning.

Senator TUBERVILLE. Thank you. Thank you for your service. General VanHerck, thank you very much for what you have done for our country.

Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Tuberville.

Senator Warren, please.

Senator WARREN. Thank you, Mr. Chairman, and thank you to our witnesses for your service.

The Pentagon's budget request is $842 billion. This is one of the largest requests in history, but it is not enough money for many components of DOD. Each year they push to get even more money using unfunded priorities lists, or what I call wish lists.

Now our colleagues on both sides of the aisle are concerned about this and they want to see this practice stopped. One of the excuses that I have received, as I have asked about these lists, is that they reflect emerging threats that cannot be accommodated in the regular budget process. Now we have transfer and reprogramming authority to account for exactly that situation, but even so let us assume that is true. That means wish lists would only include items that have been requested before. You could not know about it when you put your budget together.

General VanHerck, last year your unfunded priority list contained a request for $50 million for missile defense. Is that right?

General VANHERCK. For this year or last year?

Senator WARREN. Last year.

General VANHERCK. I would have to go back and review it. I believe that is correct.

Senator WARREN. Well, I will tell you. It is there. I understand you may not remember all the details, but it is there. Had you requested funding for that program before?

General VANHERCK. Yes. In this year's list as well. Everything on my unfunded list——

Senator WARREN. So let me just be clear here. I am just trying to track this one argument, and that is, is this some unexpected expense. You knew about it last year. How do I know you knew about it last year? Because you had also requested funding for it from the year before. In other words, this is not an unexpected requirement for missile defense that you are trying to get funded through the unfunded priorities list. Is that right?

General VANHERCK. Senator, everything on my unfunded priority list I POM'ed for, asked for. It was not funded.

Senator WARREN. I have no doubt that it was——

General VANHERCK. Please allow me to finish.

Senator WARREN. I have no doubt that it was not——

General VANHERCK. Can I finish answering your question?

Senator WARREN. I am the one asking the question here. Was this on your list before and was it a surprise what you put on your unfunded priority list?

General VANHERCK. There are no surprises on my unfunded priority list.

Senator WARREN. Okay. That is what needed to know.

General VANHERCK. All of those were POM'ed for. They are all missions I am tasked to do, which I am not resourced to do, and

the law directs me to put in an unfunded list within 10 days of the budget, and that is exactly what I did.

Senator WARREN. No. Excuse me. The law does not require that you put in any request. We know last year that two different divisions actually put in requests of zero. They did not go to an unfunded priorities list.

Now General Richardson, intelligence surveillance and reconnaissance capabilities have repeatedly appeared on your wish list as well. As Commander of Southern Command you are on the front line, confronting transnational criminal organizations, trafficking drugs in regions there and home, and I appreciate that work. Last year you asked for an additional $268 million on your wish list.

Now General Richardson, did DOD approve reprogramming money for any of the missions under your command this year?

General RICHARDSON. So this year in terms of the funding that I have received, I have $130 million for security cooperation for the region. So in terms of the reprogramming, I am not aware of that.

Senator WARREN. Well, according to the Controller's website, $750 million was reprogrammed to support drug interdiction. Does that sound about right to you?

General RICHARDSON. I am not tracking the 750, Senator.

Senator WARREN. Okay. All right.

But look, here is the point I want to make on this. DOD already has the tools to reshuffle its resources when needed. Not only that, they have also done so for a key SOUTHCOM mission in an amount that was almost three times larger than your wish list. Both of you have already submitted your lists for this year. I will be submitting questions for the record to learn more about why you could not include these in your budget priorities.

I understand you want more money, but you have to work within the budget that is given to you. That is what every other part of the government has to do. I have got a bill with Senator King, Senator Lee, Senator Braun, that would end the statutory requirement for these lists. But I want to make clear—DOD could shut them down on their own right now. We do not let any other part of government behave like this, and for good reason.

The budget process is about making tough choices and setting clear priorities, and refusal to demonstrate leadership here I think is a real mistake.

General VANHERCK. Chairman, I want to correct the record.

Chairman REED. Senator——

General VANHERCK. One hundred percent of my items on my unfunded priority list were submitted as part of the budget process.

Chairman REED. I understand, sir. Any other comments, General Richardson?

General RICHARDSON. The same here, Senator. Those requirements that I put forward to the Department as well.

Senator WARREN. I do not think I quite understand what our witnesses are saying here.

Chairman REED. I think what they wanted was to be able to fully respond to your questions, Senator, and with that I would——

Senator WARREN. But these are not on their budget now.

Chairman REED. I think the time has expired. Thank you very much.

Senator Schmitt, and Senator Rosen will preside as I go to the Appropriations Committee.

Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman, and I want to thank you both for being here. I would note to the Committee that both of these witnesses have Missouri ties and Missouri roots.

It is my belief, and I have talked about it a little bit in this Committee before, that too few people, quite frankly, understand the urgency, the gravity, and the proximity of the threat that the PRC, China, poses to the United States of America. They are rapid development as being a militarized power now, and projecting that power is very real. It is that proximity that I want to ask both of you separate questions about, given your roles.

The Belt and Road Initiative clearly is an initiative to further their economic, militaristic, and political goals, and the dual use that they get out of this once they are involved with these countries is very real.

So General Richardson, I wanted to ask you. It seems me that China is gaining far too much traction in the Western Hemisphere, if we sort of look at this under the old Monroe Doctrine. In the Western Hemisphere they continually abuse, not just the debt traps that are established but they abuse those agreements to then later expand militarily.

Could you talk about a couple of those examples that you see, and Senator Scott, I think, had a great line of questioning about how we can better explain to our folks back home the real risks. So from your perspective, a couple of examples that you would want to highlight that raise real concerns for you in the Western Hemisphere.

General RICHARDSON. So that Belt and Road Initiative, Senator, that you talk about, that is really the guise or the disguise of how I see that the PRC gets their foot in the door, to expand a lot of these projects into the critical infrastructure for the partner nations. So when you are talking deepwater ports in 17 countries, the telecommunications, the 5G, 5G backbone in five of the countries, 24 countries having the PRC 3G or 4G, and I worry about that, the stealing of information. There have been numerous cyberattacks of our partner nations in the region.

You have a communist nation that does not respect the human rights of their own people, with Huawei and ZTE, and fostering this out to all of the other partner nations across the globe, not just in my region. So they do not respect the human rights of their own people. They are not going to respect the human rights of every other nation. So that is a huge concern in terms of telecommunications.

The space, space infrastructure. Eleven space-enabling infrastructure sites in five countries in the region as well.

So it is very, very concerning, especially with the dual use that they come in, they are state-owned enterprises from the PRC, which means that they can be used for military application at a later date, if needed or wanted.

Senator SCHMITT. General VanHerck, we have talked about it before in classified briefings here and in previous settings about the Chinese spy balloon, you know, fiasco, and showed how brazen the

Chinese Communist Party is willing to be to gain intelligence. I think that opened the eyes of a lot of Americans of, again, just how brazen they were.

But one obvious concern is that they will not just send a spy balloon. There will be something else, and you have talked about awareness. What are specifically a couple of things that this Committee can do to help with that?

General VANHERCK. We need to continue to accelerate domain awareness capabilities. The Department has done a good job with recognizing my domain awareness capability gaps, which includes funding over-the-horizon radar. But we need to think differently about how we field capabilities in a more timely and rapid manner, using digital technology we have today vice industrial age processes. You can help with encouraging that and moving forward with that, and also encouraging testing, development, and when there are failures, let us not stop everything. Let us move forward more quickly to field and rapidly develop capabilities.

Senator SCHMITT. Thank you. Thank you, Mr. Chairman.

Senator ROSEN. [Presiding.] Senator Peters, you are recognized.

Senator PETERS. Thank you, Madam Chair.

General VanHerck, I would like to build on the concerns you mentioned in your earlier testimony regarding cyberattacks here in the Homeland, and specifically, could you further explain some of your gaps with authorities, personnel, and instructions for synchronizing and responding to cyberattacks affecting local defense communities and how you would coordinate with the Department of Homeland Security in the event of such an attack.

General VANHERCK. Senator, thank you. First, my largest domain awareness gap, and my biggest concern, is actually cyber domain awareness. The vast majority of the critical infrastructure in our Homeland resides outside of DOD, which General Nakasone is responsible for, and outside other Federal networks, which Jen Easterly at CISA is responsible for.

My authorities there are limited to have domain awareness. FISA–702 is crucial to having domain awareness, to giving us indicators of potential threats in the Homeland, whether they be violent extremist threats or whether they be peer threats. So I would encourage that we continue doing that, to give the National Security Agency and General Nakasone the ability to help fill those domain awareness gaps.

My responsibility for cyber is I have two cyber protection teams that defend my critical infrastructure in my headquarters. More broadly, General Nakasone is responsible for the DODIN. I am responsible for providing defense support to civil authorities. So for example, if Jen Easterly at CISA needs support, and DOD is going to provide Title 10 support, that support will go through me to provide just like I do for hurricane or wildfire response.

Senator PETERS. Well, I chair Homeland Security Committee here in the Senate and work on the cyber issues, so I look forward to working closely with you as to how we coordinate that, because there is no question that cyber is one of the most significant threats we face in the Homeland on a daily basis, and I want to throw out an example of this and get your response.

Let us take an example in Fayetteville, North Carolina, home to the Army Special Operations Command and the Immediate Response Force. If they had suffered a cyberattack to degrade the mobilization and deployment of the 82d Airborne Division, in response to some crisis, would your command have the appropriate authorities and personnel to respond and to mitigate? Do you have concerns and are those things we should be looking at pretty seriously?

General VANHERCK. We should talk in a classified environment about potential impacts, but to respond to the actual cyber incident, that is going to be General Nakasone, or of it is outside of the DODIN it is going to be Jen Easterly. I am comfortable that I have everything I need to do to respond to provide defense support of civil authorities should we be tasked to do that, to support a lead Federal agency.

Again, it is a concern for me to not have domain awareness in the cyber domain about potential threats.

Senator PETERS. Well, I look forward to discussions in a secure environment as we further examine that, to make sure that it is working properly.

The other question I have for you is you discussed the challenges of ensuring that Joint Force is able to operate in the Arctic, and you are challenged to respond to potential threats with forces that are either organic to the National Guard command structures or assigned to external combatant commands.

Given the awareness at NORTHCOM of the potential threats in the Arctic—and I think I am asking this question before Senator Sullivan can ask you a question related to this, but I am sure will be coming—given that awareness would you recommend the services prioritize Arctic training and cold weather operational readiness for units who may be ultimately assigned to your command? When I say Arctic training that does not necessarily mean necessarily in Alaska but also other cold weather environments like the State of Michigan, with our training facilities there.

General VANHERCK. Senator, absolutely I would. Fifty–2 percent of my AOR is in the Arctic, in the NORTHCOM AOR. As I said earlier I am tasked to monitor and respond. On the respond piece it is crucial that we conduct training operations. It is also crucial for campaigning, to demonstrate we have the capability, the readiness, the responsiveness, and the resiliency to operate in the Arctic day-to-day, as part of our campaigning plan.

It is also crucial that we invest in research and development to ensure that our platforms are able to sustain and operate and the human is able to sustain and operate in this environment. I think we have work still to be done there.

Senator PETERS. Thank you, General. Thank you, Madam Chair.

Senator ROSEN. Senator Scott, you are recognized.

Senator SCOTT. Thank you. I thank both of you for what you do. Thanks for your hard work to try to take care of national security.

General Richardson, can you talk a little bit about, first, your ability to sort of watch what is happening in the area that you are responsible for, and do you have the resources you need to be able to monitor what is going on, and do you have good partners with the military in countries outside of our country?

General RICHARDSON. So we have outstanding partners, Senator, that want to work with us, and very willing partners, and to be able to see everything, see the malign activity, be able to spot it, be able to go after it, you have got to see it in order to go after it. So the domain awareness, as I have talked to this Committee before, I get about 2 percent of the DOD ISR, gets after about 17 percent of my requirement. I would just say in terms of the urgency right now being at an all-time high, narcotics flow being at an all-time high, my capability and capacity to see is at an all-time low for my allocated resources.

Senator SCOTT. So what do you need?

General RICHARDSON. So I would need the resourcing in terms of the platforms. I would say in terms of allocated forces the ideal platform would be a P–8——

Senator SCOTT. How many?

General RICHARDSON.—with a long dwell, long operation, being able to see. I would say anywhere from four to six, which is what SOUTHCOM had a couple of years ago, and those went away about a year ago in January.

Also for our partner nations their ability to see as well. The ground-based radars are very important.

Senator SCOTT. So Guyana now is a rich country with lots of oil, and they have got a lot of bad actors around them. From a national security standpoint for us and also to make sure they continue their democracy, what support do we need to provide and what support can you provide?

General RICHARDSON. That is a very willing partner, Guyana, and the relationship that we have with Guyana, fastest-growing economy in the world right now because of the light, sweet crude that was discovered off their shores. But they are very vulnerable in terms of their capacity and being able to—you know, our embassy there needs to be a little bit bigger to help them channel and guide them with all these new additional resources. My little DOD team needs to be a little bit bigger as well.

But they can be a stabilizing factor in the region, Guyana, just by fact of where they are located. They are a neighbor to Venezuela, also to Brazil and Surinam, but a very willing partner.

Senator SCOTT. Thank you. General VanHerck, the southern border, there has been conversation in DC that the military could go in and secure the entire southern border, and I know we have National Guard down there that are helping at the southern border.

Without taking a policy position on whether we should or should not do it, is there really the ability, does the military really have the ability to have much of an influence on the security of the southern border?

General VANHERCK. Senator, within the authorities we have we cannot do that, but our military, the most professional, capable on the planet, if tasked to do that, absolutely we could. That is a policy decision, as you alluded to. We have incredible capability to do whatever we desire to do, as United States military.

Senator SCOTT. So, and I am sorry, you might have answered this question before I got here. Talk about hypersonics and our ability to defend ourselves against hypersonics.

General VANHERCK. I am not tasked to defend against hypersonics in the Homeland, with the exception of cruise missiles. Where I am most concerned is about my ability to detect and provide threat warning as the NORAD commander and attack assessment, because of the erosion of strategic stability that it has for providing continuity of government and nuclear force posture survival.

We can talk more in a classified session. I will give you some more details.

Senator SCOTT. All right. Thank you.

Senator ROSEN. Senator Kelly, you are recognized.

Senator KELLY. Thank you, Madam Chair.

General Richardson, I want to followup a little bit on Senator Scott's question about what you need in SOUTHCOM, and then the same for NORTHCOM, just recognizing that, you know, my State, the State of Arizona, has 370 miles of border with Mexico, and just the amount of transnational criminal organizations that are operating south of the border and the fentanyl that is coming from, you know, chemicals that come from China into Mexico, manufactured there and then come across our border is killing tens of thousands of Americans every single year. That is unacceptable.

You talked about needing four to six P–8s. How long ago was it that you had a single P–8?

General RICHARDSON. A year ago in January the P–8s were retasked to another area.

Senator KELLY. How many did you have then?

General RICHARDSON. At that time it was two——

Senator KELLY. You had two?

General RICHARDSON.—from a high of six.

Senator KELLY. You feel you need four to six.

General VanHerck, do you have P–8s available?

General VANHERCK. I get a little more ISR than General Richardson does, but my ISR request is pretty much on a not-to-interfere basis that I get along the southwest border. Now, Senator, you have to realize that I am limited on collecting intelligence in the Homeland, by the law, and so therefore you cannot expect me to be able to do that on this side. We do try to get additional information on the other side of the border, as well, on transnational criminal organizations as well as the National Security Agency helping us.

Senator KELLY. So you cannot fly the airplane south of the border without permission from Mexico. But can you fly a P–8 along the border and get some valuable information? I mean, is there something that, some utility?

General VANHERCK. So we do fly U–2s and RC–135s, not necessarily P–8, to gather information about threats to the Homeland that emanate from all of our borders, not just the southwest border. My actual allocation of that ISR is very low compared to, you know, forward geographic combatant commanders.

Senator KELLY. But does NORTHCOM have P–8s available right now?

General VANHERCK. I have P–8s available, one allocated to me for maritime homeland defense, which would be in support of submarine activity, not necessarily southwest border activity.

Senator KELLY. Where is that airplane based?

General VANHERCK. That airplane is in Whidbey Island, Washington.

Senator KELLY. I imagine it probably as a significant OPTEMPO to it right now?

General VANHERCK. Well, it is not one airplane. It is an entire organization wing up there. The one airplane is access to a single airplane. They are continually doing their mission training and support. I get access to that one airplane under the Maritime Homeland Defense EXORD.

Senator KELLY. What do you think we would need to do to provide like a detachment to SOUTHCOM?

General VANHERCK. Is that for me?

Senator KELLY. Either of you.

General RICHARDSON. Senator, if I might be able to talk about security cooperation in addition to the ISR capability because our partner nations, that security cooperation is my main lever in SOUTHCOM, and being able to train and equip our partners to be able to handle and counter the effects of the transnational criminal organizations, which are at the top of their list that they deal with every single day. The TCOs are way more powerful. They are more sophisticated. They are five times more than all the defense budgets added together for my entire region of partner nations, and we have got to really get after that.

But the foreign military sales, foreign military financing, excess defense articles, we have got to speed that process up because every delay in a piece of equipment, a little goes a long way in this region. I do not need big aircraft carriers. Our partner nations do not need big brigades of soldiers or helicopters, but they need five or six helicopters, a maritime patrol aircraft, the King Air 250. I mean, these go a long way for them, but every delay in that means our partner is not in the fight with us, and so we need to make them stronger to counter the powerful TCOs.

Senator KELLY. General?

General VANHERCK. I would just like to followup. We are not going to interdict our way out of this problem. It is part of the transnational criminal organization model. What we are attacking are the symptoms of the problem. That is the human migration, the counternarcotics trafficking, those kinds of things. The problem is transnational criminal organizations and their network.

So I am encouraged. I just sat through the Interdiction Committee. It is chaired by the Commandant of the Coast Guard with interagency support, and there is a great strategy out of the Office of National Drug Control Policy to get after this. The challenge is operationalizing that strategy across all the entities of the government who have a hand in this. You cannot have multiple entities all doing their own thing.

So I do not see this as a DOD lead, but I do think we need a lead Federal agency empowered to get after the problem that you are talking about across multiple agencies across our Nation.

Senator KELLY. Thank you, General VanHerck and General Richardson, and my office will followup.

Chairman REED.

[Presiding.] Thank you, Senator Kelly.

Senator Ernst, please.

Senator ERNST. Yes, thank you, Mr. Chair, and thank you both for your time this morning. This testimony is important to this Committee because right now our adversaries are probing our Homeland and really looking for weakness right here in our hemisphere. Our Homeland is no longer a sanctuary, so thank you again.

General Richardson, your statement cites at least 11 China-linked space facilities across 5 different countries in the region, and this is more than any other area of responsibility that we see around the globe. So what are the national security implications of these particular space facilities?

General RICHARDSON. Well just the ability for the Chinese to be able to track and launch their own satellites, but then also the ability to surveil not just the United States but our partner nations' satellites as well across the globe.

Senator ERNST. Right, and what are you doing to mitigate that surveillance that you spoke of? Are there things that we can do?

General RICHARDSON. So we are partnering together, of course, with SPACECOM, with NORTHCOM. We hosted the very first inaugural Space Conference of the Americas, bringing all of the space-faring nations together to talk about responsible space operations. Also the capabilities and being able to get after the malign activity possibly associated with those. It is always under supposed research and development and that sort of thing, and the concern is maybe it is not.

Senator ERNST. Right. That is my concern, and what are we doing then to prevent more of these space facilities from being located in your AOR?

General RICHARDSON. So I think just working with the partner nations, with the governments in terms of the responsible space operations and things like that, and talking about and discussing and warning the possibilities associated with it.

Senator ERNST. Again, relationships matter, so it is very important in this region specifically.

General Richardson, during your confirmation you committed to notify Congress if China emplaces long-range missiles in the area of operations. How do you assess the risk of this in the midterm?

General RICHARDSON. So I assess all the development and the Belt and Road Initiative and the critical infrastructure as just setting the theater, or setting the table, if you want to put it that way, in terms of possible basing and that sort of thing in the future. I would say that we are probably about 7 to 10 years behind what has happened in Africa, and with the state-owned enterprises from the Chinese in the region I worry about the dual-use capability and used for military application.

Senator ERNST. Right. I do as well, and what more can we do for SOUTHCOM to prevent China from continuing to expand in the region?

General RICHARDSON. Well I would say that Team USA can do a better job in terms of tooting our own horn about all the investment from the private sector all the way to what I do in the military and defense sector. Foreign military sales and foreign military financing, excess defense articles, training and equipping is really

what we get after. We introduce the Inter-America Defense College that is behind me here for their professional development session. You know, our schools are so important to build trust with our partner nations that we can communicate, talk in the same language. That is what I really bring to the table is being able to work with our partner nations in building that trust, so we can counter the malign activity together.

Senator ERNST. I think that is so important. Again, those relationships matter in this area of operations, and you normally place in front of us what we call a placemat that shows the region and Russian influence, Chinese influence. I just want to make sure that it is very clear to everyone that is watching today, listening to us, that they understand that while China is our pacing threat and we focus on the INDOPACOM, we have to recognize that they are in this hemisphere as well. They are here. They are everywhere around us. They are building space facilities. They are building other points of operation, and they are in our backyard.

So while we do focus on the INDOPACOM it is very, very important. We have got to focus here as well and understand that they are surrounding us, and we have got to do more about that.

General VanHerck, just in the remaining few seconds that we have, what would be the homeland defense implications of persistent Russia or Chinese cruise missile submarines off of our coasts? Do you assess this risk is increasing or decreasing?

General VANHERCK. It is absolutely increasing. Within the last year Russia has also placed their *Severodvinsk*-class submarines in the Pacific, so now not only the Atlantic, we have them in the Pacific. It is just a matter of probably a year or two before that is a persistent threat, 24 hours a day potentially. That impact is reduced decision space for a nation's senior leader in a time of crisis.

Senator ERNST. Absolutely, and again, thank you both so much for your service and dedication to protecting our Homeland. I just want to emphasize again how important it is that we pay attention to Russia and China in this hemisphere as well. Thank you.

Chairman REED. Thank you, Senator Ernst.

Senator Rosen, please.

Senator ROSEN. Thank you, Mr. Chairman, for holding this important hearing, and I want to thank both Generals Richardson and VanHerck for testifying today, for your service, and General VanHerck, of course, for your service to our very own Nellis Air Force Base in Nevada. Thank you.

I am going to buildupon what so many others have already been talking about, our adversaries in our own backyard, China and Russia, 5G technology, all of that.

General Richardson, you mentioned in your opening statement 24 countries in SOUTHCOM's AOR have existing 3G and 4G Chinese telecommunication infrastructure. Of course, we have been talking about the Belt and Road. An additional five countries have upgraded to Huawei's 5G network, and as has been discussed, this adoption of all this technology in your AOR, it is more than concerning. It impacts our national security and the security of all our regional partners.

So again, I just want to build on what they have been asking. What role do you, not just in countering the adoption of the 5G

technology in Latin America, do you think there are ways to leverage public-private partnerships so you do not have to do everything, and can you speak to this and how you are doing that please?

General RICHARDSON. Absolutely, Senator, and the fact that traveling to the region and putting all of these data points together and hearing from the leaders in the region and then coming back here to the United States to talk to our private sector as well, and hear from them, the billions of dollars of investment. But then when you hear of the big projects and tenders coming down from our partner nations, and then there are only six Chinese companies that compete for that project or the tender, then there is a disconnect there. That is why I think that we have got to show the investment that our private sector is doing, which is billions. When I hear from them and talk to them there is billions of investment into the region, and we have got to advertise that.

Team USA is there. Our partners want to work with us. They will turn to us first. But their economies are hurting, and if we cannot do it fast enough, and our foreign military sales and our training and equipping sometimes is not as fast. They are on a political timeline of one term, which is 4 years, and so they are on a stopwatch to deliver for their people, not a calendar. So we have got to speed up our processes. Because they will look to us first, but if we do not have capability to deliver then they are going to look elsewhere to wherever they can get it.

Senator ROSEN. I think accelerating the process and having a budget, not a CR, going through, everyone has talked about that.

General VanHerck, I want to speak with you a little bit about this because we know Huawei and foreign-owned companies, they are responsible for our United States miliary installations and ICBM fields, our training ranges, obviously, at Nellis. We know that people are building these telecommunications sites nearby all of these so they can collect information.

I know we are in an open setting, but can you talk about the threat this poses, what can we do, public-private partnership, and your opinion. Can you elaborate a little bit?

General VANHERCK. Absolutely. I am very concerned about Chinese communications infrastructure being built not necessarily by Chinese but with companies here in the United States in close proximity to national security locations. We have to keep an eye on that. That is a threat to our national security. It is an intelligence collection threat. It may be even a more broad threat.

I would also point out in my AOR, in the Bahamas, China is very aggressive. Their Ambassador in the information space, they have built a new embassy. Economic investment in the largest resort outside of China is right in the Bahamas, right off of our coast. It sits right on top of the Navy's AUTEC test and train ranges, which there is potential collection there. They are interested in developing smart cities here in the region. I will not go into detail. I would in a classified environment. Selling equipment that we, or our partners, utilize for assessment of goods crossing the border, all those kinds of things.

I would also point out one of the main lessons from COVID for me was the supply chain and our supply chain vulnerabilities, that

we have farmed out so much to China. You know, when you get 80 percent of your pharmaceuticals from somebody that you may face in a crisis in the future, that is a national security imperative that we need to go look at.

Senator ROSEN. Thank you. We just had a hearing about that in Homeland Security yesterday, bringing back particularly that pharmaceutical supply chain, critical medications.

I am going to take my next question off the record, but I want you to elaborate on cyber domain awareness that you spoke about. But my time is up so we will just submit that. Thank you again.

Chairman REED. Thank you, Senator Rosen.

Senator Budd, please.

Senator BUDD. Thank you, Mr. Chairman, and again, thank you both for being here. General Richardson, it was great to sit down with you yesterday and have a helpful conversation.

Following up a little bit on Senator Rosen's questions about foreign military sales, I have got a couple of yes-or-no questions about the process, and I have asked similar questions of other combatant commanders. General Richardson, is the current FMS process fast and flexible enough to meet our foreign partners' security needs in your AOR?

General RICHARDSON. No, Senator.

Senator BUDD. Does the transfer of U.S. defense articles build our partners' capacity to provide for their own defense?

General RICHARDSON. Yes, it does, Senator.

Senator BUDD. Is China increasing arms exports to any other countries in your AOR?

General RICHARDSON. Yes, Senator.

Senator BUDD. Is the United States still the security partner of choice in your AOR?

General RICHARDSON. The U.S. is the security partner of choice, Senator, yes.

Senator BUDD. Thank you. Is the United States at risk of losing that security partner of choice status to China?

General RICHARDSON. Yes, Senator.

Senator BUDD. If you would explain a little bit about how FMS challenges are impacting strategic competition with China in your AOR.

General RICHARDSON. Yes. So the ability to be able to deliver quickly. I think that there is also a backlog from COVID and the impacts that our own private sector and industries had to take, and being able to not be a year or 2 years behind delivery. Again, we do not need a lot in this region. A little goes a long way. When we are talking about one country needing one King Air 250 maritime patrol aircraft or four coastal patrol vessels or six helos, we are talking about something that is not that large but that they need to get after the transnational criminal organizations, the malign activity that occurs in their countries. Then that impacts, provides some stability. It curbs irregular migration. It keeps the flow down if our partner nations can provide that security and stability for their countries.

Senator BUDD. Thank you for that.

General VanHerck, again thank you for being here as well. The North Carolina National Guard currently has personnel mobilized

to the southern border in support of CBP, Customs and Border Patrol. We are very proud of them and we want to make sure our troops have all the resources they need to help secure the border.

Are there additional resources we could provide that would make the southwest border deployment more effective?

General VANHERCK. Senator, I am comfortable with the resources I have based on the mission and authorities I have right now.

Senator BUDD. Thank you. So nothing else needed? They have everything they needed?

General VANHERCK. Their commanders have not asked for anything to me. They are working for me in their Title 10 mobilization capacity and I am not aware of any asks.

Senator BUDD. Thank you. and for both of you, we know that illicit drugs are not the only thing being trafficked through your AORs and into the United States. Human trafficking is an all-too-common occurrence, and just this week we learned that groups of Chinese nationals are paying coyotes a premium to be smuggled across the southern border.

From your perspectives, what is driving this humanitarian crisis in your respective AORs, and what resources would be helpful to enhance your work in countering the human trafficking side?

General Richardson first.

General RICHARDSON. So I would say the security cooperation funding is my main lever, Senator, and that really empowers the partner nation militaries and their security forces to be able to handle that. That malign activity, as you said, is not just narcotics. It is human trafficking. It is illegal mining. It is illegal logging, illegal fishing. It is counterfeit goods. It is the whole money laundering piece. They are more powerful, they are more sophisticated, they are corrupt, and they drive violence and irregular migration, and strengthening our partner nations to be able to handle that is what makes them stronger and then generally ends up helping us in the Homeland, where those malign activities do not end up on our southwest border.

Senator BUDD. Thank you. General VanHerck?

General VANHERCK. Yes, thank you. So the problems, I call the symptoms. It is the human trafficking, migration, those kinds of things, are driven by an instability created by transnational criminal organizations. If you do not want your family to live within that environment you are going to try to get out, and you are willing to pay whatever it is to get out of there. That is part of their business model.

I would also say natural disasters. They have had several major hurricanes in Mexico and Central America within the last few years, and also COVID. That created an environment where folks who wanton leave, and they want to come to the United States, and transnational criminal organizations are seizing on that opportunity as part of their business model.

We will not interdict our way out. This requires a strategy to go after transnational criminal organizations. We know how to do this as a nation—cut off the funding, cutoff the weapons. Seize on those opportunities. Interdiction will not get us out of this problem.

Senator BUDD. Thank you both. My time has expired. Mr. Chairman, I will be submitting a question for the record.

Chairman REED. Thank you, Senator Budd.

Senator Blumenthal, please.

Senator BLUMENTHAL. Thank you, Mr. Chairman, and thank you both for your service and for being here today.

I want to focus on Russia for the moment, and particular, General VanHerck, the resources that you have, NORAD and NORTHCOM, in the Arctic area. Do you think those resources are sufficient to protect our national security? Should they be enhanced?

General VANHERCK. Senator, no, I do not think I have the infrastructure, the communications, the ability to respond and be persistent in the Arctic.

Senator BLUMENTHAL. What kind of additional resources do you think should be provided?

General VANHERCK. Yes, I would point back to the report that NDAA directed me to do, that I provided to Congress, that gives a list of the challenges that I face. I need additional communications capability, data and information sharing, the ability to be persistent, so fuel north of Dutch Harbor, Alaska. We need to do more research and development on capabilities that are going to go into the Arctic platforms to ensure they operate. When you send platforms into the Arctic and they are non-functioning, that is a concern for me. I can talk more in a classified environment.

The infrastructure is the biggest concern. So in a layered defense concept I need to have forces forward. That would include at Thule, Greenland, in Canada as well. So NORAD in Canada has to be part of this discussion as well. We need persistence. That requires icebreakers. We, as a Nation, are in a bad shape when it comes to icebreakers, and I fully support the Coast Guard's plan. We need to go faster.

Senator BLUMENTHAL. The Coast Guard needs more icebreakers in that area. Do you agree?

General VANHERCK. I do agree.

Senator BLUMENTHAL. General, have you seen any effect in terms of the Russian resources or threat as a result of the Ukrainian operation?

General VANHERCK. So I am not aware of any direct kinetic threat to the Homeland. We continue to monitor the cyber domain, and especially through their proxy actors. I can talk in a classified environment. I am most concerned about that cyber domain. I would point out that while Russia appears to be a failure in the land domain in Ukraine they still maintain significant strategic capabilities to hold our Homeland at risk, and we have seen them just as active, actually more active globally, to include in the NORTHCOM AOL, such as sailing the Gorshkov with hypersonic missiles just a couple of months ago, through my AOR and into General Richardson's AOR, and more persistent submarine activities that can hold our Nation at risk.

Senator BLUMENTHAL. Let me ask you both, maybe beginning with General Richardson, the Wagner Group has been very active in Ukraine. It has been very active in Africa. Have you seen any evidence of its malign activities in your command?

General RICHARDSON. Russian malign activity is alive and well in SOUTHCOM, and in my statement I talked about the disinformation campaign. Over 31 million followers now on Russia Today Espãnol and Sputnik Mundo. They do not play by the rules. They do not have any rules, and they pose journalists to be legitimate journalists. They are not. Twitter bots are off the charts, and these especially increase right before elections in our partner nations. It is very concerning, but it is very much alive and well with Cuba, Nicaragua, Venezuela that Russia continues to keep their alliances with.

Senator BLUMENTHAL. Thank you for that. That is very helpful, and do they operate also through proxies, like the Wagner Group?

General RICHARDSON. Yes, Senator, they do.

Senator BLUMENTHAL. In your command, General VanHerck, what have you seen?

General VANHERCK. Russia is active. As you know, the Mexican military utilizes Russian helicopters. I would love to see those helicopters go. They have asked, through foreign military sales, for options. We do not move fast enough, the question we got earlier about foreign military sales, to deliver capability to basically punt the Russians out of Mexico.

I would also point out that from a space perspective that Russia is actively seeking, under academic and research facilities, access for space monitoring in my AOR as well. I will just leave it at that. I will talk to you more in a classified environment about that. But it is alive and well right here in the NORTHCOM and NORAD AORs.

Senator BLUMENTHAL. Thank you. I agree with you about the helicopters, by the way. We should be providing American helicopters, not relying on Russian helicopters.

General VANHERCK. Yes. Can I point out one more thing?

Senator BLUMENTHAL. Sure.

General VANHERCK. I have been working for more than a year after I committed to provide radars to the Mexicans for domain awareness for transnational criminal organization and drug control. We still have not been able to donate those radars. The process is too slow.

Senator BLUMENTHAL. Thank you. Thank you both for your testimony. Very informative and helpful. Thank you.

Chairman REED. Thank you, Senator Blumenthal.

Let me note that the vote has started, and recognize Senator Sullivan.

Senator SULLIVAN. Thank you, Mr. Chairman, and I want to thank both of the witnesses today for their outstanding service to our country and excellent testimony. General VanHerck, is this your last hearing?

General VANHERCK. It is my last hearing in front of this Committee. I am sure there will be others.

Senator SULLIVAN. So I am sure you are sad about that.

General VANHERCK. Senator, I actually enjoy the opportunity. It is a great chance to tell our story. I have been telling it for 3 years. Recent events have brought it further into the light.

Senator SULLIVAN. Well, I want to compliment you both, but I want to compliment you in particular on your career in the military

and your outstanding work that you did over the last several months. It was a busy time for NORTHCOM, and I think you led the troops of Northern Command exceptionally well, not just the last couple of months but during your tenure. So thank you for that.

I do want to reference—can you do a quick shout-out to the men and women in Alaska, their operations over the last couple of months and what they were doing on a regular basis, whether it is Chinese spy balloons or Russian Bear bombers. Just your thoughts, very quickly, on General Nahom and the team up there, including the Guard and Reserves.

General VANHERCK. Yes. Some exceptional work, not only in Alaska but across the Department, especially when it comes to the high-altitude balloon. That was Ph.D.-level employment tracking. But most importantly the engagement.

That balloon went down, as you know, on the ice shelf off the coast of northern Alaska with limited infrastructure to support, and the National Guard stepped up, Tory Saxe and his team, and General Nahom, to do incredible work, in just incredibly challenging conditions, and monitoring additional threats to our Homeland. So I could not be more proud of the entire team.

Senator SULLIVAN. Thank you on that, and Mr. Chairman, I think this hearing has clearly, clearly highlighted the need for serious FMS reform. Senator Budd and I were in the Middle East on a codel with Senator Rosen, Senator Kelly, a number of us, and everywhere we went our allies, our military were like, "You have got fix FMS. It is killing us." So I think that is something we need to be looking at hard during this NDAA.

General VanHerck, can you briefly touch on the highlighted challenges of domain awareness? You have been talking about this for 3 years, but I think the Chinese spy balloon and other recent activities have really driven home what you have been talking about, and how we need to do it more rapidly and in a timely manner.

General VANHERCK. Yes. So the bottom line, Senator, is if you cannot detect something, you cannot defeat it, and you certainly cannot deter, and so what has happened since Shock and Awe. Our operations in the Middle East, is Russia and China, particularly, have developed capabilities to hold our Homeland at risk, to reduce our decision space, delay and disrupt our flow. My challenge is to detect those capabilities.

We have assumed, for decades, that the Homeland is a safe and secure environment, two moats on each side, friendly nations on each side. That model is gone, and my ability to detect those threats, whether they be undersea to on orbit and in cyberspace has not kept pace with the threat. That reduces decision space for our Nation's senior leader, it erodes strategic stability, and increases the risk of strategic deterrence failures.

Senator SULLIVAN. Let me ask you, it is a multi-part question and I would like you to answer it in the time I have left. I have appreciated Senators Peters, King, Tuberville, Blumenthal all raising the issues of the Arctic and your ability to currently monitor and respond to threats against the Homeland, specifically in the Arctic.

Now can you also explain why the Arctic, why the Alaska avenues of approach are so important, not just to Alaska—we want to protect the great State of Alaska, my state—but we also recognize, and you recognize, that Alaska often is the avenue of approach with our adversaries' weapons systems to attack the Lower 48, if they were going to do that, whether that is Chicago, Miami, or New York.

So could you explain a little bit on the issue of what you need more in the Arctic—I appreciate your leadership on this—and the domain awareness issues that relate to the importance of those assets in Alaska, not just for Alaska but for the whole country.

General VANHERCK. Yes, Senator. So Alaska may be the most strategic location on the planet.

Senator SULLIVAN. I think I have said that a few times before here, Mr. Chairman. That is Billy Mitchell's famous quote. Correct?

General VANHERCK. It is. So deploying from Alaska, short to the Indo-Pacific, short to the Yukon AOR, shortest avenue approach for ballistic missiles from Russia, potentially China and DPRK to our Homeland.

You know, allowing China and Russia to move forward with putting ballistic missile submarines, due to the ice now receding, in close proximity to Alaska and our Homeland, seriously erodes my ability to provide adequate threat warning, capabilities, domain awareness. So I hope the Air Force comes forward with an unfunded request to accelerate the Wedgetail. The AWACS is worn out. We need a Wedgetail, and we need it much faster, so I can monitor things in the Arctic as well.

The communication capabilities, I hope that terminals are funded for SpaceX, Starlink capabilities to give us the domain awareness, and that we accelerate over-the-horizon radar, and then more broadly think about globally integrated air and missile defense, which would include sensors in Alaska, strategic sensors in Alaska. We need to get long-range, discriminating radar online sooner and utilize that data better for deterrence purposes but if required, defeat purposes.

Senator SULLIVAN. Great. Thanks again to both of you, and again, General, thank you for your outstanding service to our country for decades. We very much appreciate you here on this Committee.

Chairman REED. Thank you, Senator Sullivan.

General VanHerck, General Richardson, thank you for your outstanding testimony today.

We have a vote on so we will vote, but I would announce that we will reconvene in approximately 15 minutes in SV–217 for the closed session.

With that I will adjourn the open session, and thank you both.

[Whereupon, at 11:44 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

TRANSNATIONAL CRIMINAL ORGANIZATIONS

1. Senator SHAHEEN. General VanHerck and General Richardson, would labeling drug cartels in your respective regions as foreign terrorist organizations support

your operations? Please explain the benefits or negative consequences of such a designation.

General VANHERCK. I assess that designating the drug cartels within my Area of Responsibility as Foreign Terrorist Organizations would be of negligible benefit, if any. With specific regard to USNORTHCOM support to interagency and international partners, I defer to the State Department for further discussion on FTO designations in accordance with Section 219 of the Immigration and Nationality Act.

General RICHARDSON. Labeling drug cartels in the USSOUTHCOM AOR as foreign terrorist organizations (FTOs) would be of small consequence to operations in the USSOUTHCOM AOR. It would blur the line between traditional criminal enterprises and terrorist organizations. The drug cartels are criminal organizations driven by money while terrorists are driven by ideology. There is also a potential for concerns from impacted partner nations because the United States would be labeling a drug cartel as a "terrorist organization" which that partner nation views as an internal criminal enterprise/organization. I defer to the Department of State, which owns the authority to make this designation, on how it might impact other United States Government efforts to counter drug cartels.

SECURITY COOPERATION

2. Senator SHAHEEN. General VanHerck and General Richardson, security cooperation with our allies and partners is crucial in the fight against illicit activities. One proven method to build partner capacity is through the legal sale of United States made weapons to vetted foreign militaries and law enforcement, such as the recent sale of rifles and pistols to the Mexican Navy and Marines. How do you view the importance of United States material being provided—in terms of building partner capacity and influence—instead of material sold by foreign governments that do not share our moral values?

General VANHERCK. The timely provision of U.S. material and support is critically important as we seek to enhance the institutional capacity of our military partners. This, in turn, serves to limit our competitors' influence in the region.

General RICHARDSON. Our Foreign Military Sales (FMS) play a significant role in U.S. Security Cooperation and is a way to achieve our diplomatic and defense strategic objectives. The strength of our programs compared with malign global competitors is our enduring partnership to develop military capabilities and institutions with the full spectrum of lifecycle management disciplines. This includes strategy and doctrine, interoperability, personnel and administration, logistics and infrastructure, and systems and institutions. Our malign global competitors do not invest in holistic approaches to build enduring capabilities, rather they exploit investments to advance malign interests. In contrast, the long-term nature of our FMS sales helps us maintain strong partnerships with countries to emphasize the importance of democratic values such as rule of law and respect for human rights.

3. Senator SHAHEEN. General Richardson, what can your respective commands do to ensure these partnership activities are continued?

General VANHERCK. Responsiveness to USNORTHCOM's partners' validated requests is a key element in maintaining the growing activities with the Mexican military. The current system whereby we provide support is antiquated and slow. There would be significant benefit in streamlining the process across the whole-of-government to move faster and provide more timely support.

General RICHARDSON. The access and presence of our Security Cooperation Personnel in our embassies throughout the USSOUTHCOM AOR are the vanguards of these partnerships but we need sufficient resources to stay engaged. A little goes a long way in this region, and we must be present via the broad spectrum of Security Cooperation programs at our required resourcing levels, including:

- Train and Equip Programs (§ 333, § 8068, Foreign Military Financing, Global Peace Operations Initiative)
- Ministerial Level Advising (Logistics, Cyber, Budgeting, Human Rights)
- Transfers of U.S. Origin Defense Articles and Services (Near Coastal Patrol Vessels, Jeep J8s, Maritime Patrol Aircrafts) via the FMS process
- Exercises (PANAMAX, RESOLUTE SENTINEL, TRADEWINDS)

4. Senator SHAHEEN. General VanHerck and General Richardson, when foreign governments that do not share our moral values provide security cooperation and material to local governments in your region, how does that impact stability and influence in those countries?

General VANHERCK. Revisionist and revanchist powers seek to gain footholds throughout the hemisphere. If provided the time and space to operate, they may be capable of buying some influence and access to the region. USNORTHCOM's ongo-

ing Security Cooperation engagements are vital to limiting competitor influence throughout the AOR.

General RICHARDSON. The People's Republic of China (PRC) has significantly increased its outreach and activities in the Western Hemisphere, with 21 of 31 nations in the USSOUTHCOM AOR having joined the Belt and Road Initiative (BRI). The non-transparent nature of PRC "investment" in the region leads to debt-traps and corruption that can break down democratic values in the region. This is true of security assistance, as well as infrastructure projects by the PRC that are all aimed at increasing PRC influence close to our Homeland. These actions have the potential to destabilize the region and erode the fundamental conditions needed for quality private sector investment. This in turn disrupts legitimate economic opportunity, compromises the rule of law, allows malign State actors the opportunity to make inroads and drives irregular migration. Through military engagements and gray zone operations, Russia colludes with authoritarian regimes in the region to undermine United States influence. In the past year, Russia continued its military engagements with both Venezuela and Nicaragua to increase influence with these two nations that are destabilizing forces in the region.

QUESTIONS SUBMITTED BY SENATOR MAZIE HIRONO

CLIMATE RESILIENCY

5. Senator HIRONO. General VanHerk, climate change is affecting the readiness of our military. Abroad, particularly in South and Central America, hurricanes, rising sea levels, flooding, and drought damage the region's health, food, and water supply destabilizing institutions and making your missions harder. how does climate change's effects on our critical infrastructure impact your ability to protect the Homeland?

General VANHERCK. The effects of environmental change have direct impacts on NORAD and USNORTHCOM's missions, planning, and infrastructure. For example, melting permafrost impacts construction and infrastructure sustainment at northern bases, while diminishing sea ice in the Arctic will lead to increased competition and drive requirements for increased sustainable presence in the region. The increased duration and intensity of wildfire season in the western United States and Canada will continue to require USNORTHCOM's support to civil authorities, while more powerful hurricanes have direct economic and readiness impacts on installations and personnel along the Gulf and Atlantic coasts. This reality is factored into NORAD and USNORTHCOM's planning and will affect the commands' operations for the foreseeable future.

6. Senator HIRONO. General Richardson, I have been focused on supporting green technologies for our own infrastructure. From your perspective, what types of technologies help prepare communities for the effects of climate change?

General RICHARDSON. Within the USSOUTHCOM AOR, our partner nations face a wide variety of transboundary challenges, to include natural disasters such as water shortages in Paraguay and Uruguay, flooding in Ecuador and Honduras, wildfires throughout Chile, the dry corridor that runs through Central America, and significant risk from sea-level rise. Below are technologies that could help prepare for and mitigate the effects of climate change.

Freshwater production and storage capability and drought resistant crops: With changing climate patterns, emerging areas of increased dry days resulting in drought conditions will affect reservoir levels and access to water for drinking and crop production. Island nations may see an increase in saltwater intrusion into freshwater drinking supplies due to an increase in demand for freshwater and an increase in sea-level. The ability to produce or capture freshwater and store it is essential for agricultural. When used with additional means of freshwater storage, drought resistant crops may also allow agricultural areas to remain viable instead of relocating. One area in the USSOUTHCOM AOR that is experiencing significant drought is the "dry region" that extends through El Salvador, Guatemala, Honduras, and Nicaragua. Over the last 3 decades, drought in this region has resulted in an approximate loss of $5 billion dollars in the agricultural sector. This is a major factor that results in food insecurity and irregular migration.

Early warning systems: The ability to provide advanced warning for environmental impacts such as severe storms, flash floods, volcanic eruptions, and tsunamis is critical to protect the population. Some severe storms such as tropical cyclones allow forecasting days in advance and allow early warning to populations through media or word of mouth. Quick onset events that give minute to hour forecast win-

dows require additional warning systems such as sirens or alarms that don't require a media source to inform the population.

ILLEGAL FISHING

7. Senator HIRONO. General Richardson, your Command is at the forefront combating illegal fishing. This maritime crime is depleting fish stocks worldwide, contributing to food insecurity. In the Pacific I certainly have heard from our allies and partners, like the Compact of Freely Associated States, that this is a pressing issue made only worse by climate change. In your engagements with our partners, what lessons have you learned from your efforts to combat illegal fishing that can be applied worldwide?

General RICHARDSON. Engagement and information sharing with Allies and partners has informed our understanding of the environment and the threat posed to the region from illegal fishing. The ability to quickly share unclassified information with partner nations as well as with interagency and NGO partners has been especially critical to countering this threat. USSOUTHCOM utilizes our Enhanced Domain Awareness (EDA) platform to illuminate IUUF activity, trends, and patterns in USSOUTHCOM's AOR and mitigate these vessels' attempts to evade detection. Our IUUF dashboard within EDA fuses commercial GEOINT, academic and NGO data, and publicly available information to provide allies and partners with near real-time awareness of IUUF, improving their ability to respond to the growing number of Chinese fishing vessels conducting these malign activities (over 1,000 as of June 2023).

Beijing subsidizes the Chinese distant water fleet (DWF), which almost certainly facilitates the DWF's expansion, helps address China's domestic food needs, and generates revenue for its domestic fishing industry. These subsidies include oil, preferential loans, and tax breaks that pay for construction and equipment procurement as well as covering insurance premiums and vessel decommissioning costs. Beijing provides the DWF with satellite imagery and research vessels to facilitate the fleet's efforts to locate fish stocks. China's DWF also uses government-subsidized supply ships and oilers to sustain itself at sea for several years without a port call, ensuring a continuous fishging cycle that facilitates year-round fish transshipment for the Chinese market. The DWF trawls the edge of the countries' Exclusive Economic Zones (EEZ), operating legally in international waters. The vessels regularly switch off their automatic identification systems (AIS), which broadcasts the ship's identity and position, likely to fish undetected in the EEZ. With the transponder disabled, the fishing vessels appear to go dark, preventing law enforcement tracking.

HUMANITARIAN AID AND DISASTER RESPONSE

8. Senator HIRONO. General Richardson, Latin America and the Caribbean are particularly vulnerable to extreme natural disasters. An important pillar of our Nation's response for humanitarian crises is the Marine Corp embarked on amphibious ships, like the Landing Platform Dock. What will the impact be in your area of responsibility if the Marine Corp does not have the ships it needs to deploy in a timely fashion to give humanitarian aid in the event of a crisis?

General RICHARDSON. In our area of responsibility, the presence of United States Marines embarked aboard amphibious warfare ships physically demonstrates America's commitment to our Latin American and Caribbean partners. 29 of 31 regional countries are connected to the maritime domain; moreover, a majority of the region's 500 million inhabitants occupy littorals that surround or partially frame national borders. U.S. Marines have a long history of operating from the sea and conducting humanitarian assistance operations in the littorals. Two recent examples include timely response to Hurricanes Matthew in 2016 aboard the USS *Mesa Verde* (LPD–19), and Maria in 2017 aboard the USS *Wasp* (LHD–1), USS *Kearsarge* (LHD–3), and USS *Oak Hill* (LSD–51). Without these amphibious warfare ships, USSOUTHCOM's response would have been limited in capacity and capability.

In addition to providing emergency aid for natural disasters and other crises, the episodic presence of amphibious ships deters Malign State Actors (MSAs) who are actively establishing footholds in the Western Hemisphere. Lack of U.S. presence degrades and imperils partner nation trust—a dangerous circumstance that MSAs can exploit by filling voids created by inadequate numbers of U.S. amphibious ships.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

9. Senator WARREN. General VanHerck and Richardson, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

General VANHERCK. Yes, NORAD & U.S. Northern Command (USNORTHCOM) follow the budget process directed by the Department of Defense (DOD) and Congress and identifies priorities for inclusion in the annual budget process. The Fiscal Year 2017 National Defense Authorization Act requires Combatant Commands to submit an Unfunded Priority List (10 USC 222a). As a Combatant Command with no assigned forces and no acquisition authority, NORAD & USNORTHCOM rely on the military Services for most resourcing. The Unfunded Priority List allows us to inform the Department of Defense and Congress of our mission-critical capabilities not resourced by the Services.

General RICHARDSON. Yes, I do agree. The UPL process offers an opportunity to address emerging priorities that arise after the budget process closes to meet the evolving dynamic environment in my AOR. As a combatant commander, I am reliant on the Services and ultimately the Department of Defense to fund my priorities. In accordance with the law established in the fiscal year 2017 National Defense Authorization Act (10 USC 222a), I submitted to Congress those mission-critical priorities that remain unfunded through the regular budget process.

10. Senator WARREN. General VanHerck and Richardson, historically, have previous Unfunded Priorities Lists items been included in the following year's base budget? Have Unfunded Priorities Lists items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

General VANHERCK. In general, requests on prior NORAD and USNORTHCOM Unfunded Priority Lists (UPL) have not been included in subsequent year base budgets. Those requests not included in the subsequent year base budget are generally out-prioritized for Department resources. However, the USNORTHCOM fiscal year 2023 UPL had two requests that were not appropriated in fiscal year 2023, but were included in the Fiscal Year 2024 President's Budget Request:

> The fiscal year 2023 UPL included a request for $29.8 million to resource NORAD and USNORTHCOM Joint Operations Center (JOC) modernization. The Fiscal Year 2024 President's Budget includes $29.5 million for JOC modernization. The requested funding will procure and install components to support ingesting, aggregating, processing, displaying, and disseminating data. If authorized and appropriated by Congress, NORAD and USNORTHCOM will utilize the Naval Information Warfare Center for purchase and installation of required components. Components will be purchased through Government Services Administration-authorized vendors that have not yet been identified.
>
> The fiscal year 2023 UPL also included a request for $50.87 million to resource a Cruise Missile Defense of the Homeland demonstration. The request included sensor procurement, fire-control integration, testing, and a live-fire demonstration. The Fiscal Year 2024 President's Budget includes $14.5 million to the Office of the Under Secretary of Defense for Acquisition and Sustainment to begin procuring an elevated sensor; and $5 million to the Department of the Army to begin fire-control integration. NORAD and USNORTHCOM are not directly involved in the obligation of this funding; the vendor(s) will be selected by lead agency.

General RICHARDSON. USSOUTHCOM works with the Army as our Combatant Command Support Agent (CCSA), the other Services, the Office of the Secretary of Defense, Defense Agencies, and the Joint Staff to include enduring Unfunded Priorities in subsequent year funding. Occasionally, these priorities are resourced.

INFORMATION ON UNFUNDED PRIORITIES LISTS

11. Senator WARREN. General VanHerck and Richardson, what was the cost of putting together this wish list?

General VANHERCK. Development of the Unfunded Priority List is part of our annual research and budget analysis activity and has no additional cost.

General RICHARDSON. USSOUTHCOM did not incur additional expense to put together the unfunded priorities list since the list is simply a compilation of the Command's already existing resource requirements that are compiled as part of a core staff function.

For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

12. Senator WARREN. General VanHerck and Richardson, what is the description of this Unfunded Priorities Lists?

General VANHERCK. A description of my unfunded priority list follows:

(1) *Arctic Capable Pre]positioned Shelters* ($10 million): Funds requested will support RDT&E efforts to design expeditionary base camp systems capable of providing life support, mission command, critical asset storage and large area maintenance shelter (LAMS) capability in an Arctic environment at temperatures as low as –65F. Requested funds will enable continued system modification, augmentation, and testing at the U.S. Army Engineer Research and Development Center (ERDC) Arctic Infrastructure Research Center in Fairbanks, Alaska to ensure the ability to operate in extreme Arctic conditions.

Explanation: Existing expeditionary shelters in Army Prepositioned Stocks can operate at temperatures as low as –25F. The most recent research and development efforts have demonstrated Arctic modifications that increase performance capability to temperatures as low as –40F. The requested funds ($4.5 million) enable RDT&E in support of base camp equipment capable of operations at temperatures as low as –65F in cooperation with the ERDC Arctic Infrastructure Research Center. Current LAMS capability in prepositioned stocks can operate at temperatures as low as –20F but require a temperature of +25F to set up. The requested funds ($5.5 million) enable the Air Force Civil Engineer Center in cooperation with the ERDC Arctic Infrastructure Research Center to conduct RDT&E in support of LAMS capable of operations at temperatures as low as –65F. The National Defense Strategy (NDS) notes that the United States seeks a secure and stable Arctic region. Developing equipment that enables campaigning in the harsh Arctic environment reduces risk in the Department of Defense (DOD) to generate and deploy forces to the region if needed to support on-going stability.

(2) *Counter Strategic Competitors in the Western Hemisphere* ($5.2 million): Requested funds will enable DOD/USNORTHCOM to support expanded intelligence and aerial & land detection and monitoring capabilities for United States Federal Law Enforcement Agencies and the Mexican Military. These capabilities will better position lead agencies, as part of a whole-of-government approach, to reduce the threat to the Homeland from transnational criminal organizations and deter Strategic Competitors in the Western Hemisphere, and particularly in Mexico.

Explanation: USNORTHCOM's relationships with Allies and partners support integrated deterrence by using additional tools at the Department's disposal to deter competitors and potential adversaries from aggression and undue influence. DOD's alignment of counter transnational criminal organization policies, investments, and activities sustain and strengthen deterrence by reinforcing the United States as the partner of first choice.

Increasing air and land domain awareness in the approaches to the Homeland directly supports deterrence by denial as noted in the NDS by maintaining our ability to advance U.S. national interests.

(3) *Arctic Campaigning* ($7.0 million): Funds requested will support infrastructure improvement efforts at Pituffik Space Base (Thule, Greenland). Pituffik SFB is the DOD's northernmost military installation and the only installation north of the Arctic Circle. The existing base infrastructure requires significant restoration and improvements to withstand the harsh environmental conditions of the region and support campaigning.

Explanation: USNORTHCOM and the U.S. Army Corps of Engineers (USACE) have worked together to define project requirements at Pituffik SFB to enhance support for Arctic operations. Posturing defensive forces forward, while actively campaigning, enables improved response time and longer "flying time on-station" to deter competitors and mitigate threats to the Homeland.

USACE will conduct geotechnical and topographic surveys at Pituffik SFB to ensure appropriate design for infrastructure restoration/construction and airfield pavement sites. The presence of permafrost drives special foundation design to avoid future melting of permafrost and severe settling of infrastructure floors ($1 million). USACE will design projects to repair two non-serviceable hangars. One environmentally controlled hangar will meet requirements to accommodate Personnel Recovery aircraft and personnel on alert status; and the other will serve as a facility for large aircraft maintenance and maintenance administrative spaces ($6.0 million).

(4) *Over the Horizon Radar (OTHR) Capability Acceleration* ($55 million): The funds requested will procure a testbed and fund RDT&E to integrate OTHR with space-based sensors.

Explanation: Funding will procure a replacement test asset ($20 million) to conduct wintertime atmospheric study and assess hardening issues. The collected data will better characterize impacts of Auroral clutter and identify strategies to mitigate impacts for northern-looking High Frequency (HF) radars. The existing test set is currently supporting real world operations and is expected to do so for an extended time period. RDT&E efforts to integrate OTHR with MDA space sensors and systems ($35 million) supports improving early warning and tracking of challenging threats, addressing gaps for both Space and OTHR systems. Funding would purchase backend servers at 2 sites and the required software development. Aligned with the NDS, domain awareness reduces risk and aids in escalation management. Additionally, in the event of crisis, globally integrated domain awareness capabilities increase warning and allow for flexible decisionmaking to respond, as necessary.

(5) *Domain Awareness Technology Development* ($9.75 million): The funds requested will provide for a demonstration of Cryogenic Exploitation of Radio Frequency (CERF) sensor technology in an operational environment (Alaska).

Explanation: The CERF prototype provides an ultra-wide band passive sensor that contributes to all domain awareness for USNORTHCOM and NORAD Homeland Defense missions. The system leverages Intelligence Community (IC) investments to provide operational indication and warning of potential threats by means of RF transmissions. Funding would enable deployment planning, transportation, sensor installation, communications architecture, and sensor demonstration as well as sensor employment in an operationally relevant environment (Alaska). The communications architecture will provide domain awareness data to existing exploitation systems. The National Security Agency's Warfighter Integration Program and Tactical Investment Portfolio program managers in Y1432 will execute funding. Additional details and applications are available at higher classification levels. Aligned with the NDS, domain awareness reduces risk and aids in escalation management. Additionally, in the event of crisis, globally integrated domain awareness capabilities increase warning and allow for flexible decisionmaking to respond, as necessary.

(6) *ARCHER* ($27 million): The funds requested will advance air domain awareness capabilities by completing the planned ARCHER fielding in Alaska and provide RDT&E funding required to deploy ARCHER well north of the Arctic Circle.

Explanation: ARCHER is a passive sensor that contributes to all domain awareness for USNORTHCOM and NORAD Homeland Defense. The systems leverage commercial-off-the-shelf technology within an Air Force TENCAP rapid acquisition effort. There are currently 21 of 35 planned systems in Alaska. The requested funding would transition ARCHER from the rapid acquisition process into the long-term sustainment process ($17 million). The funding request also includes RDT&E to develop improved system shelters ($2.5 million), communications pathways ($2.5 million), and upgraded geolocation software ($5 million) to enable deployment of ARCHER systems into remote Arctic locations further north than the current North Warning System.

Aligned with the NDS, domain awareness reduces risk and aids in escalation management. Additionally, in the event of crisis, globally integrated domain awareness capabilities increase warning and allow for flexible decisionmaking to respond, as necessary.

(7) *Three-Dimensional Expeditionary Long Range Radars (3DELLR)* ($211.SM): The funds requested will procure nine (9) 3DELLR's to fill surveillance gaps caused by existing radar failures.

Explanation: Current long range radars fielded in the 1980's reach the end of program life in 2025 and will begin to fail at increasing rates. These radars include 45 Federal Aviation Administration (FAA) Air Route Surveillance Radars (ARSR–4) ringing CONUS, 14 (FPS–117) radars at the North Warning System and 15 in the Alaska Radar System. Procuring 3DELLR systems enable deploying a gap filler capability when existing radar systems cannot be repaired in a timely manner. Additionally, 3DELLR can be used to defend critical infrastructure as required. There is no current Program of Record to replace the existing radars, making 3DELLR the only option to maintain required domain awareness for Homeland Defense.

Increasing air domain awareness in the approaches to the Homeland directly support deterrence by denial as noted in the NDS. Further, this capability is a risk mitigation in defending the Homeland-the number one NDS priority.

(8) *Modernize Homeland Defense Communications System (HDCS) Infrastructure* ($4.2 million): The funds requested will enable procurement and sustainment of infrastructure and technology updates for 61 radio sites; and the Eastern Air Defense Sector and Western Air Defense Sector that supports access to 386 radars. The investment will mitigate risk-to-mission from equipment facing accelerated end-of-life timelines.

Explanation: Hardware and software upgrades at each site are required for sensor data access and transport, communications transmission, and information sharing enabling aircraft scramble capability, cyber security needs, and Domain Awarene]ss for Homeland Defense, POTUS travel, and National Security Special Events. Air domain awareness in the interior and approaches to the Homeland directly support deterrence by denial as noted in the NDS. Further, this capability is a risk mitigation in defending the Homeland-the number one NDS priority.

(9) *Modernize NCR Domain Awareness [Enhanced Regional Situational Awareness (ERSA)]* ($33.21 million): The funds requested will modernize the legacy standard definition ERSA camera system in and around the National Capital Region (NCR) with high-definition systems.

Explanation: The ERSA camera system includes 21 electro optical/infrared cameras and 8 visual warning systems. The standard-definition cameras are designed to provide a timely and accurate local air picture of low altitude, slow-and fast-moving aircraft that pose particular identification problems within the NCR. Replacing the standard definition with high-resolution cameras will provide a better visual identification and characterization solution and be more cost effective than sustaining the legacy cameras (with limited capabilities) and scrambling United States Coast Guard helicopters and/or USAF fighters to investigate and visually identify tracks of interest. Increasing air domain awareness in the approaches to the Homeland directly support deterrence by denial as noted in the NDS. Further, this capability is a risk mitigation in defending the Homeland-the number one NDS priority.

(10) *Core Technology Investment* ($13.85 million): The requested funds will enable procurement and installation of hardware and data transmission technologies that support data sharing and collaboration to enhance domain awareness and information dominance. Component modernization will address shortfalls in Unclassified, Secret, and Nuclear Command, Control, and Communications (NC3) networks.

Explanation: Rapid and agile communications infrastructure increase the capability to see, understand, and share information that increases the decision space for senior leaders. Specific investments will address the NC3 network ($1.1 million); video teleconference deficiencies ($2.25 million); the transition of the unclassified telephone system to modem Voice Over Internet Protocol

(VOiP) technologies ($4.6 million); and deficient network servers, fiber optic systems, and encryption devices ($5.9 million). Improving domain awareness and information dominance support increased global integration—the foundational elements to integrated deterrence. Funding this request will reduce risk in the NOS priority to defend the Homeland.

General RICHARDSON. The information provided in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a, provides a narrative description for each requirement. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

13. Senator WARREN. General VanHerck and Richardson, what does the Unfunded Priorities Lists purchase? (Include all end items with quantities, contractor Full Time Equivalent, etc.)

General VANHERCK. Please see response to question #12.

General RICHARDSON. The information provided in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a, provides detailed information for each requirement. Please see our UPL for this information, which is attached as an enclosure for your convenience. As a clarifying detail on UPL requirement #3 (Cyber Domain Awareness/Network Interoperability), the funding requested will provide 30 contractor full time equivalents to run three shifts and maintain a 24/7/365 network cyber operations support center that is required by USCYBERCOM EXORD. [The attachment has been retained in Committee files.]

14. Senator WARREN. General VanHerck and Richardson, what specific capability will the Unfunded Priorities Lists provide?

General VANHERCK. My submitted Unfunded Priority List, in accordance with 10 USC 222a, is intended to provide a range of mission-critical capabilities not funded within the military Services base budget, thereby buying down risk to force and risk to mission.

General RICHARDSON. The information provided in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a, provides a description of the capability for each requirement. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

15. Senator WARREN. General VanHerck and Richardson, what gap will this fill that is not in the base budget?

General VANHERCK. Please see response to question #12.

General RICHARDSON. The information provided in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a, provides information on impact if not funded for each requirement. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

16. Senator WARREN. General VanHerck and Richardson, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

General VANHERCK. The Unfunded Priority List serves to enhance NORAD & United States Northern Command's support of the objectives outlined in the United States National Security Strategy, National Military Strategy and National Defense Strategy. Defending the homeland is the #1 priority of the National Defense Strategy and the National Military Strategy; the systems, programs and capabilities identified in the NORAD & USNORTHCOM Unfunded Priorities List all serve to address this. Furthermore, as the DOD Arctic Capability Advocate, I am designated to coordinate with other Combatant Commands, the Military Services and Defense Agencies to ensure that Arctic capability gaps are identified and prioritized. Arctic related N&NC Unfunded Priority List items are submitted in accordance with this designation.

General RICHARDSON. The NSS states "no region impacts the United States more directly than the Western Hemisphere." Presence and proximity absolutely matter, and a stable and secure Western Hemisphere is critical to homeland defense. The USSOUTHCOM UPL identifies requirements in Domain Awareness, Security Cooperation, Cyber Domain Awareness, Exercises and Partner Nation Training, Crisis Response, and Countering Disinformation. All items on this list are requirements that contribute directly to ensuring stability in our hemisphere.

17. Senator WARREN. General VanHerck and Richardson, what is the operational requirement? How does this Unfunded Priorities Lists support current or future operations?

General VANHERCK. The response to question #12 offers a description of the operational requirement for each item on the NORAD and USNORTHCOM unfunded priority list.

General RICHARDSON. The information provided in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a, includes descriptions of the operational requirements and impact if not funded for each requirement. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

18. Senator WARREN. General VanHerck and Richardson, what is the operational impact if this Unfunded Priorities Lists is not funded in fiscal year 2024?

General VANHERCK. The response to question #12 offers a description of the operational impact resulting from lack of funding for each item on the NORAD and USNORTHCOM unfunded priority list.

General RICHARDSON. The information provided in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a, includes a description of the impact if not funded for each requirement. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

19. Senator WARREN. General VanHerck and Richardson, are there plans to include this item in the fiscal year 2025 base budget?

General VANHERCK. The Military Service Departments are currently developing their fiscal year 2025 proposals, and the combatant commands do not participate in those deliberations. NORAD and USNORTHCOM will not know if any of the requested capabilities are included in the fiscal year 2025 base budget until the fiscal year 2025 President's Budget Request is released.

General RICHARDSON. As USSOUTHCOM does every year, we will work with the Army as our Combatant Command Support Agent (CCSA), the other Services, OSD, Defense Agencies, and the Joint Staff to include all our requirements in the fiscal year 2025 budget submission.

20. Senator WARREN. General VanHerck and Richardson, why was this Unfunded Priorities Lists not included in the Fiscal Year 2024 President's Budget submission?

General VANHERCK. These items were submitted to the military Services in accordance with the Department of Defense's budget process. Based on internal priorities, the Services and/or the Department did not include these items in their Fiscal Year 2024 President's Budget submissions.

General RICHARDSON. As the USSOUTHCOM Commander, it is my responsibility to articulate my requirements and the risk to force and mission if these requirements are not met. The President's Budget Request is ultimately determined by the President.

21. Senator WARREN. General VanHerck and Richardson, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

General VANHERCK. USNORTHCOM and NORAD do not have insight into potential vendors. Combatant Commands determine requirements but are reliant on the Services and Service Support Agencies to determine vendors and execute contracts.

General RICHARDSON. As a Combatant Command, USSOUTHCOM articulates the capability that is required, with no regard to specific vendors. If these requirements are funded, we would work with the appropriate acquisition authority to source the capability. For those items on the list that are already partially funded or active, vendor information is provided below:

- 1b. Airborne Long-Wave Infra-red (LWIR) Hyperspectral Imagery (HSI) Sensor: Lawrence Livermore National Laboratory (LLNL); Smartronix Inc. (SMX)—Vendor: MAG Aerospace (MAG)—Sub-Vendor
- 1c. Center for Southeast Tropical Advance Remote Sensing (CSTARS): Smartronix Inc. (SMX)—Vendor: University of Miami (UoM)—Sub-Vendor
- 1d. Single Aircraft Precision (SAP) High Frequency (HF) Direction Finding (DF) and Geolocation: Applied Signals Intelligence (ASI); Smartronix Inc. (SMX)—Vendor: MAG Aerospace (MAG)—Sub-Vendor
- 3. Cyber Domain Awareness/Network Interoperability: General Dynamics Information Technology (GDIT)—prime contractor
- 5. NAVSCIATTS: RMGS, Inc.
- 6. The Global Prepositioning Network (also referred to as Maritime Prepositioning Force (MPF)) will not be executed by traditional vendors. It will be supported by the same enablers that support the GPN/MPF and will leverage them in a similar fashion but with alternative funding solutions (UPLs). These enablers include MSC, Blount Island Command, Naval Beach Group, and the Navy Expeditionary Logistics Support Group.
- 7. Countering Disinformation: FWG, Peraton, and Digital Always-On

22. Senator WARREN. General VanHerck and Richardson, how often has your command met with the vendor executing this effort?

General VANHERCK. Please see the response to question #21.

General RICHARDSON. For those requirements that are already partially funded or operational, vendor information is provided below:

- 1b. LWIR-HSI: Over the last 3 years, USSOUTHCOM has coordinated and collaborated with LLNL regarding the development of this capability on an as needed basis, but not less than quarterly.
- 1c. CSTARS: USSOUTHCOM interacts daily with SMX/UofM regarding this capability because they are executing the mission in the field today.
- 1d. SAP-HF-DF: Over the last 5 years, USSOUTHCOM has coordinated and collaborated with ASI regarding the development of this capability on an as needed basis, but not less than quarterly.
- 3. Cyber Domain Awareness/Network Interoperability: GDIT is the existing IT/Cyber provider for USSOUTHCOM, and as such we collaborate daily.
- 5. NAVSCIATTS: USSOUTHCOM does not have a direct relationship with RMGS, Inc.
- 6. The Global Prepositioning Network: MARFORSOUTH has met with the Crisis Response-South (CR-S) enablers (vendors) on average once per week since December 2022 to include regular attendance at the Marine Corps' Preposition Force Structure Review to convey Crisis Response requirements.
- 7. Countering Disinformation: USSOUTHCOM staff meets with the vendors on a daily basis.

23. Senator WARREN. General VanHerck and Richardson, what is your relationship history with this vendor?

General VANHERCK. Please see the response to question #21.

General RICHARDSON. I have no relationship history with these vendors.

24. Senator WARREN. General VanHerck and Richardson, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

General VANHERCK. NORAD and USNORTHCOM do not participate in vendor meetings and do not track vendor representation.

General RICHARDSON. I am not aware of anyone who formerly worked at USSOUTHCOM representing these vendors in meetings. SOUTHCOM has processes in place to review vendor visits to ensure that each one is conducted in accordance with applicable Federal laws and regulations, whether related to the acquisition process (e.g. Competition in Contracting Act) or restrictions on individuals based on ethics restrictions, e.g. 18 U.S.C. § 207.

25. Senator WARREN. General VanHerck and Richardson, in which city/State will the Unfunded Priorities Lists be executed?

General VANHERCK. NORAD and USNORTHCOM do not participate in vendor meetings and do not track vendor representation. I defer to the appropriate Service or Service Support Agency regarding locations and vendors.

General RICHARDSON. For those requirements that are already partially funded or operational, vendor execution information is provided below:

- 1b. The completion/procurement of the capability would be executed through LLNL of Livermore, CA. The installation and integration onto the airframe would be executed through Smartronix, LLC of Hollywood, MD, and in conjunction with MAG Aerospace of Fairfax, VA.
- 1c. This effort is executed through Smartronix, LLC of Hollywood, MD, and in conjunction with the University of Miami located in Coral Gables, FL.
- 1d. The procurement of the capability would be executed through ASI in Sterling, VA. The installation and integration onto the airframe would be executed through Smartronix, LLC of Hollywood, MD, and in conjunction with MAG Aerospace of Fairfax, VA.
- 3. Coral Gables, FL
- 5. Stennis Space Center—Hancock County, MS
- 6. MSC's Reduced Operating Status (ROS) vessel and crew are based out of Jacksonville, Florida. Marine Corps equipment will be sourced primarily from Blount Island Command located in Jacksonville, FL but will be globally sourced from Marine Corps holdings located at Marine Corps Logistics base in Albany, GA as well as from the Fleet Marine Forces located at Camp Lejeune in Jacksonville, NC. Navy enablers will be sourced primarily from Amphibious Base Coronado in San Diego, CA and from Cheatham Annex located in Williamsburg, VA. Marine Corps forces will be sourced primarily from Reserve Component units located across the country. As necessary, Active Component forces will be sourced primarily from Camp Lejeune located in Jacksonville, NC.
- 7. Doral, FL

26. Senator WARREN. General VanHerck and Richardson, is this requirement on an existing contract? If so, with who? What is the history of the contract?

General VANHERCK. NORAD and USNORTHCOM rely on the Services and Service Support Agencies to select vendors and let the contract to deliver the required capability to meet National Defense Strategy objectives.

General RICHARDSON. The requirements that are on existing contracts are:

- 1c. The CSTARS requirement is currently in Option Year 1 on a General Services Administration contract. The current Period of Performance (PoP) runs from 24 August 2022 to 23 August 2023.
- 2d. Acquisition is through a U.S. Navy Program of Record—I defer to the Navy.
- 3. GDIT is the existing IT/Cyber provider for USSOUTHCOM.
- 5. USSOUTHCOM acquires this training directly from NAVSCIATTS. NAVSCIATTS uses RMGS, Inc. to augment its faculty. USSOUTHCOM does not have a history with this contract.
- 7. FWG and Peraton. Our FWG contracts started in 2019 and 2021, our Peraton started in 2021, and our Digital Always-on contract is new this year.

27. Senator WARREN. General VanHerck and Richardson, what is the anticipated contract award date if the Unfunded Priorities Lists receives funding?

General VANHERCK. I defer to the appropriate Service or Service Support Agency regarding potential contract award dates.

General RICHARDSON. Obligation and expenditure of resources is highly dependent on when funds become available if Congress ultimately supports these requirements. My team is ready to execute these requirements and activities in a timely manner and within the authorization limits imposed by the type of funding.

28. Senator WARREN. General VanHerck and Richardson, what funding lines are associated with this Unfunded Priorities Lists?

General VANHERCK. General VanHerck Funding lines were submitted with our Unfunded Priorities List in accordance with 10 USC 222a.

Over the Horizon Radar Capability Acceleration		
OPAF	P1 line 55	0102417F
RDAF	R1 line 158	
Three-Dimensional Expeditionary Long Range Radars (3DELRR)		
OPAF	P1 line 22	0207455F
ARCHER		
OPAF	P1 line 55	0102412F
RDAF	R1 line 157	
Modernize Homeland Defense Communications Systems (HDCS) Infrastructure		
OMAF	line 10/12A	0102331F
Modernize NCR Domain Awareness ERSA		
OPAF	P1 line 19	0102326F
Arctic Campaigning		
OMAF	line 160/15C	0201130F
Arctic Capable Prepositioned Shelters		
RDA	line 110/84	0604804A
RDAF		0604617F
Countering Strategic Competitors in the Western Hemisphere		
OMAF	line 440/42G	0201147F
Core Technology Investment		
OMAF	line 160/15C	0201130F

General RICHARDSON. The funding lines are included in our UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

29. Senator WARREN. General VanHerck and Richardson, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?

General VANHERCK. NORAD and USNORTHCOM submitted 10 items on the commands' fiscal year 2024 UPL. Three of the 10 requested capabilities included multiple appropriations: Over-the-Horizon Radar, ARCHER, and Arctic-Capable Prepositioned Shelters. Each appropriation funds a distinct and independent aspect of the requested capability, allowing each appropriation to stand on its own.

General RICHARDSON. For all but two items in the USSOUTHCOM UPL, a single appropriation is being requested. My second priority requirement within ISR (1b) would be funded by two appropriations [Procurement (PROC) and Operation & Maintenance (O&M)]. Due to the lead time to complete acquisition of the capability, it would be necessary to receive the PROC resources prior to the O&M; however, the O&M is essential to operationalize the capability in theater. Delaying the O&M delays the critical capabilities the Command requires. USSOUTHCOM continues to accept risk in this mission. One other ISR requirement (1d) would be funded by two appropriations [Procurement (PROC) and Operation & Maintenance (O&M)]. Due to a short lead time to complete capability and existing aircraft platforms, the funding for both appropriations would be needed simultaneously.

30. Senator WARREN. General VanHerck and Richardson, how much was enacted and obligated (or expended for Research, Development, Test, & Evaluation) in fiscal year 2022–23 for this requirement?

General VANHERCK. The following UPL titles and parenthetical references will be used in questions 30 to 34:

Over the Horizon Radar (OTHR):
Fiscal Year 2022: $66.022 million Fiscal Year 2023: $12.21 million

Three-Dimensional Expeditionary Long Range Radar (3DELRR):
Fiscal Year 2022: $0 Fiscal Year 2023: $14.49 million

ARCHER:
Fiscal Year 2022: $.095 million Fiscal Year 2023: $0

Modernize Homeland Defense Communication System (HDCS) Infrastructure:
Fiscal Year 2022: $0 Fiscal Year 2023: $0

Modernize National Capital Region Domain Awareness—Enhanced Regional Situational Awareness (ERSA):
Fiscal Year 2022: $0 Fiscal Year 2023: $0

Arctic Campaigning (Campaigning):
Fiscal Year 2022: $0 Fiscal Year 2023: $0

Arctic Capable Prepositioned Shelters (Shelters):
Fiscal Year 2022: $0 Fiscal Year 2023: $0

Domain Awareness Technology Development—Cryogenic Exploitation of Radio Frequency (CERF):
Fiscal Year 2022: $0 Fiscal Year 2023: $0

Counter Strategic Competitors in the Western Hemisphere (Competitors):
Fiscal Year 2022: $0 Fiscal Year 2023: $0

Core Technology Investment (CTI):
Fiscal Year 2022: $0 Fiscal Year 2023: $0

General RICHARDSON. Below is information for those requirements that were funded in fiscal years 2022 to 2023:

- 1c. In fiscal year 2022, $10 million in RDT&E was enacted for this requirement. No RDT&E resources were enacted or obligated for this requirement in fiscal year 2023.
- 2c. $16 million will be funded from the enacted fiscal year 2023 Consolidated Appropriations Act § 8068 for Regional Andean Ridge Environmental Multi Domain Awareness.
- 2d. Total fiscal year 2023 funding enacted for this initiative is $21.5. An initial $16.1 million was provided in base budget. An additional $5.4 million will be funded from the enacted fiscal year 2023 Consolidated Appropriations Act § 8068.
- 2e. Total fiscal year 2023 funding enacted for this initiative is $3.7 million.
- 2f. Total fiscal year 2023 funding for this initiative is $13.43 million, which will be funded from the enacted fiscal year 2023 Consolidated Appropriations Act § 8068.
- 4a. $3.5 million will be funded from the enacted fiscal year 2023 Consolidated Appropriations Act § 8068 for Southern Star.
- 4b. $1.2 million was obligated in fiscal year 2022 to conduct Keel-Billed Toucan 2022. $1.2 million was obligated in fiscal year 2023 to conduct Keel-Billed Toucan 2023.

31. Senator WARREN. General VanHerck and Richardson, how much was requested in fiscal year 2024 for this requirement?

General VANHERCK. The Fiscal Year 2024 President's Budget includes resourcing as noted below:

OTHR: The Fiscal Year 2024 President's Budget includes $553.1 million for the Air Force OTHR program. This funding supports development, initial procurement, and planning and design for future military construction. The UPL request includes funding for a testbed and RDT&E to integrate OTHR data with space-based sensors. These two efforts are not included in the Fiscal Year 2024 President's Budget Request.

3DELRR: The Fiscal Year 2024 President's Budget includes $103.5 million for the Air Force program to procure three radars. The NORAD and USNORTHCOM UPL requests funding for an additional nine radars.

ARCHER: The Fiscal Year 2024 President's Budget includes $.577 million to procure one sensor and conduct continuing RDT&E. The NORAD and USNORTHCOM UPL requests funding to establish long-term sustainment and RDT&E to improve communication links and enable deployment in Arctic regions.

HDCS: There is no funding for this specific requirement in the Fiscal Year 2024 President's Budget. Sustainment funding for the existing system is supported from the Global C3I & Early Warning Sub-activity Group (SAG 12A)

ERSA: $0

Campaigning: $0

Shelters: $0

CERF: $0

Competitors: $30.4 million is included in the USNORTHCOM baseline allocation. The UPL includes requests for additive capability not supported within baseline allocation.

CTI: $2.4 million is included as a line item add to USNORTHCOM in Air Force Operations and Maintenance Justification Books.

General RICHARDSON. The funding requested for fiscal year 2024 is included in our fiscal year 2024 UPL submission to Congress on March 21, 2023, in accordance with 10 USC 222a. Please see our UPL for this information, which is attached as an enclosure for your convenience. [The attachment has been retained in Committee files.]

32. Senator WARREN. General VanHerck and Richardson, is there a tail associated with this Unfunded Priorities Lists?

General VANHERCK. The NORAD and USNORTHCOM methodology for developing requests to be included in the UPL specifically seek capabilities that drive minimal or no follow-on ("tail") costs.

OTHR: The Research, Development, Test, and Evaluation (RDT&E) request does not have follow-on funding requirements. The OTHR testbed will have some level of follow-on operations and sustainment (O&S) costs that will be determined by the Department of the Air Force (DAF). These costs will be funded through the OTHR program.

3DELRR: The Air Force Program Office estimates O&S costs will be approximately $15 million per year if all 9 requested systems are authorized and funded. This O&S cost is not effective until fiscal year 2026 when the radar systems are delivered, which provides ample time for NORAD and USNORTHCOM to work with DAF for resource alignment.

ARCHER: The RDT&E request does not have follow-on funding requirements. The request includes $17 million specifically intended to establish long-term sustainment of existing capability.

HDCS: There are no follow-on costs. The request supports a one-time software modernization. On-going maintenance of the existing capability will be funded through the program baseline.

ERSA: There are no anticipated follow-on costs. The request supports a one-time camera modernization. On-going maintenance of the modernized capability will be funded through the existing program baseline.

Campaigning: There are no follow-on costs. This request resources one-time facility Planning and Design work.

Shelters: There are no follow-on costs. This request resources specific RDT&E work only.

CERF: There are no follow-on costs. This request resources specific RDT&E work only.

Competitors: There are no follow-on costs.

CTI: There are no anticipated follow-on costs. The request supports a one-time investment in technology component modernization. On-going maintenance and sustainment of the modernized capability will be funded through the existing program baseline.

General RICHARDSON. All items in the UPL have funding requirements beyond fiscal year 2024, except item 6, the Global Prepositioning Network, which is a one-time cost in fiscal year 2024 until USMC decides to sustain this capability. No recurring expenses apply to USSOUTHCOM as sustainment is within USMC's budget in subsequent years unless the GPN is activated in response to an emerging in-theater crisis at which point USSOUTHCOM will use appropriate O&M funding mechanisms.

33. Senator WARREN. General VanHerck and Richardson, is any tail funded in the future years defense plan?

General VANHERCK. The NORAD and USNORTHCOM methodology for developing requests to be included in the UPL specifically seek capabilities that drive minimal or no follow-on ("tail") costs. As noted in question 32, the only requests that

may drive future-year funding requirements are the OTHR testbed and 3DELRR. If funding for this request is authorized and appropriated by Congress, NORAD and USNORTHCOM will work with Department of the Air Force to develop an appropriate sustainment plan.

General RICHARDSON. No.

34. Senator WARREN. General VanHerck and Richardson, please describe how much the requirement will cost per year for the next 5 years.

General VANHERCK.

OTHR: The Research, Development, Test, and Evaluation (RDT&E) request does not have follow-on funding requirements. The OTHR testbed will have some level of follow-on operations and sustainment (O&S) costs that will be determined by the Department of the Air Force (DAF). These costs will be funded through the OTHR program.

3DELRR: The Air Force Program Office estimates O&S costs will be approximately $15 million per year if all 9 requested systems are authorized and funded. This O&S cost is not effective until fiscal year 2026 when the radar systems are delivered, which provides ample time for NORAD and USNORTHCOM to work with DAF for resource alignment.

ARCHER: There are no additional costs per year. The system is a passive sensor requiring only periodic maintenance and sustainment. The request includes $17 million specifically intended to establish long-term sustainment of existing capability.

HDCS: There are no follow-on costs. The request supports a one-time software modernization. On-going maintenance of the existing capability will be funded through the program baseline.

ERSA: There are no anticipated follow-on costs. The request supports a one-time camera modernization. On-going maintenance of the modernized capability will be funded through the existing program baseline.

Campaigning: There are no follow-on costs. This request resources one-time facility Planning and Design work.

Shelters: There are no follow-on costs. This request resources specific RDT&E work only.

CERF: There are no follow-on costs. This request resources specific RDT&E work only.

Competitors: There are no follow-on costs.

CTI: There are no anticipated follow-on costs. The request supports a one-time investment in technology component modernization. On-going maintenance and sustainment of the modernized capability will be funded through the existing program baseline.

General RICHARDSON. Below is the information for the outyear costs that are known or anticipated at this time:

- 1a. This requirement will have a future cost; however, at this time that amount is unknown.
- 1b. This requirement is anticipated to cost $45.5 million over the next 5 years.
- 1c. This requirement is anticipated to cost $35.7 million over the next 5 years.
- 1d. This requirement is anticipated to cost $0.9 million over the next 5 years.
- 2c. This requirement is anticipated to cost $351.8 million over the next 5 years.
- 2d. This requirement is anticipated to cost $31.7 million over the next 5 years.
- 2e. This requirement is anticipated to cost $48.6 million over the next 5 years.
- 2f. This requirement is anticipated to cost $81.4 million over the next 5 years.
- 2g. This requirement is anticipated to cost $1.5 million over the next 5 years.
- 2h. This requirement will have a future cost; however, at this time that amount is unknown.
- 2i. This requirement is anticipated to cost $64.6 million over the next 5 years.
- 3. This requirement is anticipated to cost $93.6 million over the next 5 years.
- 4a. This requirement is anticipated to cost $15.8 million over the next 5 years.
- 4b. This requirement is anticipated to cost $19.5 million over the next 5 years.
- 5. This requirement is anticipated to cost $80M over the next 5 years.
- 6. This requirement will be funded through operational or disaster relief funding based on employment of the capability in year of execution.
- 7. This requirement is anticipated to cost $17–25 million over the next 5 years.

35. Senator WARREN. General VanHerck and Richardson, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or Unfunded Priorities Lists.

General VANHERCK. The capabilities included in the NORAD and USNORTHCOM fiscal year 2024 Unfunded Priority List (UPL) were not included

in prior UPL. The fiscal year 2022 UPL did include a request for $25.1 million to accelerate Over-the-Horizon Radar (OTHR) procurement and fielding. That funding request was enacted and the Air Force Program Office responsible for OTHR is obligating the funds. The fiscal year 2024 OTHR related request addresses new and distinct requirements to increase capability and further accelerate OTHR fielding.

General RICHARDSON. No resources have been enacted for UPL items 1a, 1b, & 1d. Item 1a was submitted in USSOUTHCOM's fiscal year 2023 UPL at $10.2 million but not funded. 1b was submitted in the fiscal year 2023 UPL at $9.7 million but not funded. In fiscal year 2021 ($7 million) and fiscal year 2022 ($10 million), the CSTARS requirement was funded via RDT&E resources that were provided to a national government agency. The Paraguay Riverine Security Resilience Program (RSRP) and the Paraguay Special Operations Forces (SOF) requirement were both funded under the fiscal year 2023 Consolidated Appropriations Act § 8068. $27.3 million was funded for Regional Andean Ridge Environmental Multi Domain Awareness from the enacted fiscal year 2023 Consolidated Appropriations Act § 8068. For the Regional Caribbean Domain Awareness requirement, an initial $16.1 million was provided in base budget and an additional $5.4 million was funded via the fiscal year 2023 Consolidated Appropriations Act § 8068. $3.7 million was enacted in the fiscal year 2023 base budget for the Jamaica SOF requirement. The fiscal year 2023 Consolidated Appropriations Act § 8068 also is also providing $13.43 million for the Theater Maintenance Partnership Program. No resources have been enacted for items 2g, 2h, and 2i. USSOUTHCOM has submitted the Cyber Domain Awareness/Network Interoperability requirement to the lead service or funding authority in the fiscal year 2023, 2024, 2025 budget/POM cycles. USSOUTHCOM has also submitted it to OSD, which directed the U.S. Army to partially fund it in President's Budget Request 2023 ($8.3 million) and President's Budget Request 2024 ($8.6 million) respectively. $3.5 million of the funds enacted in the fiscal year 2023 Consolidated Appropriations Act § 8068 for will fund the Southern Star Exercise. $1.2 million was obligated in fiscal year 2022 to conduct Keel-Billed Toucan 2022 (base budget). $1.2 million was obligated in fiscal year 2023 to conduct Keel-Billed Toucan 2023 (base budget). The Countering Disinformation requirement was funded in fiscal year 2023 at $11 million in the base budget. No resources have been enacted for any other requirements on the UPL.

36. Senator WARREN. General VanHerck and Richardson, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

General VANHERCK. The Military Service Departments are currently developing their fiscal year 2025 proposals and the combatant commands do not have visibility on those deliberations. NORAD and USNORTHCOM will not know if any of the requested capabilities are included in the fiscal year 2025 base budget until the fiscal year 2025 President's Budget Request is released.

General RICHARDSON. I commit to working with the Army as my Combatant Command Support Agent (CCSA), the other Services, OSD, Defense Agencies, and the Joint Staff to include all USSOUTHCOM requirements in future budget submissions.

37. Senator WARREN. General VanHerck and Richardson, please provide photos of this requirement for visual aid.

General VANHERCK. NORAD and USNORTHCOM rely on the Services and Service Support Agencies to select the vendors and let contracts to deliver the capability we require to meet National Defense Strategy objectives. I have no insight into what vendors the Services might select for any given contract, and therefore I do not have the ability to provide photos.

General RICHARDSON. As a Combatant Command, USSOUTHCOM outlines the capability required and an acquisition authority will contract or purchase a capability to meet that requirement. At this time, the exact equipment to be purchased for most of our UPL items are unknown. For those items where specific equipment has already been identified, we have included photos below:

1c. Center for Southeast Tropical Advance Remote Sensing



2c. Near Coastal Patrol Vessel



2d. Utility Boat (UTB)



2h. C–182 aircraft



2i. TPS–78 Radar



4a. Southern Star Exercise Support—photo from 2022 exercise



4b. Keel-Billed Toucan 24—photo below from 2023 exercise



4c. FIDAE—photo from 2022 trade and air show in Chile



4d. CRUZEX—photo from 2010 exercise



4e. TAPIO–24—photo from 2022



4f. RELAMPAGO–24—photo from 2022



5. NAVSCIATTS



QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN III

TRANSNATIONAL ORGANIZED CRIMES AND FENTANYL

38. Senator MANCHIN. General Richardson, how are you working with the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, who has led in the Department of Defense for the counternarcotic mission, to combat this epidemic?

General VANHERCK. USNORTHCOM personnel work with the Assistant Secretary of Defense for Special Operations and Low Intensity conflict through the Office of the Deputy Assistant Secretary of Defense for Counter-narcotics and Stabilization Policy (DASD/CNSP). DASD/CNSP provides continuous programmatic and policy guidance for the Department's counterdrug mission to all combatant commands, including USNORTHCOM, to implement the authorities provided by Congress, which enables military support to lead Federal agencies and partner nation law enforcement. DASD/CNSP further provides an annual budget to USNORTHCOM, coordinated to ensure policy and program goals are met.

General RICHARDSON. The Deputy Assistant Secretary of Defense—Counter Narcotics/Special Projects (CN/SP), within the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, is the DOD lead for CN, Counter Drug (CD), and Counter Trans-Criminal Organizations (C-TCO). We work closely with this office as we develop the operational requirements to meet our statutorily directed mission to detect and monitor the trafficking of illegal drugs in the air and maritime domains throughout Latin America and the Caribbean.

CRITICAL INFRASTRUCTURE PROTECTION

39. Senator MANCHIN. General VanHerck and General Richardson, what additional authorities or resources are you looking for that will allow you to better perform your duties of security our critical infrastructure?

General VANHERCK. I do not currently require additional authorities for the defense of critical infrastructure. Regarding resources, domain awareness is my top priority. The NORAD and USNORTHCOM Unfunded Priority List includes requests for an Over-the-Horizon Radar testbed to accelerate fielding and for procurement of nine Three-Dimensional Expeditionary Long Range Radars (3DELRR). The 3DELRR radars could be used to fill surveillance gaps in support of critical defense infrastructure if tasked. NORAD and USNORTHCOM have submitted a plan to the Department of Defense (DOD) identifying a range of options to defend defense critical infrastructure, and I am awaiting a DOD assessment of those options. I believe that policy guidance should expand beyond defense critical infrastructure, and NORAD and USNORTHCOM are working closely with the Department, the interagency, and the National Security Council toward that effort.

General RICHARDSON. USSOUTHCOM focuses efforts on exposing, illuminating, and attributing Malign State Actor (MSA) activity through information and intelligence sharing with the interagency and partner nations. For example, we work with the interagency and partner nations to provide assessments of partner nation infrastructure vulnerabilities and look for opportunities to assist interagency partners like the Departments of Treasury and Commerce to provide U.S. assistance to our partner nations with civil-military activities. These activities are meant to meet our partners at their need and demonstrate the U.S. commitment to the region, while outmaneuvering malign actors who might otherwise step in to capitalize on those vulnerabilities.

It is critical for our interagency partners to be appropriately resourced and staffed for this mission as much of the influence fight takes place outside USSOUTHCOM authorities. In those areas that directly affect our authorities, we need more efficient vetting processes to be able to reduce the lag time in identifying and getting partner personnel into training and education programs like the International Military Education and Training (IMET) program. We need a more streamlined foreign military sales pipeline to meet the real-world challenges that partner nations face. We need the ability to react at scale to support USG messaging, counter disinformation, amplify key narratives, and refocus target audiences on topics of national security. This can only be accomplished through a multi-front campaign including, removal of disinformation, the timely release of messages that are amplified at scale, the use of third-party validators that are able to reinforce that narrative, the ability to offer a private/public alternative that is viable, and a proactive technologically advanced protective force that can work on partner nation infrastructure.

CHINESE ACTIVITIES IN THE REGION

40. Senator MANCHIN. General VanHerck and General Richardson, what challenges do you foresee in pursuing security cooperation with these countries?

General VANHERCK. A challenge to USNORTHCOM security cooperation efforts is the mandate under 10 U.S.C. § 312 that restricts how combatant commanders can expend funds to facilitate partner nation participation in Traditional Commander's Activities. For example, The Royal Bahamas Defence Force (RBDF) is a willing partner, and the Bahamian Government has made substantial investments in new ships and improving their military bases. 10 U.S.C. § 312 requires "extraordinary circumstances" for a waiver to pay for RBDF expenses incident to engagements that strengthen our alliance, even if it is more cost effective to conduct them in the United States. This requirement affects my ability to be a consistent and responsive security cooperation partner to this vital partner, and constitutes my biggest challenge in countering malign Chinese influence in The Bahamas.

General RICHARDSON. In this region, a small investment—whether in time, physical resources, funding, or collaboration—goes a long way. We don't have to outspend the PRC to outcompete, but we must be present on the field and deliver at the speed of relevance. The USSOUTHCOM Security Cooperation program has historically been resourced at approximately half of our requirement. In the fiscal year 23 Consolidated Appropriations Act (§ 8068), Congress supported our Security Cooperation program, funding some of those requirements that had not previously been resourced. Further, it is critical to have a timely and predictable budget—continuing resolutions are disruptive to U.S. and partner nation efforts to defend against threats. If we don't have presence in the AOR, the PRC and Russia will fill the void.

41. Senator MANCHIN. General VanHerck and General Richardson, while I recognize the challenges associated with detecting and identifying unmanned objects into our national airspace, could you provide as an update on USNORTHCOM and NORAD's efforts to identify/deconflict non-security related activities in our airspace?

General VANHERCK. NORAD and USNORTHCOM coordinate directly with the FAA on a daily basis for both security and non-security activities in our airspace.

General RICHARDSON. I defer to General VanHerck on USNORTHCOM/NORAD's efforts to identify/deconflict non-security related activities in U.S. airspace.

CRITICAL MINERALS IN LATIN AMERICA

42. Senator MANCHIN. General Richardson, do you assess that we are providing viable alternatives for partnerships with our Latin American partners, especially as China has taken a hit on the international stage due to their role in failing to contain the COVID–19 outbreak?

General RICHARDSON. While China did take a hit on the international stage due to COVID, the PRC was also first on scene within our AOR to deliver vaccines and support in the wake of COVID. The United States response was slow in this region, and I believe we have some work to do make up ground that we lost following the pandemic.

Both the U.S. Government and private industry are working closely with our partners in the hemisphere to increase security and economic investment and opportunities, but we must do better. First, we must do a better job of taking credit for all that Team USA does, from providing critical life-saving aid to countries following a disaster to supporting construction of critical infrastructure. United States Federal agencies and United States-based companies already do so much to partner with the nations of this hemisphere, but United States presence and engagement is not always evident to our partners, nor our adversaries. Second, we must work closely with these nations to learn about opportunities for partnership and collaboration where our shared democratic values can thrive, as opposed to allowing malign State actors to take advantage of the needs of our partners. Specific to DOD, we must work with our partner nation militaries and security forces to ensure a secure environment where Western businesses can invest without concern for the corruption and insecurity brought by TCOs.

FISA REAUTHORIZATION

43. Senator MANCHIN. General VanHerck and General Richardson, what impact would a failure to reauthorize Title Seven have in your ability to assist our partners and support your efforts to defend our Nation against malign actors?

General VANHERCK. Without FISA Section 702, NORAD and USNORTHCOM's missions to defend the homeland will be impaired. FISA Section 702 has helped the commands to understand the strategic intentions of the foreign governments we are most interested in: the People's Republic of China (PRC), Russia, Iran, and the Democratic People's Republic of Korea. It allows the intelligence community to acquire communications of specific foreign actors overseas and use those details to identify and mitigate terrorist plans, cyberattacks, and foreign intelligence threats. In the last 2 decades, the PRC has evolved as America's primary geopolitical challenge while Russia continues to pose an acute and ongoing threat to regional security in Europe. There has also been a change in conflict. Cyberspace is now a battleground and cybersecurity has become one of our most pressing national security concerns. Section 702 is needed to address these evolving challenges and plays an important role in keeping our Nation secure. In recent examples, FISA Section 702 assisted in identifying multiple foreign ransomware attacks on U.S. critical infrastructure and helped positioned the interagency to respond to and mitigate these events, and in some instances, prevent significant attacks on U.S. networks. FISA Section 702-acquired information related to sanctioned foreign adversaries was used in USG efforts to stop components for weapons of mass destruction from reaching foreign actors.

General RICHARDSON. Reauthorization of this authority is key to USSOUTHCOM's intelligence gathering and helps us close our intelligence gaps. It is the authority that gives us insights into hostile foreign actors, reporting of cybersecurity threats, counterterrorism threats, and protecting U.S. allied troops. Without this authority, USSOUTHCOM's mission to provide indications and warnings, track external State actors, protect the Homeland, and gain insight into malign State actors and their activities in the AOR would be severely impaired.

CYBER OPERATIONS

44. Senator MANCHIN. General VanHerck and General Richardson, based on the importance of the Cyber domain and its critical integration into all domains of the Joint Operational environment, is your command resourced and staffed appropriately to keep pace with the integration of Cyber capabilities in an operational environment?

General VANHERCK. I have significant concerns about emerging cyber threats to the homeland, however I believe NORAD and USNORTHCOM are appropriately staffed at this time. In particular, USNORTHCOM has gained significant capability through the USCYBERCOM Cyberspace Operations Integrated Planning Element (COIPE) assigned to my headquarters. The COIPE coordinated defensive and offensive cyber capabilities within the USNORTHCOM area of operations and is integral to my ability to compete in the cyber domain. COIPEs are in high demand in all operational theaters, as they provide crucial expertise, domain awareness, and capability in the cyber domain.

Regarding resourcing, the USNORTHCOM fiscal year 2024 Unfunded Priority List included requests for $4.2 million to modernize homeland defense communications system infrastructure and $13.85 million for core technology investments. These efforts will improve USNORTHCOM communications and information security and mitigate risk to mission from equipment that is nearing the end of its service life. The core technology investment would enable procurement and installation of hardware and data transmission technologies to enhance domain awareness and information sharing while addressing shortfalls in unclassified, secret, and nuclear command, control, and communications networks.

General RICHARDSON. USSOUTHCOM is accepting risk based on the resources and staff I currently have to address the growing and evolving need to integrate cyber capabilities in an operational environment.

QUESTIONS SUBMITTED BY SENATOR JACKY ROSEN

IRAN'S PRESENCE IN THE WESTERN HEMISPHERE

45. Senator ROSEN. Latin America is viewed by the Iranian regime as a key area in which it can expand its influence. By forging partnerships with leaders in the region, Iran develops new arenas in which it can conduct illicit activities and circumvent sanctions. This deepening of ties is perhaps best encapsulated by last year's agreement between Iran and the Maduro regime in Venezuela. Under this 20-year agreement, the two countries will cooperate in the areas of oil, defense, and agriculture. Iran has also deepened its presence in Latin America through its proxy Hezbollah. Hezbollah is not only a potential terrorist threat in your Area of Respon-

sibilities, but also an actor deeply embedded in transnational organized crime networks in the region, including drug trafficking. That's why last Congress, Senator Blackburn and I introduced the Hezbollah in Latin America Accountability Act to hold Iran and Hezbollah accountable for their activities in the region.

General Richardson, can you update the Committee on Hezbollah's recent activities in Latin America? In addition, can you explain how the Iranian regime has expanded its influence in the region and the steps SOUTHCOM is taking to disrupt and degrade both actors' power projection capabilities?

General RICHARDSON. Hizballah is active in Latin America, exploiting the region for fundraising and terrorist operations. The Lebanese Hizballah Foreign Relations Department is charged with liaising with diasporas throughout the world. We estimate the Lebanese diaspora in Latin America sends more than $212 million annually in remittances, some of which lands in the hands of Hizballah. Support for Hizballah is most pronounced within the diasporas in Venezuela and the Tri-Border Area of Argentina, Brazil, and Paraguay, and we have seen terrorist-related activity in Bolivia, Chile, Colombia, and Peru during the last decade.

Hizballah's Islamic Jihad Organization (IJO) is responsible for the systematic clandestine planning, coordination, and execution of terrorist activities, such as the development of contingency-based attack options, outside of the Levant to include in Latin America. In late 2021 in Colombia, Hizballah was planning to assassinate an Israeli national in Bogota to avenge the January 2020 killing of Iran's Qods Force commander Qasem Soleimani as part of a broader operation that also targeted Americans. In 2017, Bolivian authorities identified a Hizballah-affiliated warehouse and seized enough explosive precursor material to produce a two-and-a-half-ton bomb. In 2014, Peruvian police arrested a Hizballah operative in Lima for planning a terrorist operation and regional security services disrupted a plot targeting civilians in Chile.

Iran seeks to improve its standing in the region, while also portraying the United States as culpable for the region's socioeconomic and citizen security challenges. To do so, Iran uses its relationship with Venezuela, the Shia Muslim diaspora, cultural centers throughout Latin America, Spanish-language media, and military outreach. Venezuela is Iran's primary ally in the Western Hemisphere. Tehran's relationship with Caracas has consisted primarily of economic cooperation to assist each country with circumventing sanctions, arms transfers, and intellectual and skill exchanges. Iranian leaders will periodically travel to the region to bolster economic and social ties. In mid-June, Iranian President Raisi visited Nicaragua, Venezuela, and Cuba to discuss increased cooperation in the areas of science, biotechnology, and energy, as well as to expand economic ties and trade. Earlier this year, Iran's foreign minister or deputy foreign minister have conducted diplomatic engagements with Bolivia, Colombia, Cuba, Nicaragua, and Venezuela. Iran uses its cultural centers to gain access to prominent individuals within the Islamic and indigenous communities throughout the region. In late 2022, the Iranian ships Makran and Dena (oiler and frigate respectively) initiated a round-the-world cruise that concluded in early 2023, with a 1-week stop in Rio de Janeiro, Brazil to "show the authority of the dear people of Iran to the whole world," according to Iran's Navy Chief. In mid–2021, midway through a trip to Venezuela to deliver seven small fast-attack boats, Iran diverted two ships to St. Petersburg, Russia, suggesting Caracas acquiesced to United States diplomatic concerns.

SAFEGUARDING DOMAIN AWARENESS

46. Senator ROSEN. Our competitors continue to field advanced capabilities across domains that have the potential to threaten the Homeland. In light of these threats, NORTHCOM and NORAD must ensure that the systems providing the Homeland with domain awareness are survivable, adaptable, and modern. In addition, these systems must be hardened, as they will be subject to an array of cyberattacks during any contingency. I am encouraged by NORTHCOM's continued efforts to modernize legacy detection systems such as the Over the Horizon Radar, but detection alone is not sufficient. Operators must also have the ability to effectively communicate the operational picture to other commands, as well as to our partners and allies, often under highly compressed timeframes.

General VanHerck, what steps are you taking to sufficiently harden our command and control nodes, particularly in the cyber domain, so that we are able to effectively share the operational picture during a conflict?

General VANHERCK. I have conducted an assessment of requirements for defending NORAD and USNORTHCOM command and control assets in the homeland against kinetic and non-kinetic threats. My recommendations include acquiring automated sensors to detect cyber intrusions, ensuring first line cyber-defenders are

tasked and resourced, and ensuring adequate defensive Cyber Protection Teams are tasked in the event of a detected intrusion. I have provided those recommendations to the Department to inform decisions regarding resourcing, the Services who own the assets, and USCYBERCOM, which has the technical expertise to execute the defensive recommendations. Cyber Domain Awareness is a key part of this initiative, and while I can visualize the cyber assets controlled by NORAD and USNORTHCOM, my missions rely on many more critical nodes that are not owned or operated by NORAD or USNORTHCOM.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

CHINESE SURVEILLANCE BALLOON

47. Senator COTTON. General VanHerck, prior to the late January/early February shootdown of the Chinese surveillance balloon, had NORTHCOM developed options for countering this threat?

General VANHERCK. Yes, NORAD and NORTHCOM maintain options daily to engage potential threats to North America and the United States.

48. Senator COTTON. General VanHerck, when were these options presented to the Secretary of Defense?

General VANHERCK. As I testified in open session before the Senate Armed Services Committee on 23 March 2023, I presented options relating to the PRC HAB to the Secretary of Defense on 1 February 2023. However, I'd like to reiterate that I am prepared every single second of every day to defend our Homeland.

CHINESE AND RUSSIAN ACTIONS IN USNORTHCOM AOR

49. Senator COTTON. General VanHerck, I have an article from last year which quotes you as saying that China and Russia are "very aggressive and active" in the whole area of the Northern Command's area of responsibility, including the Bahamas and Mexico. We've seen what happened with the Chinese spy balloon. Can you give other examples of aggressive actions?

General VANHERCK. In The Bahamas, the PRC continues its aggressive economic and political engagement. The PRC Ambassador remains active in an effort to present the PRC as the alternative to United States partnership in the region, and has renewed offers to provide economic assistance, to include renovating the Bahamas' largest stadium. The PRC also donated medical assistance during the COVID–19 pandemic and relief supplies such as greenhouses following Hurricane Dorian. Since at least 2013, Chinese entities and intermediaries have supplied Mexican transnational criminal organizations (TCOs) with precursors and equipment for the production of synthetic opioids and methamphetamine, and facilitated illicit exports of Mexican iron ore, timber, and other commodities and raw materials. In addition, Chinese entities have assisted Mexican TCOs in laundering the revenues and profits generated from the drug trade and other illicit activities. These activities ultimately bolster the financial and operational bases of the TCOs, contributing to the threat they pose to Mexico's internal security as well as enabling flows of synthetic drugs into the United States.

Although Russia's focus continues to be on its war against Ukraine, Russian long-range aviation remains capable of executing high-priority missions and is routinely used to demonstrate Russia's capabilities and global reach, including through Air Defense Identification Zone incursions off the Alaskan and Canadian coasts with their heavy bombers.

50. Senator COTTON. General VanHerck, what do we need to do in order to adequately deter Russia and China in your Area of Responsibilities?

General VANHERCK. In The Bahamas, the PRC continues its aggressive economic and political engagement. The PRC Ambassador remains active in an effort to present the PRC as the alternative to United States partnership in the region, and has renewed offers to provide economic assistance, to include renovating the Bahamas' largest stadium. The PRC also donated medical assistance during the COVID–19 pandemic and relief supplies such as greenhouses following Hurricane Dorian. Since at least 2013, Chinese entities and intermediaries have supplied Mexican transnational criminal organizations (TCOs) with precursors and equipment for the production of synthetic opioids and methamphetamine, and facilitated illicit exports of Mexican iron ore, timber, and other commodities and raw materials. In addition, Chinese entities have assisted Mexican TCOs in laundering the revenues and profits generated from the drug trade and other illicit activities. These activities ultimately

bolster the financial and operational bases of the TCOs, contributing to the threat they pose to Mexico's internal security as well as enabling flows of synthetic drugs into the United States.

Although Russia's focus continues to be on its war against Ukraine, Russian long-range aviation remains capable of executing high-priority missions and is routinely used to demonstrate Russia's capabilities and global reach, including through Air Defense Identification Zone incursions off the Alaskan and Canadian coasts with their heavy bombers.

SOUTHERN BORDER

51. Senator COTTON. General VanHerck, 2 weeks ago, United States Border Patrol Chief Raul said that we do not have "operational control" of the southern border. Do you agree with that assessment?

General VANHERCK. U.S. Northern Command is in a supporting role to the Department of Homeland Security's (DHS's) Southwest Border (SWB) mission and is neither in a position nor tasked to assess DHS's SWB operations.

52. Senator COTTON. General VanHerck, if you do agree, what actions need to be taken to regain operational control?

General VANHERCK. Please see previous response to question #51.

53. Senator COTTON. General VanHerck, what role does Joint Task Force North play in regaining operational control?

General VANHERCK. Joint Task Force North's primary mission is support to the interagency in the counter TCO and counter narcotic missions. For the ongoing Southwest Border support to DHS, Joint Task Force North (JTF-N) commands and controls Department of Defense forces supporting the Department of Homeland Security (DHS), as directed in the Secretary of Defense's Southwest Border Action Memos. JTF-N is executing its mission within the authorities of the Chairman, Joint Chiefs of Staff's Defense Support of Civil Authorities Execute Order.

54. Senator COTTON. General VanHerck, what do you believe the proper role of the U.S. military is in securing the border in concert with Department of Homeland Security?

General VANHERCK. I believe that securing the U.S. border and enforcing immigration laws are inherently law enforcement functions. I believe it is lawful and appropriate for the Department of Defense to contribute secondary support to a lead Federal law enforcement agency at the request of the Department of Homeland Security and as approved by the Secretary of Defense. As I have previously testified, Department of Defense support to DHS at the Southwest Border should only occur in extremis situations and should not be an enduring Department of Defense mission.

55. Senator COTTON. General VanHerck, are there areas of coordination that need to be improved between the U.S. military and Department of Homeland Security?

General VANHERCK. DOD and DHS have a long-established collaborative and coordinated working relationship; however, it is important to note that USNORTHCOM does not directly coordinate with DHS. Instead, OSD coordinates with DHS, and then, OSD provides guidance to USNORTHCOM through the Joint Staff. With that, USNORTHCOM will continue to support direction from military leadership by providing military capabilities in support of properly vetted DHS Requests for Assistance (RFAs) in response to natural or manmade disasters and/or countering criminal organizations. As with most relationships, coordination and communication can always be improved. Receiving DHS RFAs as early in the decisionmaking process as possible allows DOD to better respond to and process those requests. USNORTHCOM is poised to support improved and streamlined coordination efforts with respect to future DHS RFAs to assure unit sourcing is identified in a timely manner and the needs of the Nation are met.

56. Senator COTTON. General VanHerck, does the Mexican military have more combat power than cartels?

General VANHERCK. Yes. Mexican military maneuver elements have a decided advantage over cartels in terms of firepower, tactical proficiency, organizational cohesion and discipline, leadership, mobility support, and sustainment. Mexican light attack aircraft can provide close air support for engaged ground forces, and firefights between cartel gunmen and military elements typically end with cartels being the first to disengage and break contact, often after suffering disproportionate casual-

ties. The Mexican military has openly acknowledged that it is facing challenges to receiving maintenance on its Russian-made helicopters due to the war in Ukraine. I believe the Mexican military would increase its advantage over the cartels if equipped with reliable helicopters. A more streamlined interagency process for approving Foreign Military Sales to our partners would also benefit the Mexican armed forces and help to reinforce the United States' position as the partner of choice. With that said, I remain concerned by TCOs' increasing emphasis on fielding military-grade arms and explosives, and their aggression against Mexican security forces.

THREATS TO THE HOMELAND

57. Senator COTTON. General VanHerck, General Kurilla said 2 weeks ago it was his Commander's estimate that ISIS-K could conduct an external operation against United States or Western interests abroad in under 6 months, with little to no warning. Do you judge the southern border to be a possible vector of attack for foreign terrorists?

General VANHERCK. Yes, it is certainly possible that the southern border, and any border for that matter, could be used as an attack vector. With that said, although it is accurate to judge the southern border as being potentially vulnerable to foreign terrorists moving into the United States, USNORTHCOM has no information of plans to do so. Instead, foreign terrorist groups prefer individuals who have no known association with a terrorist organization or have no record who can use safer, cheaper, legal, and more direct methods, such as flying, to enter the United States.

58. Senator COTTON. General VanHerck, does ISIS still assess the southern border to be an opportunity to smuggle their operatives into the United States commit terrorist attacks?

General VANHERCK. Although it's possible that ISIS, or any entity that desires to inflict harm to the United States could use any border to gain access, there is no evidence to suggest ISIS is interested in or has sent operatives to exploit the United States southern border to enter the United States to conduct attacks. Even during the group's high-water mark in 2015, ISIS was unable to conduct a directed attack in the United States. Instead, ISIS relied on Homegrown Violent Extremists to conduct attacks on the group's behalf. With substantial CT setbacks over the last several years, the group likely will continue to rely on HVEs to target the Homeland.

59. Senator COTTON. General VanHerck, do you agree that Iran remains intent on conducting attacks on the United States Nation's capital?

General VANHERCK. Yes, I agree with that assessment. Iran remains intent on directing attacks within the United States and is not limiting its efforts to Washington DC. During the past year, Iran has targeted Iranian nationals living in the United States that Tehran views as critical of and a threat to the Iranian regime. Iran has also stated a clear intent to seek revenge for the death of former Quds Force Commander, Qasseim Soleimani, and has sanctioned plots against United States Government officials that Iran views complicit in Soleimani's death. This includes a failed murder-for-hire plot against a former U.S. National Security Advisor.

RUSSIAN INTELLIGENCE

60. Senator COTTON. General VanHerck, last year, you warned the Armed Services Committee that Russian military intelligence had more officers deployed to Mexico than any other country in the world. Is that still your assessment?

General VANHERCK. Yes. While I appreciate the Mexican Government's attention to this matter, I have seen nothing to change my assessment regarding the concerning number of Russian military intelligence officers deployed to Mexico.

61. Senator COTTON. General VanHerck, what aspects of Russian activity most concern you?

General VANHERCK. I am most concerned by Russia's ability to hold the homeland at risk with nuclear, conventional, and non-kinetic weapons. I am also concerned by the potential for a regional crisis, such as what we are seeing in Ukraine, to escalate into wider conflict that directly impacts the homeland and/or the territories of our allies and partners. As we are witnessing in Ukraine, advanced long-range Russian cruise missiles are highly precise and difficult to detect and track. They can be fired from long-range bombers, submarines, surface vessels, or road-mobile launchers and can reach targets in the United States and Canada from well outside

our territory. Some of those missiles could be used to strike targets in North America with conventional or nuclear warheads. Limited warning times and uncertainty about what type of payload a missile is carrying increases the risk of miscalculation, potentially limiting our options.

62. Senator COTTON. General VanHerck, according to Department of Homeland Security data, Customs and Border Protection encounter more than 100 Russians attempting to illegally enter the United States every month near just a single location on the United States-Mexico border. Do you know how many have had ties to Vladimir Putin's government?

General VANHERCK. I'll defer to DHS for the totals, by country, of foreign nationals entering the United States and if any have ties to the Russian Government. I am aware of the ongoing efforts by United States law enforcement agencies to uncover actors with nefarious intentions at our border crossings, including any Russians.

63. Senator COTTON. General VanHerck, how are you working with Department of Homeland Security to secure this threat?

General VANHERCK. DHS and FBI have the primary responsibility to assess, characterize, and respond to activity by irregular migrants with possibly malign affiliations or intent. USNORTHCOM coordinates regularly with the Intelligence Community, FBI, DHS on border security issues, and I have DHS and FBI representatives permanently assigned to my headquarters to keep the command apprised of potential threats from foreign terrorists or foreign intelligence operatives.

QUESTIONS SUBMITTED BY SENATOR MICHAEL ROUNDS

CHINA'S ROLE IN DRUG TRAFFICKING ON SOUTHERN BORDER

64. Senator ROUNDS. General VanHerck, is Joint Taskforce North (JTF-NORTH) tracking China's involvement with the drug manufacturing that happens in Mexico, specifically fentanyl?

General VANHERCK. Yes, USNORTHCOM and JTF-North are aware that Chinese expatriates and China-based companies are part of the supply chain that provides chemicals used to manufacture synthetic drugs, including fentanyl, in Mexico. Chinese chemical companies are the primary producers of chemicals used to make illicit fentanyl.

65. Senator ROUNDS. General VanHerck, if they are, can you explain to me what the Chinese role in the process is? Are they simply shipping the component chemicals over from Asia or are they an integral piece in the development, trafficking and selling of illicit drugs in America?

General VANHERCK. Chinese nationals and companies are producers and brokers of chemicals used in the production of synthetic drugs. Chinese chemical companies are the primary producers of chemicals used to make illicit fentanyl and methamphetamine. Aside from a small number of direct precursor chemicals, the chemicals used to make illicit drugs tend to be unregulated and uncontrolled by China, so their production and sale is generally legal in China. Brokers facilitate the sale and shipment of the chemicals to buyers in Mexico. Some of these transactions are for illicit purposes from their outset, while others are for precursor chemicals that do have legitimate, dual-use applications, but which are subsequently diverted to illicit use. Accordingly, the role—and complicity—of the Chinese producers and brokers in the synthetic drug supply chain varies.

TRANSNATIONAL CRIMINAL ORGANIZATIONS

66. Senator ROUNDS. General VanHerck and General Richardson, do you believe that having Department of Defense involved in the United States' approach to countering transnational criminal organizations results in inter-agency information sharing that would not occur if Department of Defense was not involved?

General VANHERCK. Yes, but only marginally. The Department of Defense, through USNORTHCOM and Joint Task Force North, does facilitate information sharing as a by-product of the support we provide to various U.S. and foreign partners. However, we are limited in what the Department of Defense can affect, due to the lack of a lead Federal agency that is empowered to coordinate a whole-of-government strategy for countering transnational criminal organizations. As I am previously testified, I do not see the TCO mission and the mission on the Southwest Border as enduring DOD missions. We need a whole-of-government strategy with

a designated lead Federal agency fully resourced to execute this mission. DOD resources should only be utilized in extremis.

General RICHARDSON. Yes. There are currently 18 Interagency representatives from nine different agencies and departments assigned full time to USSOUTHCOM Headquarters to enable effective interagency integration into operations and planning to counter transnational criminal organizations. USSOUTHCOM has a robust law enforcement presence and a Law Enforcement Working Group (LEWG) focused primarily on the counter-TCO mission set. The LEWG brings law enforcement agents and intelligence officers together with key members of the Staff and Components to discuss law enforcement issues, align targeting, provide information sharing, and refine Concepts of Operation.

DOD supports C-TCO interagency efforts through a variety of technical and procedural means and ways. Interagency partners share information with DOD to help the Department leverage its resources under Title 10 to support law enforcement and foreign partners combat transnational criminal organizations. In the case of Joint Interagency Task Force-South (JIATF-S), the information shared by the interagency feeds a "cycle of success," enabling JIATF-S to fuse information and cue partners to interdict drug trafficking and gather evidence used to further illuminate and prosecute criminal activity and the criminal networks behind them. The DOD is uniquely postured to help facilitate collaboration, integration and synchronization across the USG.

67. Senator ROUNDS. General VanHerck and General Richardson, is there any increase in authority that may assist the Department in furthering the goal of countering Transnational Criminal Organizations?

General VANHERCK. No. I have the appropriate authorities to perform my assigned support missions. Transnational Criminal Organizations are a global security problem, and the Department of Defense is not the lead for countering them. I believe designating and empowering a lead Federal agency to get after this problem would provide greater benefits than increasing the Department of Defense role.

General RICHARDSON. USSOUTHCOM is currently reviewing our existing authorities as part of the development of the fiscal year 25 Legislative proposals process. As we look specifically at our ability to counter TCOs, we will keep the Congress apprised of any additional authorities we believe would be helpful in this mission.

JTF-NORTH'S MISSION IN COUNTERING TRANSNATIONAL CRIMINAL ORGANIZATIONS

68. Senator ROUNDS. General VanHerck, it's my understanding that JTF-NORTH's ultimate mission is to set up its mission partners to counter Transnational Criminal Organizations without Department of Defense support. Do you think this goal is achievable? Or do you expect Department of Defense to be a necessary component in this task indefinitely?

General VANHERCK. The goal itself is appropriate given Defense Department priorities and authorities, but I consider it aspirational in light of how the Federal Government counters TCOs. We simply cannot interdict our way out of this situation. We need a strategy that goes after the networks, rather than focusing on specific commodities. With a designated, resourced, and empowered lead Federal agency, and in a truly whole-of-government approach, we could begin to see progress. But, until a lead Federal agency is identified and properly resourced, I believe we will continue to see only marginal, superficial success.

MEXICAN CARTELS

69. Senator ROUNDS. General VanHerck, what happens if the Mexican cartels are designated as foreign terrorist organizations? How would that designation affect Department of Defense?

General VANHERCK. With specific regard to the U.S. Northern Command operations, I assess that designating the Mexican drug cartels as Foreign Terrorist Organizations would be of negligible benefit, if any, to those activities we conduct in support of our interagency partners. I defer to the Department of Defense for assessments of Department-wide effects.

UNITED STATES-MEXICO MILITARY-TO-MILITARY RELATIONS

70. Senator ROUNDS. General VanHerck, what does the mil-to-mil situation look like with our Mexican counterparts?

General VANHERCK. The military-to-military relationship between USNORTHCOM and our Mexican military partners is exceptionally strong and getting stronger. We have progressed beyond the traditional transactional relationship into one of a true and resilient partnership. USNORTHCOM remains attuned to

Mexican sensitivities and understands that we must go at the speed and pace of our partners as they continue to take on more leadership in the region.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

MISSILE DEFENSE

71. Senator ERNST. General VanHerck, what is the risk to homeland defense of persistent Russian or Chinese cruise missile submarines off our coasts?

General VANHERCK. The risk is decreased decision space for our Nation's leaders, which erodes strategic stability and increases the risk of an attack on our homeland and the potential for strategic deterrence failure. It also potentially limits timely power projection from the homeland to a forward fight. Russia's strategy, and likely the PRC's in the future, is to delay and disrupt forces flowing from the homeland and to destroy the will of the American people in order to terminate a forward crisis on terms favorable to their goals.

72. Senator ERNST. General VanHerck, are there capability gaps in current missile defenses against this threat?

General VANHERCK. Yes, gaps and limitations in present day surveillance and response options greatly limit NORAD and USNORTHCOM's ability to detect, track, ID, and engage cruise missile threats to the Homelands.

73. Senator ERNST. General VanHerck, what is the risk to homeland defense from containerized missiles? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General VANHERCK. Containerized missiles systems can conceal cruise missiles enroute to a launch location, decrease indications and warning, and make it difficult to detect and defeat a missile threat. Russia currently produces the Club-K containerized missile system, which provides a long-range precision strike capability against land, sea, and air targets and includes four ground or sea-launched cruise missiles concealed by a standard 40-foot shipping container. One of the missiles available for the system is a special anti-ship variant that accelerates to supersonic speeds of up to Mach 3, generating a catastrophic kinetic effect on a target vessel.

The PRC is reportedly building a long-range cruise missile that could be fired from shipping containers. This development likely would be similar to the Russia Club-K type missile system and disguised as a commercial shipping container. This new weapon could help the PRC turn its fleet of freighters into potential warships and commercial ports into potential missile bases. This development would make distinguishing civilian maritime traffic from military vessels more difficult and could limit the ability to warn of an attack against North America.

74. Senator ERNST. General VanHerck, what is the risk to homeland defense from cruise missiles generated by platforms other than submarines? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General VANHERCK. In the maritime domain, Russia's development and fielding of cruise missile capable surface combatants and deployment outside of Russian territorial waters will increase the risk to homeland defense as the Russian naval order of battle expands. Most of Russia's new surface combatants are capable of carrying the KALIBR cruise missile, and the Club-K containerized missile system is the export version of the KALIBR. Russian heavy bombers already have the capability to launch cruise missiles against targets in North America without entering NORAD radar coverage. Russia's long-range aviation command continues modernization efforts intended to improve the capabilities of its bombers to ensure their continued viability. This includes upgrades to propulsion, avionics, and weapons, enabling LRA to strike deeper into North America. LRA's heavy bombers continue to be a flexible tool for Russia to perform strategic messaging and conventional precision strikes, as well as providing Moscow with a nuclear option. Russian heavy bombers frequently conduct Air Defense Identification Zone incursions off the coasts of Alaska and western Canada and have the capability to conduct cruise missile strikes against North America with little to no warning.

The People's Liberation Army (PLA) Navy has expanded its force of large surface combatants by building *Renhai*-class guided missile cruisers and the *Luyang III*-class guided missile destroyers. The *Renhai* cruiser is equipped with a 112 cell vertical launch system (VLS) and the LUYANG III has a 64 cell VLS. Once operational, these systems will be capable of carrying a variety of weapons including

anti-ship cruise missiles, and likely land-attack cruise missiles (LACM) and anti-ship ballistic missiles. As the PLA Navy continues to transition into a global multi-mission force, the addition of land attack capabilities to its modern array of anti-surface and anti-air capabilities is a logical next step. In the coming years, the PLA Navy will probably field LACMs on its newer cruisers and destroyers and developmental *Shang III*-class SSGNs. The addition of land attack capabilities to the PLA Navy's surface combatants and submarines would provide the PLA with flexible long-range strike options and allow the PRC to hold land targets within North America at risk.

75. Senator ERNST. General VanHerck, what is the risk to homeland defense from threats posed by long-range bombers like the H–20? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General VANHERCK. The H–20 will indeed pose an enhanced risk to the homeland, especially compared to the legacy long-range bombers that the PRC currently fields. The H–20 is expected to operate at or beyond the range of the PRC's current bomber fleet. The aircraft's extended range, combined with long-range weapons will provide a new capability for the PRC. The low-observable nature of the H–20 will present additional challenges regarding the ability to detect the aircraft and provide warning. However, while the H–20 poses an enhanced threat compared to its predecessors, the PRC's arsenal of currently fielded ICBMs continue to pose the biggest threat to the Homeland and will remain the largest portion of its nuclear triad for at least the next decade.

AERIAL THREATS

76. Senator ERNST. General VanHerck, what is the risk to homeland defense from ubiquitous armed balloons?

General VANHERCK. NORAD and USNORTHCOM are not aware of an armed balloon threat to the Homeland.

77. Senator ERNST. General VanHerck, what active and passive measures can we adopt to reduce vulnerability ubiquitous armed balloons?

General VANHERCK. NORAD and USNORTHCOM are not aware of an armed balloon threat to the homeland. However, increased domain awareness, improved information sharing, and global integration between commands will all reduce vulnerability to potential airborne threats.

78. Senator ERNST. General VanHerck, has NORTHCOM's guidance for defeating potential aerial threats changed since the four incidents earlier this year? If so, in what ways? If not, why not?

General VANHERCK. No, NORAD guidance for defeating potential aerial threats has not changed. Our Rules of Engagement have not been modified for these types of events, and we continue to execute our missions in accordance with that NORAD ROE.

DOMAIN AWARENESS

79. Senator ERNST. General VanHerck, what is the gap in NORTHCOM capabilities to detect and analyze cruise missile threats? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General VANHERCK. Although NORAD's current line-of-sight surveillance architecture is capable of addressing certain legacy threats, it is inadequate for modern threats to include cruise missiles and hypersonic weapons. The Department must secure multi-domain, layered, integrated, passive and active sensor capabilities to enable timely warning, detection, identification and persistent tracking of low attitude multi-axis cruise missile attacks.

80. Senator ERNST. General VanHerck, what is the gap in NORTHCOM capabilities to detect and analyze threats in the cyber domain? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General VANHERCK. USNORTHCOM requires increased domain awareness in all domains, to include the cyber domain, to effectively conduct operations and maintain domain awareness for prioritized defense critical infrastructure (DCI). The cyber threat remains a significant concern as competitors continue to expand their

capacity to exploit and exfiltrate data and deny services, and to disrupt critical infrastructure, commercial services, and military operations. USNORTHCOM is working with USCYBERCOM, the military Services, and the Cybersecurity and Infrastructure Security Agency to improve domain awareness and information sharing to better protect DCI in the cyber domain.

CHINESE AND RUSSIAN THREATS

81. Senator ERNST. General Richardson, what are the national security implications of 11 China-linked space facilities in your Area of Responsibilities?

General RICHARDSON. The presence of China-linked space facilities in Latin America and the Caribbean enhances Beijing's ability to track our space assets as well as their own and to collect on the United States. The PRC's access to space sites is critical to its efforts to become a leading space power. Beijing may use these sites to spy on United States facilities and attempt to intercept communications. China's ground stations in South America provide coverage of the skies over the Western Hemisphere and many of the China-linked space facilities are located along the same longitudinal sector as the United States Eastern seaboard, Washington, and most of the U.S. military's telecommunications and reconnaissance satellites that service the area while in geosynchronous orbit. These facilities make up one segment of a global network of ground stations that maintain communications with satellites as they pass over different geographic regions along their orbit.

82. Senator ERNST. General Richardson, what has SOUTHCOM done to mitigate surveillance capabilities related to the 11 China-linked space facilities in your Area of Responsibilities?

General RICHARDSON. USSOUTHCOM is actively engaging with our partners in the AOR to develop a shared commitment to utilize space in a manner that is in keeping with the international norms of behavior for peaceful use in virtually every dimension of our bilateral and multilateral relationships.? Working with partners across the U.S. interagency, we continue to engage our foreign partners to help them to understand the nature of MSA utilization of their space facilities. Few have a desire for their country to be used as a platform for military capabilities.

Additionally, USSOUTHCOM, in conjunction with USSPACECOM, has partnered to establish common objectives to closely monitor and, when appropriate, address the PRC's space capabilities and influence in the AOR. This is done through collaborative partner nation engagements to promote Space Domain Awareness aligned with U.S. interests.

83. Senator ERNST. General Richardson, how is SOUTHCOM preventing installation of additional People's Republic of China-linked space facilities?

General RICHARDSON. The PRC consistently works to expand its network of military space infrastructure across the USSOUTHCOM AOR. USSOUTHCOM continues to strengthen relationships with our allies and partners by positioning ourselves as a partner of choice through subject matter expert exchanges (SMEE) and capability building with partner nations throughout the AOR. As USSOUTHCOM builds out our common operation picture while mapping current and potential MSA space facilities, we provide guidance and requested assistance to partner nations while illuminating nefarious actions performed by MSAs. Additionally, we continue to expose predatory and failed MSA influenced contracts which create unfavorable conditions for partner nations.

In a truly integrated deterrence approach, we coordinate with the Department of Commerce on critical advocacy cases to deny unchallenged penetration to the MSA State Owned Enterprises. We also collaborate with their Commercial Law Development Program, highlighting opportunities to advise and assist partner nations in developing robust legal frameworks to secure their critical telecommunication infrastructure. This effort is coordinated with the Department of State and is further guided by NSC prioritization to ensure synergy.

84. Senator ERNST. General Richardson, does the United States have capabilities to hold at risk potential Chinese or Russian military targets located in your Area of Responsbilities? If so, what capabilities? If not, what are the capability gaps?

General RICHARDSON. While USSOUTHCOM has no assigned forces and limited capabilities to hold targets at risk, the United States does have those capabilities and there are mechanisms in place by which USSOUTHCOM could request additional capabilities, if required.

85. Senator ERNST. General Richardson, does the United States have capabilities to hold at risk valued military targets of states in your Area of Responsibilities that host Chinese or Russian military or dual-use capabilities? If so, what capabilities? If not, what are the capability gaps

General RICHARDSON. While USSOUTHCOM has no assigned forces and limited capabilities to hold at risk valued military targets of states in this AOR that host Chinese or Russian military or dual-use capabilities, the United States does have those capabilities. Also, there are mechanisms in place by which USSOUTHCOM could request additional capabilities, if required.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

CHINESE BALLOON OVER COLOMBIA

86. Senator SULLIVAN. General Richardson, while many are tracking the Chinese Spy Balloon incursion over my State in January 2023, most may have forgotten the Colombian military reportedly sighted a similar balloon over their country in the same timeframe. United States military officials have confirmed a Chinese balloon was spotted over Latin America but have never specified exactly where. The existence of Chinese balloons in both our NORTHCOM and SOUTHCOM AORs are to me a startling message from China. What have you learned from the Colombians on the Chinese Balloon that flew over their country?

General RICHARDSON. Colombia was aware the Chinese balloon flew through its airspace at a high altitude and sent a report through established channels with information about the balloon. The object was detected at an altitude of 55,000 feet, moving into the airspace to the north at an average of 25 knots, or 29 miles per hour. The object was monitored until it left the airspace. The government did not see the balloon as a threat to the civilian population and had no additional information to share about the balloon.

87. Senator SULLIVAN. Since the previously mentioned incident, what changes have you made in your tracking capability to monitor future activity?

General RICHARDSON. This incident demonstrated that we need to be more aware of this type of surveillance threat within the USSOUTHCOM AOR. We have learned that we need to be actively monitoring and sharing potential tracks and threat assessments with NORAD/NORTHCOM, other COCOMs, and the Joint Staff, as well as our regional partners that may be in its flight path. In doing so, the USSOUTHCOM Joint Operations Center (JOC) has increased its coordination and communication with NORAD/NORTHCOM and the Joint Staff with monitoring and tracking these occurrences. The JOC has also added these events to its reporting requirements to the USSOUTHCOM Commander and senior staff to provide consistent and continuous updates for analysis and decisionmaking.

COUNTERINTELLIGENCE THREATS IN SOUTCOM

88. Senator SULLIVAN. General Richardson, can you please speak to how you mitigate China and Russia from collecting on our Tactics, Techniques, and Procedures during trainings in which our forces train SOUTCOM-based military's who also receive instruction from China and Russia?

General RICHARDSON. Training is done at the level of disclosure permitted by classification guidance. Additionally, the Command utilizes Foreign Disclosure Officers to review training material prior to its release to partners. All host nation forces that we partner with are vetted through the Leahy vetting process. United States forces receive operational security training prior to entering the theater in order to protect critical and sensitive information as well as receive force protection briefs from United States Embassy Regional Security Officers and Senior Defense Officials once in theater. Sensitive TTPs are closely safeguarded and those with whom we share those in training and advisory capacities are closely vetted.

RUSSIAN PRESENCE IN THE ARCTIC

89. Senator SULLIVAN. General VanHerck can you please speak to how Russian demands for experienced troops and its primary focus in Ukraine has impacted their force disposition in the Arctic region?

General VANHERCK. Russia has drawn ground forces and equipment from its Arctic territories to support its conflict with Ukraine. Despite the requirements of the conflict, Russia continues to develop military infrastructure in the Arctic, as well as

field advanced military platforms. We judge Moscow will prioritize reconstituting its Arctic forces following the conclusion of its conflict with Ukraine.

INFRASTRUCTURE IMPROVEMENT IN ALASKA

90. Senator SULLIVAN. General VanHerck what specific infrastructure improvements in Alaska would most benefit NORTHCOM's mission to monitor and defend the Homeland?

General VANHERCK. Alaska plays a pivotal role in defending the Homeland as well as providing access to the United States European Command and United States Indo-Pacific Command AORs in support of multiple strategic plans. Though all Alaskan infrastructure is key, my primary concern is the infrastructure that meets these no-fail plans requirements. To that end, USNORTHCOM has funded a $2 million Area Development Plan (ADP) through the U.S. Army Corps of Engineers-Alaska District. This ADP will allow for a holistic analysis of requirements needed to support OPLANs and CONPLANs in conjunction with those to support the Indo-Pacific theater. I am awaiting the results of this ADP to identify any gaps and seams and identify our highest priority infrastructure. Other improvements that will facilitate Joint Force support of NORAD and USNORTHCOM mission requirements include alert, fuels, laboratory, and maintenance facilities at various Alaskan installations, as well as an operations facility at the Joint Pacific Alaska Range Complex (JPARC). I am working closely with the Services and the Department to prioritize investment in these improvements in the coming years.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MARCH 28, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

THE DEPARTMENT OF DEFENSE BUDGET REQUEST

The Committee met, pursuant to notice, at 9:30 a.m., in room G50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, Kaine, King, Warren, Peters, Manchin, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. I would like to call a hearing to order, and since we have a quorum, I would ask the Committee to consider Tuesday's nominations and a list of 27 pending military nominations.

First, I ask the Committee to consider the following civilian nominations. Mr. Ronald Keohane to be Assistant Secretary of Defense for Manpower and Reserve Affairs, and Hon. Nickolas H. Guertin to be the Assistant Secretary of the Navy for Research, Development and Acquisition. Is there a motion to favorably report these——

Senator WICKER. So, moved.

Chairman REED. Is there a second?

Voice: Second.

Chairman REED. in favor, say aye.

[Chorus of ayes.]

Chairman REED. Finally, I ask the Committee to consider a list of 27 pending military nominations. of these nominations have been before the Committee for the required length of time. Is there a motion to favorably report this list of 27 pending military nominations?

Senator WICKER. So, moved.

Chairman REED. Is there a second?

VOICE. Second.

Chairman REED. Thank you. All in favor, say aye.

[Chorus of ayes.]

[The list of nominations considered and approved by the Committee follows:]

MILITARY NOMINATIONS PENDING WITH THE SENATE ARMED SERVICES COMMITTEE WHICH ARE PROPOSED FOR THE COMMITTEE'S CONSIDERATION ON MARCH 23, 2023.

1. **In the Air Force there are 27 appointments to the grade of brigadier general (list begins with David J. Berkland)** (Reference No. 196)
2. **Col. Corey A. Simmons, USAF to be brigadier general** (Reference No. 198)
3. **RADM George M. Wikoff, USN to be vice admiral and Commander, US Naval Forces, Central Command/Commander, FIFTH Fleet and Commander, Combined Maritime Forces** (Reference No. 211)
4. **RADM Frederick W. Kacher, USN to be vice admiral and Commander, SEVENTH Fleet** (Reference No. 212)
5. **In the Army there are 101 appointments to the grade of major (list begins with Tolulope O. Akinsanya)** (Reference No. 238)
6. In the Marine Corps there is 1 appointment to the grade of lieutenant colonel (Jason W. Price) (Reference No. 257)
7. **In the Air Force Reserve there are 11 appointments to the grade of brigadier general (list begins with Sean M. Carpenter)** (Reference No. 290)
8. **In the Air Force Reserve there are 2 appointments to the grade of brigadier general (list begins with Kristin A. Hillery)** (Reference No. 291)
9. **In the Air Force Reserve there are 10 appointments to the grade of major general (list begins with Elizabeth E. Arledge)** (Reference No. 292)
10. **Col. Carlos M. Caceres, USAR to be brigadier general** (Reference No. 310)
11. **RADM Shoshana S. Chatfield, USN to be vice admiral and US Military Representative to the North Atlantic Treaty Organization Military Committee** (Reference No. 311)
12. **In the Air Force Reserve there is 1 appointment to the grade of colonel (Shane K. Doty)** (Reference No. 312)
13. In the Air Force Reserve there are 9 appointments to the grade of colonel (list begins with Speight H. Caroon) (Reference No. 313)
14. In the Air Force Reserve there is 1 appointment to the grade of colonel (Brandi Barnard King) (Reference No. 314)
15. In the Air Force Reserve there are 3 appointments to the grade of colonel (list begins with Daniel S. McPherson) (Reference No. 315)
16. In the Air Force Reserve there are 10 appointments to the grade of colonel (list begins with Matthew J. Andrade) (Reference No. 316)
17. In the Air Force Reserve there are 10 appointments to the grade of colonel (list begins with Adam James Cole) (Reference No. 317)
18. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Eric K. Wilke) (Reference No. 318)
19. In the Air Force Reserve there are 13 appointments to the grade of colonel (list begins with Kelli M. Bermudez) (Reference No. 319)
20. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Lisa Carol Giugliano) (Reference No. 320)
21. In the Air Force Reserve there are 7 appointments to the grade of colonel (list begins with Joseph Catalino, Jr.) (Reference No. 321)
22. In the Air Force Reserve there are 9 appointments to the grade of colonel (list begins with James M. Bershinsky) (Reference No. 322)
23. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Gary Monroe Boutz, Jr.) (Reference No. 323)
24. In the Air Force Reserve there is 1 appointment to the grade of colonel (John Charles Easley) (Reference No. 324)
25. In the Air Force Reserve there are 37 appointments to the grade of colonel (list begins with Robert M. Acosta) (Reference No. 325)
26. In the Air Force Reserve there are 2 appointments to the grade of colonel (list begins with Nicole Dyan David) (Reference No. 326)
27. In the Air Force Reserve there are 7 appointments to the grade of colonel (list begins with Karrie Megan Bem) (Reference No. 327)

28. In the Air Force Reserve there are 3 appointments to the grade of colonel (list begins with Douglas A. Collins) (Reference No. 328)
29. In the Air Force there is 1 appointment to the grade of major (Marquis A.T. Smith) (Reference No. 329)
30. In the Air Force Reserve there are 61 appointments to the grade of colonel (list begins with James S. Akers II) (Reference No. 330)
31. In the Air Force Reserve there are 31 appointments to the grade of colonel (list begins with David I. Amar) (Reference No. 331)
32. In the Army there is 1 appointment to the grade of colonel (Sashi A. Zickefoose) (Reference No. 332)
33. In the Army Reserve there is 1 appointment to the grade of colonel (Howard F. Stanley) (Reference No. 333)
34. In the Army there is 1 appointment to the grade of lieutenant colonel (Bobby J. Chun) (Reference No. 334)
35. In the Army there are 7 appointments to the grade of colonel (list begins with Joshua G. Glonek) (Reference No. 335)
36. In the Army there are 7 appointments to the grade of lieutenant colonel (list begins with Alex J. Duffy) (Reference No. 337)
37. In the Army there are 4 appointments to the grade of major (list begins with Liza B. Crawford) (Reference No. 338)
38. In the Army Reserve there are 2 appointments to the grade of colonel (list begins with Jeremy S. Stirm) (Reference No. 339)
39. In the Army Reserve there is 1 appointment to the grade of colonel (Renee R. Kiel) (Reference No. 340)
40. In the Army there are 2 appointments to the grade of lieutenant colonel (list begins with Melissa B. Riesterhartsell) (Reference No. 341)
41. In the Army there is 1 appointment to the grade of lieutenant colonel (Kimberly A. Dilger) (Reference No. 342)
42. In the Army there is 1 appointment to the grade of major (Abigail R. Osman) (Reference No. 343)
43. In the Army Reserve there is 1 appointment to the grade of colonel (Andrew J. Archuleta) (Reference No. 344)
44. In the Army Reserve there are 8 appointments to the grade of colonel (list begins with Christopher C. Cross) (Reference No. 345)
45. In the Army there are 37 appointments to the grade of major (list begins with Michael J. Baierlein) (Reference No. 346)
46. In the Army there are 575 appointments to the grade of major (list begins with Austin P. Abarr) (Reference No. 347)
47. In the Army there are 489 appointments to the grade of major (list begins with James H. Abney) (Reference No. 348)
48. In the Army there are 981 appointments to the grade of major (list begins with Mitchell A. Ables) (Reference No. 349)
49. In the Army Reserve there are 9 appointments to the grade of colonel (list begins with Peter B. East) (Reference No. 350)
50. In the Navy there is 1 appointment to the grade of lieutenant commander (list begins with William M. Schweitzer) (Reference No. 351)
51. In the Navy there is 1 appointment to the grade of captain (list begins with Louis V. Scott) (Reference No. 353)
52. **Col. William F. Wilkerson, USAR to be brigadier general** (Reference No. 359)
53. **Col. Evelyn E. Laptook, USAR to be brigadier general** (Reference No. 360)
54. **BG Ronald R. Ragin, USA to be major general** (Reference No. 361)
55. **In the Army there are 37 appointments to the grade of brigadier general (list begins with Brandon C. Anderson)** (Reference No. 362)
56. **In the Marine Corps there are 8 appointments to the grade of brigadier general (list begins with David R. Everly)** (Reference No. 363)
57. **In the Navy there are 2 appointments to the grade of rear admiral (lower half) (list begins with Walter D. Brafford)** (Reference No. 364)
58. **In the Navy there are 16 appointments to the grade of rear admiral (lower half) (list begins with Eric J. Anduze)** (Reference No. 365)
59. **In the Navy there are 2 appointments to the grade of rear admiral (lower half) (list begins with Brian J. Anderson)** (Reference No. 366)
60. **In the Navy there are 2 appointments to the grade of rear admiral (list begins with Casey J. Moton)** (Reference No. 367)
61. **RADM(lh) Rick Freedman, USN to be rear admiral** (Reference No. 368)
62. **RADM(lh) Kenneth W. Epps, USN to be rear admiral** (Reference No. 369) 3

63. **In the Navy there are 13 appointments to the grade of rear admiral (list begins with Stephen D. Barnett)** (Reference No. 370)
64. **Capt. Frank G. Schlereth III, USN to be rear admiral (lower half)** (Reference No. 371)
65. **In the Navy there are 2 appointments to the grade of rear admiral (lower half) (list begins with Joshua C. Himes)** (Reference No. 372)
66. **In the Navy there are 4 appointments to the grade of rear admiral (lower half) (list begins with Thomas J. Dickinson)** (Reference No. 373)
67. **In the Air Force there are 2 appointments to the grade of major general (list begins with Thomas W. Harrell)** (Reference No. 379)
68. In the Air Force there is 1 appointment to the grade of colonel (Maximilian S. Lee) (Reference No. 380)
69. In the Navy there is 1 appointment to the grade of lieutenant commander (Justin J. Reeb) (Reference No. 381)
70. **LTG James W. Bierman, Jr., USMC to be lieutenant general and Deputy Commandant for Plans, Policies, and Operations, Headquarters, US Marine Corps** (Reference No. 389)
71. In the Army there is 1 appointment to the grade of colonel (Matthew J. Clementz) (Reference No. 397)
72. In the Army there is 1 appointment to the grade of major (Samuel T. Kramer) (Reference No. 398)
73. In the Army there is 1 appointment to the grade of colonel (Carla A. Kiernan) (Reference No. 399)
74. In the Army there is 1 appointment to the grade of colonel (John W. Brock II) (Reference No. 400)
75. In the Army there is 1 appointment to the grade of colonel (John D. Horton) (Reference No. 404)
76. In the Army Reserve there is 1 appointment to the grade of colonel (Joel N. Buffardi) (Reference No. 405)
77. In the Army there is 1 appointment to the grade of colonel (Sarah D. Eccleston) (Reference No. 406)
78. In the Army there is 1 appointment to the grade of major (Nicholas P. Fiebke) (Reference No. 407)
79. In the Army there is 1 appointment to the grade of major (Andrew J. Doyle) (Reference No. 408)
80. In the Army there is 1 appointment to the grade of major (William T. Griggs) (Reference No. 409)
81. In the Army there is 1 appointment to the grade of major (Megan L. Maloy) (Reference No. 410)
82. In the Army there is 1 appointment to the grade of major (Kaitlyn M. Hernandez) (Reference No. 411)
83. In the Army Reserve there are 15 appointment to the grade of colonel (list begins with Timothy I. Arcelay) (Reference No. 412)
84. In the Army there is 1 appointment to the grade of major (Sara C. Adams) (Reference No. 413)
85. In the Army there is 1 appointment to the grade of major (Christina G. Nalley) (Reference No. 414)
86. In the Army Reserve there are 7 appointments to the grade of colonel (Andrew Adamczyk) (Reference No. 415)
87. In the Army there is 1 appointment to the grade of colonel (Ashley S. Lee) (Reference No. 416)
88. In the Army there is 1 appointment to the grade of major (Timothy W. Lindeman) (Reference No. 417)
89. In the Army there is 1 appointment to the grade of major (Ebony Q. Star) (Reference No. 418)
90. In the Army there is 1 appointment to the grade of major (Sarah A. Delarosa) (Reference No. 419)
91. In the Army there is 1 appointment to the grade of major (Mark T. Sopkiw, Jr.) (Reference No. 420)
92. In the Army there is 1 appointment to the grade of major (Justin T. Thomas) (Reference No. 421)
93. In the Army there is 1 appointment to the grade of major (Rei T. Israel) (Reference No. 422)
94. In the Army there is 1 appointment to the grade of major (Adam L. Fox) (Reference No. 423)
95. In the Army there is 1 appointment to the grade of major (Jason L. Workman) (Reference No. 424)

96. In the Army there is 1 appointment to the grade of major (Stephen J. Cumby) (Reference No. 425)
97. In the Army there is 1 appointment to the grade of major (Stephen M. Anderson) (Reference No. 426)
98. In the Navy Reserve there is 1 appointment to the grade of captain (Elisabeth Crumpler) (Reference No. 427)
99. In the Navy there are 27 appointments to the grade of captain (list begins with Kyle A. Aduskevich) (Reference No. 428)
100. In the Navy there are 9 appointments to the grade of commander (list begins with Bramwell B. Arnold III) (Reference No. 429)
101. In the Navy there are 34 appointments to the grade of lieutenant commander (list begins with Jeffrey R. Biermann) (Reference No. 430)
102. In the Navy there is 1 appointment to the grade of lieutenant commander (James H. Knight) (Reference No. 431)
103. In the Space Force there are 9 appointments to the grade of major (list begins with Ross M. Boston) (Reference No. 432)
104. In the Space Force there are 38 appointments to the grade of colonel (list begins with Jason M. Adams) (Reference No. 433)
105. In the Space Force there are 68 appointments to the grade of lieutenant colonel (list begins with Christopher John Alban) (Reference No. 434)
106. In the Space Force there are 58 appointments to the grade of lieutenant colonel (list begins with Bridget L. Ajinga) (Reference No. 435)
107. In the Space Force there are 76 appointments to the grade of major (list begins with John W. Anderson) (Reference No. 436)
108. In the Space Force there are 100 appointments to the grade of major (list begins with Christina M. Akers) (Reference No. 437)
109. In the Space Force there are 2 appointments to the grade of lieutenant colonel (list begins with Cassandra R. Hidalgo) (Reference No. 438)
110. In the Space Force there is 1 appointment to the grade of colonel (Edward E. Jones) (Reference No. 439)

TOTAL: 3,059

Chairman REED. The ayes have it. Thank you very much. Welcome, Secretary Austin, General Milley, and Secretary McCord. Before I get into my statement, I want to take a moment to recognize the tragic disasters that struck Mississippi and Alabama this weekend.

Our hearts are certainly with the people of Mississippi and Alabama after tornadoes caused terrible loss of life and intense damage, and I know Senator Wicker, Senator Tuberville are doing everything they can to help their States, and we are thinking about the families and loved ones who were suffering.

Senator WICKER. Thank you very much.

Chairman REED. Good morning. The Committee meets today to receive testimony on the President's Budget Request for the Department of Defense (DOD) for fiscal year 2024. Witnesses this morning are Secretary of Defense Lloyd Austin, Under Secretary of Defense Controller Michael McCord, and Chairman of the Joint Chiefs of Staff, General Mark Milley.

Thank you for appearing before us today and please extend the Committee's thanks to the servicemembers and Defense civilians in the Department. I would like to take a moment to recognize that this will be General Milley's final posture hearing before his retirement later this year. General, you have served this Nation for 43 years with honor, skill, and steadfast leadership, and we are deeply grateful.

We thank your family for their support throughout your service, and we congratulate you on a very well-deserved retirement. Thank you, sir. Earlier this month, President Biden released his fiscal year 2024 budget request for the Department of Defense with a top

line of $842 billion. As the President's Budget recognizes and as his national defense strategy makes clear, China is our primary competitor.

The PRC [People's Republic of China] is the only nation with both the intent and the capability to challenge the security and economic interests of the United States and our allies and partners. At the same time, Russia remains a violent, destabilizing force. Putin's assault on Ukraine is inflicting horrific suffering on innocent civilians, threatening European stability, and harming the global economy.

However, if Putin thought his war would drive a wedge between NATO members and the international community, he was badly mistaken. The international community has united in a way not seen in decades, and our potential adversaries around the world are taking note.

The Biden administration and the witnesses before us today deserve great credit for leading this effort. In addition to the threats posed by Russia and China, nations like Iran and North Korea continue to push the boundaries of military brinksmanship and issues like terrorism and climate change remain persistent.

Prevailing in this environment will require thoughtful strategies and a budget that is structured to meet the challenges we face. During today's hearing, I would ask our witnesses to update us on the strategic planning documents published over the past year, including the National Defense Strategy, National Military Strategy, Nuclear Posture Review, and Missile Defense Review, and how the 2024 budget will execute this strategies.

An essential element for the United States long-term strategic competition will be our ability to build a joint capabilities of our Armed Forces across all domains, including space, cyber, and information operations. As the Defense Department's recently released Joint Concept for Competing makes clear, the object of our Nation's adversaries is to win without a fight.

The concept warns that if we do not adapt to the realities of long-term competition, "the United States risks ceding strategic influence, advantage, and leverage while preparing for war that never comes." I am interested to hear from our witnesses how this budget supports joint capabilities to ensure our military remains the world's premier fighting force.

To that end, I am encouraged that the budget includes the largest ever request for research, development, testing, and evaluation, a total of $145 billion. The budget would provide significant funding for modernization areas such as microelectronics, artificial intelligence (AI), hypersonics, and 5G, technologies that will be critical for our national defense.

Our strategy toward China and Russia should not be solely defined in dollars by how much, but rather where and why we are investing to achieve the greatest comparative advantage. Keeping our competition with China front and center, this budget request includes $9.1 billion for priorities covered by the Pacific Deterrence Initiative, or PDI.

I am encouraged by the progress we have made through PDI thus far, and this Committee will continue working to help improve the design and posture of the Joint Force in the Indo-Pacific region.

This should include strengthening logistics, modernizing infrastructure, conducting exercises, and training and building the capabilities of our allies and partners. Indeed, our approach to the Indo-Pacific should be informed in part by lessons drawn from the European Defense and Deterrence Initiative, or EDI, which has played a decisive role in strengthening Ukraine for the last 9 years.

The Department's 2024 budget request wisely includes $3.4 billion for EDI related investments and $300 million for the Ukraine Security Assistance Initiative. I am also pleased to see that this budget request prioritizes taking care of our men and women in uniform and the civilians who serve alongside them by providing an across the board pay raise of 5.2 percent.

This pay increase sends an important message to the workforce at a time when recruiting is particularly challenging. The budget request also includes $16.7 billion for military construction projects, and I am particularly pleased to see] increases in barracks sustainment. The improvements to our facilities' repair and modernization will go a long way toward the Joint Force's readiness and quality of life for military personnel.

With regard to our nuclear strategy, I understand that the budget request supports important steps for the modernization of our nuclear triad. Given the reckless behavior of Putin over the past year, our allies and partners depend on our extended deterrence now more than ever.

We must also be acutely aware of China's rapidly growing arsenal. Modernization of our strategic forces is needed to reassure not only our allies but deter any attack on our Homeland by any of our nuclear armed competitors. Even as we modernize, we should seek ways to promote strategic stability, reduce the risk of miscalculation, and, if possible, reduce nuclear stockpiles when verifiable for all parties.

Given these strategic threats, the proposed investments in tried-and-true platforms like the *Columbia* and the *Virginia*-class submarines is a prudent decision. Similarly, this budget supports the further development of long-range stealth bombers, strengthening the fighter fleet and building up the defense industrial base, including upgrades to the Navy's public and private shipyards.

At the same time, taxpayers should not have to pay for programs and systems that are wasteful or ineffective, and Congress must not shirk its responsibility to divest outdated platforms in favor of more effective new technologies. We are engaged in a struggle between autocracy and democracy, and we cannot fail in succeeding in that struggle.

Again, I would like to thank the witnesses for their participation today. I look forward to the testimony and let me now recognize Ranking Member Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman. I, too, want to thank our distinguished witnesses for being here. For the third year in a row, President Biden has sent through Congress a budget request that cuts military spending amid a more dangerous and complex threat environment.

We are in the most crucial years of our efforts to prevent aggression by our peer adversary, the Chinese Communist Party. The cost of failure in this effort would be nearly unthinkable. Despite international efforts to the contrary, Russia was not deterred from invading Ukraine, and that invasion has already cost the global economy well over $1 trillion, in addition to untold suffering and loss of life.

These costs will continue to mount unless we give the Ukrainians every single tool they need to win as soon as possible. Our intelligence community tells us a deterrence failure over Taiwan would make the economic effect of Ukraine conflict look vanishingly small. This year's budget is the last one that funds capabilities that are likely to be fielded before 2027.

That is the year by which Xi Jinping says he wants the People's Liberation Army to be ready to take Taiwan. That makes our work here very urgent. I am heartened to see that the budget request prioritizes some programs of critical importance to near-term deterrence and warfighting, including the Strategic Capabilities Office, DARPA [Defense Advanced Research Projects Agency] led Assault Breaker II, electronic warfare and cyber programs, and the emerging efforts to deliver real warfighting capability out of the JAC2 program.

These near-term high return investments are crucial. Even so, I remain concerned that we are not moving fast enough on some of these efforts. At the same time, while the National Defense Strategy emphasizes the importance of our posture in the Western Pacific, I note this budget actually cuts the level of spending on key planning and design activities.

This is despite the clear congressional signal sent by Senators Reed and Inhofe in the statute when they created the Pacific Deterrence Initiative several years ago. We cannot successfully deter Xi with a brittle basing and logistics infrastructure. Further, we must work together to think bigger and more creatively about the scale of investment and focus needed to compete with Beijing in the decades to come.

Our current nuclear modernization efforts are moving too slowly and will produce a force ill-equipped to deter multiple nuclear armed adversaries. The current approach to rebuilding our shipbuilding industrial base is also woefully insufficient. The Department of Defense has failed our shipbuilders by promising stability and then pulling the rug out from under them.

This has hit amphibious shipbuilders particularly hard. This budget also fails by actually shrinking the U.S. Navy this year and in future years, instead of growing the fleet as is required by law. Congress again will need to rectify these failures. Yet even where Congress and the Department of Defense have agreed on our approach, such as with the submarine industrial base, progress has been too slow or nonexistent.

We need to make generational investments across our basic defense infrastructure, including shipyards, munitions, and ammunition plants, advanced test ranges and even barracks for our servicemembers. I do appreciate the Chair emphasizing that in his statement.

Similarly, we cannot effectively compete with and deter our adversaries with the recruiting deficiencies we have heard about, for example, at last week's hearing, I hope our witnesses will address this issue and State whether this budget contains every single possible investment that could alleviate the recruiting crisis. Last, I want to discuss the Department's relationship with Congress.

I think we have some work to do on this front, and let me mention two instances. First on February 8, I sent the Secretary of Defense a letter asking some simple questions about the facts and decisionmaking surrounding the Chinese spy balloon. This was signed by Senator Rubio, the co-chair of the Senate Intelligence Committee. Three weeks later, the Deputy wrote back with a non-answer, which I can only describe as dismissive. So, I sent another letter reiterating my request.

Yesterday afternoon, the day before this hearing, I finally received a response to my letter from the Secretary. I have significant questions about that response, and I will address that in questions for the record. So, that is one thing. Also, early last Thursday morning, an Iranian backed attack killed one American contractor and injured several United States servicemembers in Syria.

These troops are there to ensure that ISIS [Islamic State of Iraq and Syria] does not pose a threat to the United States. That very day, the Senate was considering several significant votes relating to the use of force against Iran, and yet no member of the Senate, to my knowledge, was told that day about an attack by this very adversary while we were voting on issues involving them.

Given the number of legislative affairs personnel that the Office of the Secretary has, I find it hard to believe that no one in the executive branch was tracking the votes on the Senate floor or thought of the nexus between our decisions and the very acts that were going on, on the other side of the globe. It is unacceptable that no one informed the Senate of this attack in a timely manner.

Mr. Secretary and Mr. Chairman, we are all in this together. We are all on the same side here. I would strongly prefer that the Biden administration treat the Congress as a partner moving forward, and I thank the witnesses for appearing today.

Again, I thank them for their service and I look forward to their testimony. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Wicker. Let me recognize Secretary Austin. Mr. Secretary, please.

STATEMENT OF THE HONORABLE LLOYD J. AUSTIN III, SECRETARY OF DEFENSE

Secretary AUSTIN. Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, at the outset, let me echo your comments, Chairman, regarding the tragedies that we have just witnessed in Mississippi and then Alabama, and our condolences go out to all. I am glad to be here with you today to testify in support of the President's Budget Request for fiscal year 2024.

I am joined, as always, by General Milley, and I remain grateful for his leadership. I am also glad to be joined by the Department's Comptroller and CFO, Michael McCord. This is a strategy driven budget and one driven by the seriousness of our strategic competition with the People's Republic of China. At $842 billion, it is a 3.2

percent increase over fiscal year 2023 enacted, and it is 13.4 percent higher than fiscal year 2022 enacted.

This budget will help us continue to implement our national defense strategy and the President's National Security Strategy. Now I have three key priorities, to defend our Nation, to take care of our outstanding people, and to succeed through teamwork. The PRC is our pacing challenge and we are driving hard to meet it.

Our budget builds on our previous investments to deter aggression. We are investing in a more resilient force posture in the Indo-Pacific and increasing the scale and the scope of our exercises with our partners. This budget includes a 40 percent increase over last year's budget for the Pacific Deterrence Initiative, and it is an all-time high of $9.1 billion.

That will fund a stronger force posture, better defenses for Hawaii and Guam, and deeper cooperation with our allies and partners. This budget also makes the Department's largest ever investments in both R&D [research and development] and procurement. We are investing—we are requesting more than $61 billion to sustain air dominance. That includes funding for our fighters and extraordinary B–21 strategic bomber that I helped unveil last December.

We are also seeking more than $48 billion for sea power, including new construction of nine battle force ships. We are boosting capacity in America's shipyards to build the ships that our strategy demands. We are investing a total of $1.2 billion in the submarine industrial base, and we are buying two *Virginia*-class attack submarines and one *Columbia*-class missile submarine.

On land, we are investing in air and missile defense and in defenses to counter unmanned aerial vehicles. We are also requesting $11 billion to deliver the right mix of long-range fires, including major investments in hypersonics. We will also continue to modernize all three legs of our nuclear triad and bolster our strategic deterrence. We put forward the largest budget, largest space budget in Pentagon history.

We have requested $33.3 billion to improve our capabilities in our resilience in space. Well, let me again thank Congress for providing the Department with multi-year procurement authorities and appropriations for critical munitions.

In this budget, we are requesting more multi-year procurement authorities, and we are asking for more than $30 billion to further invest in the industrial base, and to buy the maximum number of munitions that American industry can produce.

This budget also moves us away from aging capabilities that aren't relevant to future conflicts so we can focus on the advances that our warfighters will need. Now our national defense strategy calls out Putin's highly aggressive Russia as an acute threat. Under President Biden's leadership, the United States has rallied the world to help Ukraine fight Russia's indefensible invasion.

We have reinforced NATO's defense and deterrence on its Eastern flank. Our allies and partners have provided crucial security assistance coordinated through the Ukraine Defense Contact Group that I lead. We will support Ukraine's defense for as long as it takes. Meanwhile, the Department remains vigilant against other persistent threats, including North Korea and Iran.

We will take all necessary measures to defend our troops and our interest overseas, as seen in our recent air strikes against facilities linked to Iran's Islamic Revolutionary Guard Corps. We are also investing in over the horizon counterterrorism capabilities. Mr. Chairman, our Joint Force stands ready to meet any challenge.

You can see the forces readiness after Russia's unprovoked invasion of Ukraine, when we swiftly deployed elements of the 3d Infantry Division to Poland to shore up NATO's Eastern flank. We closely monitor readiness at the unit level and maintain response forces at our highest State of readiness, while the rest of the force, by design, is preparing for future contingencies.

So, this budget will help us maintain our readiness with $146 billion in funding for operations, training, and maintenance. This budget also invests in improving our readiness and resilience in the face of climate change and other 21st century threats. Mr. Chairman, we are going to remain the strongest military in the world.

As we mark the 50th anniversary of our All-Volunteer Force, I am enormously proud of the brave men and women who choose to wear the cloth of our Nation. We owe it to them and to their families to take the best possible care of all of our people. Over the past 2 years, we have made moves easier, we have cut commissary prices, and we have made childcare more affordable.

This budget funds other key steps to increase the quality of life of our teammates, including the largest military and civilian pay raises in decades. Now, we are also pushing hard to help eliminate suicide in our ranks, including immediate steps to hire more mental health professionals and improve access to mental health care. Meanwhile, we are working toward a military that's free of sexual assault.

We worked with Congress to improve the response of sexual assault and related crimes under the Uniform Code of Military Justice, and those reforms will be fully implemented by the end of this year. The Department is also investing in a specialized workforce to combat sexual assault, harassment, suicide, and more.

Now, the Department's third priority is succeeding through teamwork, and our rival network of allies and partners magnifies our power and expands our security. In recent months, our friends in the Indo-Pacific have taken major steps forward. The Philippines has agreed to nearly double the number of sites where we cooperate together. Japan is committed to double its defense spending.

Through the historic AUKUS partnership, we will work with our Australian and British allies to build game changing defense advantages that will deter aggression and boost our defense industrial capacity. In sum, Mr. Chairman, this is a budget that will meet this moment, and I respectfully ask for your support.

The single most effective way that this Committee can support the Department and our outstanding troops is with an on time full year appropriation. So, I look forward to working with all of you so that we can continue to defend our democracy and support the forces of freedom in this hour of challenge. Thank you, Mr. Chairman.

[The prepared statement of Secretary Lloyd J. Austin III follows:]

PREPARED STATEMENT BY LLOYD J. AUSTIN III,

INTRODUCTION

Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee: thank you for the opportunity to testify in support of the President's Budget Request for fiscal year 2024.

On behalf of Deputy Secretary Hicks, the leadership of the Department of Defense, and our servicemembers, civilian workforce, and their families, let me also thank you for your continued support and partnership as we work to defend the United States. I also want to thank the Chairman of the Joint Chiefs of Staff, General Mark Milley, and the Department's Comptroller, Mike McCord, who are both testifying with me and are vital partners in realizing the Department's priorities.

The President's $842 billion defense budget request for fiscal year 2024 provides us with the capabilities and investments to advance our three key priorities: *defending the Nation, taking care of our people,* and *succeeding through teamwork.*

This is a strategy-driven budget that provides the resources to continue to implement our 2022 National Defense Strategy (NDS) and the President's National Security Strategy. This budget will also enable us to strengthen our deterrent and defensive capabilities across domains, informed by our 2022 Nuclear Posture Review and our 2022 Missile Defense Review.

As President Biden has said, we are in a "decisive decade," and the choices that we make today will set our course for generations to come—not just for the United States but for the world. So the Department is rising to meet this moment, seizing on opportunities to outpace our competitors, strengthen our security, and move our world toward a more secure future.

As our National Defense Strategy makes clear, the People's Republic of China (PRC) is the Department's pacing challenge. To meet this challenge, the Department is honing new operational concepts, deploying cutting-edge capabilities, and making essential investments for the long term. This budget request shows it, including requests for the Department's largest procurement and R&D budgets ever—$170 billion and $145 billion respectively, and our budget request will also help us meet the acute threat from Russia, as Russia's unprovoked war of choice against Ukraine is now in its second year.

To maintain our edge, this budget will invest in vital technological advancements for the Joint Force, while also reflecting the need to eliminate capabilities that no longer best serve our national defense. Such decisions can be difficult, but they will enable us to invest in the advanced programs that our security demands.

The Department is also intensely focused on taking care of our people, who remain our greatest asset. This budget invests in significant quality-of-life improvements, including the largest military pay raise in 22 years and the largest civilian pay raise in 43 years. We remain focused on continuing to recruit, retain, and develop the best talent from across the country to serve in both uniformed and civilian roles.

We owe it to our outstanding servicemembers, civilian employees, and their families to provide the support that they need to thrive. We also owe them environments that reward excellence, promote teamwork, and are free from harassment and abuse. So, we are implementing military justice reforms, fighting sexual assault, and redoubling our efforts to end suicide in our ranks. These challenges are personal priorities for me, and this budget paves the way for even more progress.

We rely on teamwork within our Department and beyond it—including with our interagency colleagues, Congress, the defense industrial base, and our peerless network of Allies and Partners worldwide. That network is a strategic advantage that no competitor can match. From rallying the world to support Ukraine's fight for freedom to conducting joint exercises in the Indo-Pacific with like-minded countries, our Allies and Partners are a huge force multiplier. They magnify our power, advance our shared security interests, and help uphold a world that is free, open, prosperous, and secure, and this budget will support the security partnerships that make America even stronger.

I have never been more confident in the power of our fighting force and the talents of our civilian workforce. The fiscal year 2024 budget request will help ensure that we meet America's national security challenges and use this decisive decade to defend our democracy and forge a world of greater security, prosperity, and liberty. I therefore ask for your support of our budget and our mission as Congress writes authorizing and appropriations bills in the months ahead.

DEFENDING THE NATION

We are deeply aware of our responsibility to be responsible stewards of taxpayer dollars. This budget request has been carefully prepared to provide the resources for the objectives laid out in our 2022 NDS, Nuclear Posture Review, and Missile Defense Review.

The NDS directs the Department to act urgently to sustain and strengthen U.S. deterrence, with the PRC as our pacing challenge. The NDS also directs the Department to tackle the acute threat of Russia, as well as the persistent threats from Iran, the Democratic People's Republic of Korea (DPRK), and global terrorist groups.

The NDS clearly articulates our priorities: defend the Homeland from the growing, multi-domain challenge posed by the PRC; deter strategic attacks against the United States, our allies, and our partners; deter aggression, while preparing to prevail in conflict if necessary, by prioritizing the PRC challenge in the Indo-Pacific, followed by the Russian challenge in Europe; and build a resilient Joint Force and defense ecosystem.

Within the Department, the NDS is our North Star, and we have aligned our processes, policies, and plans to implement it. The fiscal year 2024 budget is the latest concrete manifestation of our strategy—and its deep recognition that the PRC presents a challenge now and in the years to come.

PRIORITIZING THE PRC AS OUR PACING CHALLENGE

In recent decades, the PRC has demonstrated both the will and, increasingly, the economic, diplomatic, military, and technological power to reshape its region and the international order to suit its preferences. The United States will not let that happen. This budget will enable us to continue executing our strategy and outpacing the PRC, across all timeframes and domains.

Through the fiscal year 2024 budget, we will strengthen U.S. deterrence and continue advancing new operational concepts, deploying cutting-edge capabilities across all domains, and investing in the innovations that we will need in the future. Through a $9.1 billion request for the Pacific Deterrence Initiative, the largest ever, the Department is expanding the scope and scale of our activities to reinforce security and stability in the Indo-Pacific region, strengthen deterrence, and bolster our advantages and those of our allies and partners.

The Department is also investing in a more resilient posture across the Indo-Pacific region. For example, in Japan, Australia, Guam, and the Compact of Free Association States, we are forward-stationing and deploying more capable forces even as we make major infrastructure investments in airfields, logistics, domain awareness, and resilience. In addition, throughout Southeast Asia, we are executing rotational deployments, logistics cooperation, and targeted security assistance to strengthen our partnerships, deepen our interoperability, and enhance our collective readiness. This budget allows us to continue to support Taiwan's self-defense, consistent with our longstanding commitments enumerated in the Taiwan Relations Act, the three United States-PRC Joint Communiques, and the Six Assurances.

Across the Indo-Pacific region, we have increased the complexity and scale of our exercises and operations. In addition to building interoperability with our allies and partners, we are experimenting to build our warfighting advantages, which will help us further refine our operating concepts and investments. This budget request will enable us to continue that crucial work.

MEETING THE ACUTE THREAT OF RUSSIAN AGGRESSION

Russia's unprovoked further invasion of Ukraine poses a historic challenge to European and global security. Russia's campaign of conquest is also an attack on the rules-based international order that has helped to make the world safer and more secure since its creation in the aftermath of World War II. If Russia succeeds, it would send a message to other aggressor nations that they can attack and conquer their neighbors. With United States leadership, a broad coalition of allies and partners have rallied to help support Ukraine's defense of its sovereignty.

Over the past year, the United States has committed more than $32 billion in game-changing security assistance to support Ukraine's fight against Russian aggression. This has helped meet Ukraine's most urgent needs—including for air defense, artillery systems, tanks and other armored vehicles, and other crucial capabilities—and it has translated to tangible gains on the battlefield. In the year since Russia's unjust war of aggression began, Ukraine's military forces have won the battles of Kyiv, Kharkiv, and Kherson—and they have inspired the world with their courage and resilience.

We will continue to support Ukraine's fight for freedom for as long as it takes. To keep pace with Ukraine's urgent security needs even as we maintain our own readiness, we are pushing to expand production from the defense industrial base. We are focused on increasing the resiliency of supply chains that are critical for national security. Ee are focused on accountability of the security assistance that we have provided.

Our NATO Allies face a historic challenge from Putin's aggressive Russia, and we are making significant investments in bolstering European security. Those build on foundational investments in posture and presence that we have made in Europe since Russia's 2014 invasion of Ukraine and seizure of the Crimea region. These investments paid dividends in 2022 when we rapidly surged an additional 20,000 United States Forces into the European theater to deter Russian aggression and reassure our NATO allies. With little advance notice, the United States deployed additional combat power, repositioned United States forces already in Europe, and integrated deploying forces with prepositioned stocks of munitions and supplies. Our continued investments in posture and presence in Europe help deter Russian aggression against NATO—now and in the future.

TACKLING ADVANCED AND PERSISTENT THREATS

We remain vigilant against the advanced and persistent threats from the DPRK, Iran, and global terrorist organizations.

We continue to shore up security on the Korean Peninsula despite the DPRK's provocations, including through bilateral and trilateral cooperation. We will continue to stand with our allies, the Republic of Korea (ROK) and Japan. We remain steadfast and ironclad in our extended deterrence commitments to the ROK and Japan, and we continue to demonstrate our ability to respond rapidly and firmly to any DPRK provocation. We are working to strengthen and modernize our alliances with the ROK and Japan and will continue to ensure that our forces in and around the Korean Peninsula are ready to "Fight Tonight" in the event of DPRK aggression.

Iran's nuclear program, its dangerous proxies, its support for terrorism, its cyber threats, and its proliferation of one-way attack unmanned aerial systems (UAS) all undermine Middle East security and threaten United States forces and partners. We have acted decisively when Iran-backed militia groups have attacked United States forces in Iraq and Syria. As Iran deepens its partnership with Russia, including Russian military support to Tehran in return for Iranian one-way attack UAS to deploy in Ukraine, we are developing and fielding effective approaches to counter the proliferating threats from Iran's UAS. This budget request seeks to tackle these persistent challenges through investments in integrated air and missile defense, maritime domain awareness, and counter-UAS systems. We have repeatedly demonstrated our ability to deploy combat-credible forces into the region to deter potential Iranian aggression, and we will continue to take necessary and proportionate military action to defend United States forces and facilities from attack, or threat of attack, from Iran or Iran-backed proxies. The United States will support and strengthen partnerships with countries that subscribe to the rules-based international order, and we will make sure those countries can defend themselves against foreign threats. These actions have the added benefit of demonstrating our commitment to the region's security that will offset the efforts by external powers to reshape the region in their interest and to our detriment.

Meanwhile, ISIS, al Qaeda, and other terrorist groups continue to threaten the security of the United States, our citizens, and our Partners in the Middle East, Africa, and South Asia. We are investing in a modernized, over-the-horizon counterterrorism architecture to prevent future attacks on our citizens and the United States Homeland, and we have proven our continued ability to remove the most threatening al Qaeda and ISIS operatives from the battlefield.

One legislative authority that is key to our ability to tackle these advanced and persistent threats—Section 702 of the Foreign Intelligence Surveillance Act—expires at the end of this year. Section 702 provides essential, irreplaceable insights on the activities of critical foreign targets. The loss of this authority, or its renewal in diminished or unusable form, would profoundly damage the Department's ability to see and mitigate some of the most profound threats against the United States as well as its allies and partners. Reauthorization is therefore a matter of utmost priority. Along with our colleagues in the Intelligence Community and the Department of Justice, we look forward to working with this Committee and others, in order to secure section 702s extension.

INNOVATING AND MODERNIZING

The fiscal year 2024 budget request will enable the Department to develop, acquire, and modernize across all domains to address all the above challenges, especially our competition with the PRC.

To maintain and expand our advantage over the PRC, we need to modernize not just our weapons systems but also our operational concepts and the ways that we do business. To operate effectively in a dynamic security environment, the Department is prioritizing investments to maintain a ready warfighting capability, build a skilled defense workforce, and work more effectively with our allies and partners.

A safe, secure, and effective U.S. nuclear deterrent is the ultimate backstop to deter strategic attacks on our country and our allies. The Department is committed to maintaining and modernizing our nuclear triad, while seeking to reduce the role of nuclear weapons in U.S. national strategy. The fiscal year 2024 budget request, including an investment of $37.7 billion in fiscal year 2024, fully funds the nuclear triad and nuclear command, control, and communications, demonstrating our commitment to maintain reliable and effective legacy systems while pursuing their timely replacements.

The Department is also accelerating investments in cutting-edge defense capabilities, such as uncrewed systems that can operate on the water, underwater, in the air, and on land. Integrating human-machine teaming, autonomous systems, and resilient networks will make our operations significantly faster, more lethal, and more survivable.

The fiscal year 2024 budget request includes $30.6 billion specifically for our munitions enterprise. It invests in modernizing and growing our munitions industrial base and expanding production capacity and procurement quantities. The Department is seeking to use the unprecedented multiyear procurement authorities provided by Congress to affordably acquire critical munitions, while bolstering our inventories and providing our industry partners with a more predictable "demand signal."

The fiscal year 2024 budget request makes long-term investments of $33.3 billion in the resilience of our space architecture in the event of an attack. These investments will further expand and diversify constellations for space sensing and communications resilience, as well as augmenting our space warfighting capabilities. These steps will drive even deeper cooperation with the robust American commercial space sector.

In the cyberspace domain, this budget request makes targeted investments to speed the development and management of new cyber tools. This will help us integrate our sequentially developed Cyber Mission Force capabilities. It will also aid our transition to, and sustainment of, advanced cyber capabilities from the Department's Science and Technology (S&T) activities. These efforts will enhance the interoperability and effectiveness of our Joint Cyberspace Warfighting Architecture and maintain an efficient pipeline from America's world-class cyber-innovation workforce into the Department's cyberspace operations forces.

The Department is also adapting to America's changing labor market to ensure that we have the right team to execute the NDS. This budget funds a new civilian cyber workforce-incentive program to target skill gaps, and it develops a curriculum of advanced cyber training for our military. We are also increasing investments in international research partnerships on critical technologies with our allies and partners.

Our technological superiority is not a given; we have to work for it every day. That includes rapid prototyping and commercial integration. So, the Department is investing in tomorrow's technology, such as responsible cutting-edge artificial intelligence, enhancing our critical supply chains, and modernizing our testing and training capabilities.

The Department continues to vigorously develop and test advanced weapons prototypes. Against the backdrop of our recent successful flight tests, the fiscal year 2024 budget request expands the development of several hypersonic weapons programs, as well as demonstration and testing activities. This budget will also improve our subsonic cruise missiles to ensure their effectiveness against rapidly changing threats and targets.

The Department is pursuing a range of initiatives to harden U.S. basing and ensure that it is resilient against air and missile attacks. For example, we have made major investments in missile defenses for Guam and Hawaii, as well as infrastructure improvements across the entire Indo-Pacific region.

This budget request also funds the advancement of our joint warfighting concepts and the rapid experimentation and fielding of emerging capabilities across all do-

mains. Ultimately, these initiatives will ensure a Joint Force that is increasingly agile, innovative, interoperable with allies and partners, and resilient.

After decades of combat and coalition experience for our Special Operations Forces (SOF) in recent conflicts, we are pioneering new SOF approaches to help meet today's primary challenges. This budget enables our SOF enterprise to continue to modernize its crisis-response capabilities, while developing creative, adaptable, and asymmetric options that ensure our Joint Force will present a range of dilemmas to our adversaries.

The Department will also expand the Pacific Multi-Domain Training and Experimentation Capability, which will help our forces train in the ways and places they may be called upon to fight. These investments boost our readiness and lay the foundation for advances in sensor-to-shooter networks that will multiply our forces' lethality. To improve the speed and global integration of our operational decision-making, we will deliver proven Joint All Domain Command and Control enhancements to our warfighters by 2027.

The fiscal year 2024 budget is rooted in the recognition that our competitors and adversaries are not standing still, and we must make the right investments now to retain our technological advantages in the decades to come.

The Department will continue to draw on America's longstanding strategic advantages by investing in critical innovations—such as quantum computing, advanced materials, renewable energy projects, integrated networks, and future-generation wireless technology. To maintain the United States' position as the global leader in research and development, we are cultivating a strong, adaptive, and highly skilled workforce of scientists and engineers through programs like the Science, Mathematics, and Research for Transformation scholarship-for-service program.

INVESTING TO WIN ACROSS ALL DOMAINS

On land, the fiscal year 2024 budget continues to build a combat-credible, ready, and lethal Army that can tackle challenges around the world. Our budget request seeks to strengthen Army capabilities in the Indo-Pacific region, with significant investments in our air and missile defenses as well as land-based long-range fires. We are also revitalizing and strengthening the Army's Organic Industrial Base by modernizing the Army's arsenals, maintenance depots, and ammunition facilities.

The fiscal year 2024 budget builds on past investments in the Marine Corps Force Design 2030 concept, which focused on fielding capabilities and updating the Corps' force structure in the Indo-Pacific region. It also makes important new investments in electronic-warfare capabilities, command and control systems, air and missile defenses, and ground-force survivability, as well as in training and exercises.

At sea, this request helps deliver a ready and formidable naval force focused on deterring potential aggression from the PRC. The budget request continues the transition of our naval force to Distributed Maritime Operations, with an increased focus on uncrewed surface and underwater vehicles. Our request expands investments in long-range fires, more advanced weapons systems, and next-generation platforms, including development of the *Columbia*-class submarine. The Department also continues its critical investments in the submarine-construction industrial base; we will begin investing in better submarine-maintenance capacities, and we will increase our investments in the optimization of our shipyard infrastructure to make our industrial base healthier and more capable of meeting future needs. The budget request continues to move the Navy away from systems that are ill-suited for operations in highly contested environments.

In the air domain, the fiscal year 2024 budget request makes significant investments to ensure air dominance in future conflicts. This includes F–35 and F–22 aircraft modernization, next-generation fighter development, and autonomous combat collaborative aircraft. These investments complement global strike capabilities such as the B–21 family of systems. The budget request invests in the development of strategic nuclear capabilities, such as Sentinel and the Long-Range Stand Off weapon. It also prioritizes long-range fires like hypersonic weapons, as well as a modern air command-and-control framework, rapid global mobility, and improved electronic warfare capabilities. To fully realize the tremendous advantages offered by our next-generation fighter and bomber platforms, we are investing in air-launched weapons that offer greater range, speed, precision, flexibility, and lethality. We are also closing shortfalls in supplying critical munitions by accelerating procurement where feasible, as well as expanding and procuring additional production capacity for our top-priority air-launched weapons. Moreover, this budget request continues to responsibly make the transition away from air-weapons systems that do not support our strategy, even as we invest in the maintenance and development of more advanced systems.

In the space domain, we continue to build our advantages over our competitors by investing in missile warning and tracking, data transport, communications, and space sensing. This budget request also funds upgrades to our launch infrastructure to support more government and commercial launches. Consistent with our recently completed Space Strategic Review, additional investments will deter hostile uses of space, and if deterrence fails, ensure that we can prevail in conflict in this domain, too.

This budget also strengthens our cyberspace operations force, which persistently engages both State and non-State cyber actors seeking to harm the United States, its interests, and its Allies. It upgrades our cyber operations training platform, accelerates the use of cloud-based capabilities, and invests in rapidly modernizing the software and hardware needed to further fortify our cyber posture.

Finally, over the past 3 years of the COVID–19 pandemic, we have seen the massive impact that biological threats can inflict on our country. Accordingly, the President's Fiscal Year 2024 Budget will enhance our ability to address any future pandemics or other biological threats.

MEETING THE CLIMATE CRISIS

As the NDS makes clear, climate change is increasingly shaping the context in which the Department operates. That places new demands on the Joint Force, with implications for our readiness. Climate change is also creating new potential points of friction in places such as the Arctic, while affecting security relationships with Allies and Partners around the world. We are determined to ensure that the United States can meet and deal with these challenges.

This budget therefore invests in enhancing operational capability, mission resilience, and readiness. This includes programs that mitigate the risk of energy supply disruptions to critical military facilities—whether caused by extreme weather, cyber operations, or kinetic attack. The budget request also includes funding to improve the energy efficiency of combat operations and platforms while deploying new technology to improve lethality and mitigate logistics risk in contested environments. Throughout, our focus is on building our operational advantages. These are not only essential steps for the climate of the world that we share, but also strategic moves to defend our country and strengthen our military.

TAKING CARE OF OUR PEOPLE

The U.S. Military is without a doubt the strongest fighting force in human history, and we remain determined to keep it that way. The foundation of that strength is our people. The Department is deeply committed to taking care of our total workforce by growing our talent, building resilience and readiness in the force, ensuring accountable leadership, and tackling even the most difficult workforce challenges.

This budget prioritizes our ongoing actions to take care of our outstanding servicemembers, and their families, including by increasing servicemember and civilian employee compensation, raising housing allowance, and improving military housing. The budget also helps make quality childcare more accessible and affordable, including through the launch of universal pre-kindergarten at all Department of Defense Education Activity schools. We are also making investments to fight a range of problematic and harmful behaviors. That includes continued efforts to combat sexual assault and sexual harassment, reform the military justice system, and prevent suicide in the Force.

GROWING OUR TALENT

To defend our Nation's security, we must tap into the talent that exists all across our Nation. We must recruit and retain the best of America, building pathways of opportunity for all qualified patriots who seek to serve. In this budget, we continue to provide our force with exceptional opportunities for service and professional development. This means being the employer of choice for personnel with technological skills, mastery of foreign languages, and more. We are also investing in training and education, as well as creating scholarships for science, technology, engineering, and math. We will continue to deepen the Department's partnerships with America's best universities, paving the way for the next generation of leaders. I am proud that the Department recently established its first university-affiliated research center at an Historically Black College and University—just one of the many ways that we are building new ways for talented Americans to join our team.

BUILDING RESILIENCE AND READINESS

Ensuring the safety, health, and well-being of our servicemembers is a sacred trust—and a matter of readiness. We know that when economic challenges hit our teammates where they live, it can make it even harder to serve. However, we also know that when we take care of our servicemembers and ensure they are well trained and well equipped, they continue to serve.

So, in addition to robustly funding the factors that immediately contribute to readiness—training, equipping, and maintaining—we have made continued investments to support our servicemembers and their families, launching targeted initiatives to bring down daily costs for servicemembers. Those efforts have made childcare more accessible and affordable, lowered prices in the commissary system and made access to affordable food easier through online ordering, eased moving costs, and increased opportunities for spousal employment and career mobility including through the launch of the Military Spouse Career Accelerator Pilot, a paid fellowship for military spouses that allows employers to connect with this diverse and talented pool of talent. We have also raised pay and allowances across the board. The fiscal year 2024 budget will support a 5.2 percent pay raise for our servicemembers and our civilian employee workforce—the largest pay raise in decades. The fiscal year 2024 budget also invests in full day pre-kindergarten at all Department of Defense Education Activity schools, providing our military children an essential head start on their education. There is no greater testament to the resilience and readiness of our force than the historically high retention rates across the Services.

ENSURING ACCOUNTABILITY

The Department of Defense is committed to the health, safety, and well-being of our servicemembers and will not tolerate prohibited harmful behavior. This is a leadership issue, and we will lead. In February 2021, I ordered the creation of a 90-day independent review commission (IRC) on sexual assault in the military. The Department, including the Military Services, are now implementing the IRC recommendations that I approved.

The Department also worked with the President and Congress to enact historic legislation improving the response to sexual assault, domestic violence, and related crimes under the Uniform Code of Military Justice. The Offices of Special Trial Counsel, newly established to prosecute these crimes with independence and specialized expertise, will reach full operating capability in December 2023.

We will continue to work relentlessly to end sexual assault and related crimes, including through investments in a specialized prevention workforce and through important tools like the On-Site Installation Evaluations, which help us identify where our efforts are working and where more support is urgently needed.

The Department remains focused on efforts to eliminate suicide in the ranks and to respond better when these tragedies occur. This budget makes a significant investment in suicide prevention, and we are accelerating efforts to expand and increase access to mental health care, to including increased hiring and training of mental health professionals, to ensure that our servicemembers can access the help they need when they need it.

SUCCEEDING THROUGH TEAMWORK

Our world is increasingly defined by strategic competition, profound technological change, and 21st century challenges that pay no heed to borders. In this changing strategic environment, the United States is far stronger because of the power of our like-minded allies and partners, the improvements in industrial exchanges with our friends, the integration and development of innovation, and the interoperability of our forces. Our cooperation with allies and partners is central to co-developing advanced capabilities and rushing tangible improvements to our warfighters. These are strategic advantages that no rival can match. The Department is deeply committed to further strengthening our work with the allies and partners who magnify our might.

THE AUKUS PARTNERSHIP

The historic AUKUS partnership breaks new ground in working with two of our closest Allies—Australia and the United Kingdom—to take on the threats of the 21st century, just as we did together in the 20th century. As the President outlined in his State of the Union address, we are building bridges between partners in the Pacific and those in the Atlantic, and AUKUS is a generational opportunity at the center of this change. This initiative translates our strategy into action, and it helps

to forge a more advantageous balance of power in the Indo-Pacific, where the United States, Australia, and the United Kingdom are actively strengthening deterrence across the region. AUKUS will enhance our collective military capabilities, especially in the advanced technologies that we believe will be critical for security and stability in the future.

On March 13, 2023, the President announced our plans for the first major initiative of AUKUS: providing Australia with a conventionally armed, nuclear powered submarine capability. This phased approach will allow us provide this capability on the fastest possible timeline, while upholding the highest standards for nuclear stewardship and setting a precedent that strengthens the nonproliferation regime. As the President made clear, our three nations are making concrete commitments to each other, and we are backing these commitments up with significant investments to strengthen the industrial bases of each of our nations.

ALLIES AND PARTNERS IN THE INDO-PACIFIC REGION

In the Indo-Pacific region, we continue to build and strengthen our peerless network of alliances and partnerships. Recent progress only underscores the enormous value of our Allies and Partners in the region.

For example, we are working closely with Japan to expand the roles and missions of our alliance. We are forward-deploying more versatile, resilient, and mobile United States capabilities even as we enhance Japan's capabilities, including in counterstrike, unmanned vehicles, and counter-hypersonic weapons. We are also increasing our trilateral cooperation among the United States, Japan, and Australia, further demonstrating regional commitment to a free and open Indo-Pacific region.

We are working with the ROK to ensure that our combined forces are able to deter the DPRK and help ensure peace and stability in Northeast Asia, including by returning our defensive exercises to historical norms.

In Australia, we have built a deep partnership on technology and the development of advanced capabilities, including space cooperation and space domain awareness. We are continuing the rotational presence of United States capabilities through Australia, across the air, land, and maritime domains. Working alongside our ally, we are identifying locations to support enhanced U.S. presence with necessary infrastructure improvements. In 2022, we also announced that we will preposition munitions and fuel to support United States capabilities in Australia.

In the Philippines, we are modernizing the United States-Philippine Alliance by enhancing maritime cooperation, improving interoperability and information sharing, and adding four important new locations under the Enhanced Defense Cooperation Agreement. These steps underscore our unwavering commitment to the Mutual Defense Treaty with the Philippines.

In Thailand, we are continuing to strengthen the long-standing United States-Thai alliance. Our annual Cobra Gold exercise, for example, contributes immeasurably to peace, security, and stability in the Indo-Pacific, while ensuring we are prepared to respond rapidly and effectively to a humanitarian disaster.

Meanwhile, with India, we are advancing our Major Defense Partnership and launching a new chapter in United States-India ties. The Department is bolstering the Indian military's deterrent capabilities to ensure that India remains the preeminent power in the Indian Ocean and can help uphold a favorable balance of power across the wider Indo-Pacific region. We are committed to working closely with India on technology cooperation; deepening our interoperability across key defense and security domains, including space and cyberspace; and ensuring that the United States-India partnership supports the efforts of our broader network of like-minded Allies and Partners, especially the Quad.

EUROPEAN SECURITY COOPERATION AND SUPPORT TO UKRAINE

Under President Biden's leadership, the United States has changed the course of history by surging critical security assistance to Ukraine over the past year. With the support of Congress, our response to Russia's full-scale reprehensible assault on its peaceful and democratic neighbor has provided historic levels of security assistance to Ukraine through a combination of Presidential Drawdown Authority and the Ukraine Security Assistance Initiative. The United States has also rallied like-minded countries around the world to support Ukraine's brave defenders. The engine of our efforts is the Ukraine Defense Contact Group, the coalition of some 50 countries that I convene regularly to spur and coordinate support to Ukraine. Our Allies and Partners have collectively committed approximately $20 billion in security assistance to Ukraine, including hundreds of tanks, thousands of other armored vehicles, vital air-defense systems, hundreds of artillery systems, and other crucial capabilities.

In the face of the biggest threat to European security since the height of the cold war, the NATO Alliance is more united than ever. We have moved urgently with our Allies to further fortify NATO and bolster its defenses on its eastern flank. Our commitment to Article Five of the North Atlantic Treaty remains ironclad. We will not be dragged into Putin's war of choice, but we will stand with Ukraine as it fights to defend itself, and we will continue to strengthen NATO's collective defense and deterrence.

BUILDING TEAMWORK AT HOME

Our partners at the Federal, State, local, tribal, and territorial levels provide essential support for our servicemembers and their families, caregivers, and survivors at military installations and communities around the country. The Department is committed to working even more closely with these vital partners. Meanwhile, our servicemembers continue to proudly support our fellow Americans in times of crisis, as they have this year during natural disasters and amidst the lingering COVID–19 pandemic.

At the same time, we are supporting our Federal, State, local, tribal, and territorial partners' efforts to become more resilient and less reliant on Department of Defense support. Increased national resilience will ensure that America stands ready should an adversary choose to test our will with cyber or kinetic attacks on the U.S. Homeland.

In addition, our partners in industry remain an engine of innovation—one that ensures that our warfighters remain ready to tackle the security challenges of this century. Our budget request will shore up our defense industrial base, strengthen its ability to produce the capabilities that we need, and develop critical technologies for the future.

It is the honor of my lifetime to lead our exceptional and dynamic team at the Department of Defense. We continue to strengthen our internal processes to ensure that we make timely decisions based on rigorous cooperation among civilian and military teams across the Department and with our interagency partners. We will demonstrate that spirit of partnership at the highest levels, and we will expect it from every person in the Department.

CONCLUSION

The way that we respond to today's challenges will help determine America's course for generations to come. The Department is seizing this inflection point in history. We will never flinch in the defense of the democracy that we have vowed to protect, and we will take care of all of the extraordinary patriots who comprise the world's strongest fighting force.

The fiscal year 2024 budget enables us to deliver on these priorities, and we ask for your support as we build the Department of the future. We remain deeply committed to working with Congress on oversight and appropriations to ensure that we have the resources that our Total Force needs and deserves—today, tomorrow, and in the future.

We will be good stewards of those resources, for both warfighters and taxpayers. Defense reform will ensure that we use taxpayer dollars efficiently by modernizing our business processes, improving our financial and contract management, and completing the Department's audit. Above all, our accountability to both our own forces and the American public is core to our democracy and sets us apart from our competitors on the world stage.

Finally, we are grateful for our extraordinary soldiers, sailors, airmen, marines, guardians, their families, caregivers, and survivors, and civilian employees. They are the foundation of America's strength, and we are honored to serve alongside them. Thank you.

Chairman REED. Thank you very much, Mr. Secretary. General Milley, do you have a statement?

STATEMENT OF GENERAL MARK A. MILLEY, CHAIRMAN OF THE JOINT CHIEFS OF STAFF

General MILLEY. I do, Chairman, and Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, thank you for the opportunity to testify before you today. I want to echo the condolences, about the Secretary and the Chairman, for the great people of Mississippi and Alabama. Tragic losses.

Our hearts go out to them, and many, many soldiers and sailors, airmen, marines in uniform come from your two great states, so our hearts go out to you. I have been privileged to defend this country for 43 consecutive years in uniform, and as the Chairman said, this is likely my last set of posture hearings.

But I do want to thank the Congress for your continued support to our military, not only on this budget, but for the last 4 decades. I ask that you support this year's request with an on-time budget approval. I am honored to represent here today the soldiers, sailors, airmen, marines, guardians, and families of the United States Joint Force, along with Secretary Austin and Mike McCord. I want to publicly thank them both for their leadership.

Our Joint Force, as the Secretary says, is the most lethal and capable military in the world because of your support. Our purpose, the military's purpose, the uniformed military, is simple. It is to defend the United States, and our task is to fight and win in all the domains of combat to secure America and prevent a great power war.

Readiness for us in uniform, and readiness now and readiness in the future, through modernization, is our number one priority, and there is no other number one other than the readiness for combat. The joint boards will accomplish this at the fiscal year 2024 budget request of $842 billion.

Right now, as pointed out by Senator Wicker, the international system is under stress. For the first time, the United States is facing two major nuclear powers whose vital national security interests are in competition with the United States. Both the People's Republic of China and Russia have the means to threaten our interests and our way of life. But war with either one is neither inevitable nor imminent.

A great power war has not happened in the last 80 years, in large part because of the rules put in place at the end of World War II and the capabilities of the United States military, along with our allies and partners. We must remain the most powerful Nation and the great power peace then will be prevailing.

The People's Republic of China remains our number one long-term geostrategic security challenge. The PRC intends to be the regional hegemonic Asia within the next 10 years and to exceed the United States overall military capability by mid-century, and they have publicly said 2049. The PRC's actions are moving it down the path toward potential confrontation with its neighbors and the United States.

But again, war with China is neither inevitable nor imminent. Additionally, Russia is an acute threat and remains quite dangerous. Over a year ago, Russia undertook an illegal and unprovoked war against Ukraine, threatening the peace on the European continent and global stability.

We are supporting Ukraine to protect its sovereignty and supporting NATO with the United States force presence in every single nation on NATO's Eastern flank. This fight is not just in Ukraine's interest. It is in the United States interest to protect the system that has prevented a great power war. In Iran, Iran threatens to push the Middle East into regional instability by supporting terrorists and proxy forces, as we recently saw.

Just last week, Iranian aligned groups killed one American and injured seven in attacks on coalition bases in Syria. We acted immediately to defend our troops and we will continue to counter terrorist threats in the region and anywhere else we find them.

Iran has taken actions also to improve its capabilities to produce a nuclear weapon. From the time of an Iranian decision, Iran could produce enough fissile material for a nuclear weapon in less than 2 weeks and would only take several months thereafter to produce an actual nuclear weapon.

The United States remains committed as a matter of policy that Iran will not have a nuclear weapon. The United States military has developed multiple options for our national leadership to consider if or when Iran decides to develop a nuclear weapon.

North Korea's continued ballistic missile testing and nuclear weapons development pose threats to our Homeland and our allies and partners, but we stand together, shoulder to shoulder with the Republic of Korea, to deter North Korean aggression, as we have for 7 decades.

Terrorists continue to operate around the globe, threatening fear, destruction, destabilization, and this budget supports our continued counterterrorism effort. In short, the United States military stands ready to protect our Nation's interests and the American people. We are currently standing watch on freedom's frontier with nearly a quarter of 1.25 million troops in Europe, Asia, Africa, the Middle East, and South America.

The United States never fights alone. The key source of our strength is our large global network of alliances and partnerships. Just this month, we conducted 63 operations and joint combined exercises globally with our allies and partners. Last, our operational readiness rates are higher now than they have been in many years.

Currently, 60 percent of our Active force is at the highest State of readiness and could deploy to combat in less than 30 days, well exceeding our minimum standard of one-third of the force, Ten percent, in fact, could deploy in less than 96 hours. This military, the United States military is ready.

The Joint Force is at an inflection point, and we must balance operations, readiness, and modernization. We must not allow ourselves to create the false trap that we can either modernize our forces for the future or focus only on today. We must do both. We must integrate advancing technologies, including precision long range fires, hypersonic weapons, quantum computing, artificial intelligence, robotics, and all domain sensors.

The time is now. We have very little margin to wait, and the common thread critical to accomplish all of this is our people. We must continue investing in training, education, and talent management to be prepared for future operating environment.

I urge Congress to support this budget's significant pay raise, health care, housing, and childcare initiatives. This budget sustains our readiness and adapts the Joint Force to the future warfighting requirements. There is nothing more expensive than fighting a war. Preparing for war is very expensive, but nothing more expensive than fighting it, and preparing for war will deter a war, and that is our goal.

We must act with clear eyed urgency in order to deter a great power war. By doing so, no adversary should ever underestimate the resolve of our Nation and the strength of our military. Thank you, and I look forward to your questions.

[The prepared statement of General Mark A. Milley follows:]

PREPARED STATEMENT BY GENERAL MARK A. MILLEY, USA

INTRODUCTION

After 43 years in uniformed service, 4 years as Chief of Staff of the Army, and 3.5 years as Chairman of the Joint Chiefs of Staff, this will be my last set of posture hearings. I want to thank the Congress up front for your continued support to our military, not only this year but every year for the last 4 decades. We would not have a military without the generous support of the American people and their elected representatives. Thank you for what you have done and, yet again, I ask that you support this year's request with an on-time budget approval.

I am honored to represent the soldiers, sailors, airmen, marines, guardians, and their families of the United States Joint Force. They are the most lethal and capable military in the world. Our troops are the best led, best equipped, and best trained force anywhere because of your support. Side by side with our allies and partners, American soldiers, sailors, airmen, marines, and guardians are standing watch in 158 countries and conducting operations every day of the year to keep Americans safe.

The United States military is a key component of our national power. In concert with our diplomatic corps, economic organizations, and democratic institutions, we support efforts to sustain a stable and open international system. This hard and soft power provides a range of options to this legislative body and the Commander-in-Chief. Our strength deters adversaries and preserves peace. Although, if deterrence fails, the United States military is prepared to fight and win against those who attack the United States or our vital interests.

The Joint Force appreciates the work that our elected representatives do to ensure that we have the resources needed to train, equip, and man the force in order to be ready. The increased level of military funding beyond last fiscal year will ensure we continue future modernization while simultaneously meeting the national security readiness requirements of today.

The Joint Force will deliver modernization of our armed forces and security to the people of the United States at the fiscal year 2024 budget request of $842 billion. The people of the United States, through this body, have committed significant funding and we will work diligently to ensure it is spent prudently in the best interest of this Nation. This budget will enable the investments and transformations necessary to build the Joint Force of 2030 and beyond.

In alignment with the National Defense Strategy (NDS) and National Military Strategy (NMS), this budget delivers a ready, agile, and capable Joint Force that will defend the Nation, while taking care of our people, and working with our partners and allies. There are direct linkages from the NDS and NMS to the Joint Warfighting Concept (JWC) which describes how we will employ and succeed as a Joint Force. The JWC is threat informed and fully integrated into our resourcing and requirements processes to build the force required for the future.

Stable, predictable, and timely budgets are critical for this Nation's defense. The passage of these budgets enables proper planning, prioritization, and programmatic investments necessary for continued progress. Continuing resolutions risk future modernization and impair our ability to meet our missions.

Preventing great power war through readiness and deterrence is very expensive but not as expensive as fighting a war and the only thing more expensive than fighting a war is losing a war. This budget is a significant step in the right direction to ensure that the United States military maintains the current readiness and develops the future modernization necessary to deter war and, if deterrence fails, to fight and win.

STRATEGIC ENVIRONMENT

The People's Republic of China (PRC): War with the PRC is neither imminent nor inevitable, however the potential for armed conflict is growing. The PRC remains our #1 long-term geostrategic security challenge. Since the reforms of Deng Xiaoping in 1979, the world has witnessed the greatest geopolitical shift in economic power in over 100 years. In the wake of the PRC's economic growth has come rapidly in-

creasing PRC military capability. Using economic and military hard power, the PRC's goal is to revise the global international order by midcentury, and it intends to be the regional hegemon in Asia within the next 10 years. Its intention is to exceed the United States' military capability within the Western Pacific in the next decade and to exceed the United States' overall military capability by 2049.

The PRC continues to take increasingly aggressive actions to reshape the Indo-Pacific region and revise the global order. It is making significant economic investments in its military to improve technology and modernize its military forces. The PRC continues to challenge the stability and security in the Pacific as well as across the globe. Through economic coercion, the PRC is expanding its global footprint and increasing its ability to project military power at range and scale. It is aggressively modernizing its military in order to protect its authoritarian interests and are prepared to use force if required. The PRC seeks to strengthen its hard power enabling the PRC to coerce others with militarily might. These PRC actions continue to move its nation down the path toward confrontation and conflict.

The PRC remains focused on revising the global international order by midcentury. In short, the PRC continues to develop significant nuclear, space, cyber, land, sea, and air capabilities. It is working every day to close the technology gap with the United States and our allies. We must maintain our military superiority over the PRC in all the domains of war if we are to preserve the great power peace of the last 80 years. The PRC represents a real and growing national security challenge. This is a matter of national urgency.

History is not deterministic and war with the PRC is not inevitable. While the PRC is clearly an increasingly capable strategic competitor, it is imperative that we keep our relationship in competition and not in conflict. By maintaining a strong military with overmatch against the PRC, we are postured to deter conflict with the PRC. Through integrated deterrence, we will raise perceived costs to the PRC and deter aggression. If deterrence fails, then we will end the conflict on terms favorable to the United States.

Russia: Over 1 year ago, Russia undertook an illegal and unprovoked war against Ukraine threatening peace and stability on the European continent—a peace that ensures global stability and an international order where all nations can prosper. Russia's invasion of Ukraine is in complete contradiction to the basic rules that underline the United Nations Charter established at the end of World War II. Russia's war is a brazen assault against the free people of Ukraine and threatens to destabilize all of Europe and beyond.

In response to this Russian war of choice, we are supporting Ukraine as it fights to protect its sovereignty and supporting our NATO allies with a United States force presence in every single nation on NATO's eastern flank. Putin's war of choice has caused untold human suffering and terrorized a free country and its people. Putin attempted to seize Kyiv, overthrow its government, and fracture the NATO alliance. NATO remains more unified than ever, and Ukraine remains free and independent.

The Ukrainian people have demonstrated immense bravery and resilience and inspired the world. The international community has come together to ensure that this unambiguous act of aggression by Russia does not go unanswered. This fight is not just in Ukraine's interests, it is in the global interest to protect the system and rules that have prevented great power war since the conclusion of World War II.

With the backing of the U.S. Congress, the United States is determined to continue to support Ukraine with the means to defend themselves. The United States has committed to provide Ukraine 160 155mm Howitzers, over 1,000,000 155mm artillery rounds, 38 High Mobility Artillery Rocket Systems (HIMARS), a Patriot air defense battery, 8 National Advanced Surface-to-Air Missile Systems (NASAMS), 31 Abrams tanks, and 109 Bradley Infantry Fighting Vehicles.

A broad mix of air defense systems protect the skies over Kyiv and the cities of Ukraine. Armor systems strengthen Ukrainian front lines enabling offensive and defense operations. Ukrainians employ long range fires to challenge Russian command and control and its ability to sustain Russian aggression. These systems will enable Ukraine to ensure that Russia does not achieve its strategic objectives. Russia failed in its initial war aims and continues to revise its strategic goals due to its sustained operational failures. Russia continues to pay extremely heavy costs on the battlefield.

Last year, in Poland, we established the first permanent United States installation on NATO's eastern flank. The United States maintains significant numbers of combat capable forces in Europe to deter aggression and to stand shoulder to shoulder with our allies and partners.

Russia retains a large nuclear capability to threaten the United States, Europe, and the globe. Vladimir Putin and his regime continue to use irresponsible nuclear

rhetoric and posturing. Russia has repeatedly demonstrated its capability and will to conduct complex malicious cyber activities targeting American digital infrastructure, both military and commercial.

Through private military companies, Russia continues to undermine other nations' sovereignty and create unstable security situations. Aside from its brutal war in Ukraine, Moscow's actions in Africa and the Middle East demonstrate its aggressiveness, resourcefulness, and opportunism. Russia is an immediate acute and very dangerous challenge to the United States' national security.

North Korea: Its continued weapons testing and development pose real threats to our Homeland as well as allies and partners in the Indo-Pacific. North Korea's rhetoric is becoming increasingly aggressive as it is growing more confrontational and continues to enhance its ballistic missile capability and capacity. Pyongyang shows no signs of relenting in its focus on its Weapons of Mass Destruction (WMD) program at the expense of its citizens and the peace of the Korean Peninsula as well as the entire region. Readiness of United States military forces on the Korean Peninsula and our ability to rapidly respond to provocation ensure stability and prevent war.

Iran: Iran's support for and involvement in conflicts in the region and its neighbors threaten to push the Middle East into broader regional instability and chaos. Through its funding of terrorist activities and support to partner and proxy forces inside the borders of its neighbors, along with its ballistic missile programs, Iran seeks to revise the regional order and balance of power in its favor. Iran's proliferation of UAVs across the region and into Russia pose critical security challenges for the United States and our partners. Iran is taking actions to improve its capabilities to produce a nuclear weapon, should it make the decision to do so, while continuing to build its missile forces. From the time of a national decision, Iran could produce enough fissile material for a nuclear weapon in approximately 10–15 days and it would only take several months to produce an actual nuclear weapon. The United States remains committed, as a matter of policy, that Iran will not have a nuclear weapon. The United States military has developed multiple options for our national leadership to consider, if or when Iran decides to develop a nuclear weapon.

Violent extremist organizations: Terrorist organizations such as Al-Qaeda, ISIS, Al-Shabaab, and others continue to export terror, destruction, and destabilization. Unless the root causes of instability that give rise to these types of groups are resolved, terrorists will continue to take root around the globe, threaten others with attacks, and undermine legitimate governments. The root causes can only be effectively addressed by including governments of the region and we can best influence outcomes with diplomatic, economic, information, stability, and counterterrorism efforts. Through coalition efforts to train, advise, and assist partners and allies as well as intelligence sharing, we will continue to ensure that terrorists do not possess the capacity and capability to exert their will. Our counterterrorism strategy is to work by, with, and through our regional allies and partners and to conduct direct action counterterrorism strikes when necessary to protect the United States or our interests.

Allies and partners: Our alliances and partnerships are key to maintaining the rules based international order and a stable and open international system promoting peace and prosperity. This budget allows us to build our partners' and allies' capabilities, foster interoperability, and strengthen relationships. Doing so allows us, our allies, and our partners to counter the coercion of our strategic competitors, oppose the malign activity of regional threats, and meet the varied security challenges posed by State and non-State actors. We are stronger when we operate closely with our allies and partners.

READINESS AND MODERNIZATION

Right now, we are experiencing a fundamental change in the character of war. The character of war—how, where, and with what weapons and technologies wars are fought—is changing significantly. We must fully integrate developing technologies including precision long range fires, hypersonic weapons, quantum computing, artificial intelligence, robotics, and pervasive all-domain sensors.

The current rapidly changing technology will provide decisive advantage to the nations that can integrate and fuse the capabilities into military weaponry, doctrine, training, organization, and professional development. The future operating environment will be highly lethal and will be characterized by the ability to see and sense the environment like never before. The attributes of the future Joint Force will be characterized by stealth, resilience, speed, distributed, agile, adaptive, in a constant State of motion, and, most importantly, highly lethal. Our leaders and forces will

operate independently in degraded communication environments with mission type orders in austere logistics.

Continued modernization is imperative for the Joint Force. Building the Joint Force required to implement our National Defense Strategy requires modernizing our capabilities, design, and employment. We must not allow ourselves to create the false trap that we can either modernize or focus only on today. We must do both. The United States has always had the advantage of time to conduct a long buildup prior to the beginning of hostilities. Our fortunate geography with oceans on our east and west borders and friendly neighbors to our north and south have given us the strategic advantage of buffer zones to threats. With advances in technology and a growing global interconnectedness, we will no longer have the luxury of a long protected buildup prior to conflict. It is imperative that we have a modern advanced force in sufficient size and readiness to enable sustained deterrence and, if required, to be able to fight and win. We must make some fundamental changes to our Joint Force in order to leverage our military overmatch to deter conflict in a future operating environment.

Our strategic competitors are modernizing their militaries, weapons, and capability. We must continue to modernize ours; we have no choice. We must divest legacy systems to enable the modernization of our forces.

In the fall of 2019, the Secretary of Defense tasked the Joint Staff to develop the Joint Warfighting Concept (JWC) to address strategic conflict. This year, the Joint Staff published the third iteration of JWC and will integrate the ideas into new joint doctrine. Today, JWC is the unifying vision to guide future force design, force development, and force employment to ensure we have the right people, equipment, training, roles, and doctrine. It will continue to incorporate evolving threats to help us shape our strategic environment and future operations. JWC 3.0 contains an updated description of the overarching military challenges facing the Joint Force, a refined explanation of the military solution—expanded maneuver—and a detailed description of how the Joint Force will apply this solution. This version of the JWC includes greater fidelity on key warfighting concepts and more precision on the operational approaches that will enable the Joint Force to gain positions of advantage against peer adversaries.

Joint All Domain Command and Control (JADC2) is a warfighting capability to sense, make sense, and act at all levels and phases of war, across all domains, and with partners, to deliver information advantage at speed to our forces and decision-makers.

We are revising our leader development *Joint Professional Military Education (JPME)* to support the JWC. We are modernizing our JPME curriculum to develop strategically minded joint warfighters, who think critically and can creatively apply military power. Our focus remains on instructing mission command, operational agility, and ethics to ensure our military leaders can effectively employ forces at all levels of warfare and respond to a dynamic battlefield. Additionally, we are increasing the amount of JPME devoted to the study of the changing character of war and Great Power Competition.

We are focused on building a more lethal Joint Force by ensuring that we continue to modernize our concepts, doctrine, training, and military education. We must continue to invest in capabilities that sustain our military overmatch, while strengthening alliances and attracting new partners. Investments in this budget ensure the Joint Force can execute all requirements leveed by our Nation. The investments made in this budget will ensure that we remain a capable and ready force while funding our priorities of *nuclear modernization, long range fires, hypersonic technology, artificial intelligence, robotics, shipbuilding, space, and cyber.*

Nuclear modernization: The *nuclear triad* is the foundation of our strategic deterrent. Our adversaries are improving their nuclear posture and potential nuclear threats continue to emerge. It remains critical that all three legs of the triad—bombers, intercontinental ballistic missiles, and submarines—remain a viable deterrent and allow us to hedge against geopolitical, technological, operational, and programmatic risks. Our legacy systems have been extended well beyond their original service lives and we must recapitalize our nuclear enterprise. Modernizing the nuclear triad will cost 3.7 percent of the Defense budget at its peak not including DOE/NNSA warhead modernization. Costs will be significant but relatively less burdensome on the overall Defense budget relative to previous recapitalization efforts. Modernization of our nuclear forces, weapons complexes, and requisite nuclear command, control, and communications (NC3) capabilities are a high priority.

Long range fires: The war in Ukraine highlights the strategic and devastating effect provided by long range fires. The Joint Force must have a long range strike capability without having to also maintain air superiority. Long range fires provide significant offensive capabilities that are both cost-effective and cost-imposing

means of improving deterrence. By enabling power projection from standoff ranges, the risk to critical United States assets decreases while the defensive burden imposed upon the enemy increases. These fires challenge an adversary's logistics, command and control, and basing forcing them to choose between increased risk or decreased effectiveness. The PRC has thousands of ground-launched theater-range missiles in its arsenal that would be difficult for the United States to counter given its current inventories. Investments in long range and hypersonic missiles launched from ground, sea, and air platforms are a cost-effective strategy that improves our ability to compete with the PRC. Recent budget requests have enhanced the lethality and resilience of the Joint Force by developing and expanding the long-range fires portfolio.

Hypersonic technology: Our adversaries are undertaking hypersonic weapons testing and development from a variety of delivery platforms. These weapons operate at speeds greater than Mach 5 and are maneuverable, which make the weapons challenging to detect and defeat. Weapons operating at these speeds will provide significant offensive capability that will challenge an opponent's decision timelines. We must invest in this technology to provide a suite of capabilities that provide transformational warfighting capability to our Joint Force.

Artificial intelligence and robotics: Decisionmaking in warfare is fundamental to the outcome. Militaries must be able to collect, analyze, and assess vast quantities of data in order to make effective decisions. The military that can iterate through the decisionmaking framework fastest will have decisive advantage. Artificial intelligence has the potential to reform military decisionmaking processes at the tactical, operational, and strategic levels of war to enable rapid assessments and decisions that outpace human abilities. Additionally, artificial intelligence combined with new military platforms could enable the proliferation of robots across the battlefield. Robots in the land, sea, and air domains could provide significant quantities of firepower, logistics, and communications capabilities while decreasing risks to our military forces. Through human-machine teaming, each human warfighter would have exponentially increased abilities to shoot, move, and communicate in battle to prevail over the enemy.

Legacy platform divestment: Maintaining and operating weapons that are not relevant in the future fight and whose capabilities are matched by superior technology need to be divested. Continuing to purchase and maintain legacy equipment takes needed Defense dollars away from the acquisition of higher priority systems necessary for modernization. I strongly urge Congress to enact legislation that authorizes the Department to divest select legacy platforms to ensure that every Defense dollar spent on programs and equipment is relevant for the next fight. We must not be influenced by a sunk cost bias, and we cannot continue to mortgage our future by being wedded to technology of the past.

Shipbuilding: The United States Navy must always be the world's most powerful naval force in capacity and capability. We must never accept 2d place in naval power. We are a maritime nation and the vast majority of international trade moves across the world's oceans. The United States is committed to a free and open global maritime common. Manufacturing our warships overseas is a strategic risk and is not in our national interest. Our shipbuilding and supporting vendor base are a national security capability that needs support to grow and maintain a skilled workforce. The fiscal year 2024 President's Budget reflects the Administration's strong commitment to continued American naval dominance, including improvements to our industrial base to meet the demands of our current and future defense needs. This Nation must have the right ships, with the right crews, and the right capabilities on the right timelines in the theaters where they matter. This budget specifically procures warships and submarines with credible combat power to deter the PRC. We must continue to invest in the industrial base to support remotely operated ship development, fleet modernization, on time delivery of the COLUMBIA class submarine, and to accelerate production and maintenance of VIRGINIA class submarines to support both the United States and AUKUS needs.

Recapitalization of the *sealift fleet* is necessary to enable joint power projection. Sealift ships transport 90 percent of war material and supplies in support of major combat operations. The DOD sealift fleet is approaching the end of its useful life with an average age of 48 years. Our overall sealift readiness rate is consistently below our stated requirements. I urge Congress to remove all limitations on the Department's ability to procure additional used vessels to replace these aging ships.

Space: Space is essential to our way of life. Space capabilities are vital to our economy, quality of life, exploration initiatives, and national security. Every year we see additional commercial space launches and increased competition for lower earth orbit.

Our adversaries view space as a warfighting domain and believe that achieving supremacy in this arena will be a decisive factor in winning future conflicts. The exosphere is already contested as Russia has tested both a ground-based anti-satellite missile and an on-orbit anti-satellite weapon prototype, which threaten our space capabilities. Both the PRC and Russia view counterspace capabilities as a means to reduce United States and allied military effectiveness. Additionally, our adversaries have demonstrated space-jamming capabilities and maintain independent launch capabilities. Left unsecured, our capabilities in space will become strategic vulnerabilities. I urge Congress to support the significant increase in this budget for United States space capabilities.

Cyber: Adversaries continue to use operations in the cyber domain to compete with the United States and attempt to gain an information advantage. Malign cyber actors exploit commercial software vulnerabilities to gain network access and conduct cyber operations against United States citizens, organizations, and institutions. The low-cost barrier to entry and attribution deniability make this a priority method for adversaries to compete below the level of armed conflict while minimizing risk of escalation. The PRC, Russia, Iran, and North Korea use a range of cyber capabilities from information operations (IO) to cyber-attacks to collect intelligence, position for future operations, impose costs, and signal to the United States and adversaries.

Therefore, we must increase our ability to compete and prevail in cyberspace while ensuring all elements of informational power are integrated into operations, activities, and efforts to deter our adversaries and protect the United States Homeland. This requires investments in technology, building and maturing cyber readiness and operations, reducing risk to weapon systems and critical infrastructure, strengthening cybersecurity, and improving network resiliency.

Advanced Capabilities: The changing character of war necessitates that we continue to modernize and innovate our technology, capabilities, and training. Data and communication networks are fundamental to how the United States trains, plans, and employs force. We must have rapid and robust linkages from sensors to shooters in a networked information environment. This will require investments in *microelectronics and quantum computing* to ensure we maintain a technological edge over our adversaries. The current globally distributed supply chains as well as access to critical materials and rare earth metals present vulnerabilities to the Joint Force's ability to acquire necessary parts and technology in the event of crisis. We must also find ways to deepen collaboration on advanced capabilities with our closest allies and partners, such as our trilateral cooperation under AUKUS.

TAKING CARE OF OUR PEOPLE

People are our most important resource in the Joint Force. We must ensure that we are doing all that we can to take care of and guard our most critical resource. Taking care of people is a critical readiness issue and it decisively impacts unit cohesion, recruitment, retention, and confidence in leadership.

To attract, grow, and retain the best talent in the world, we must ensure that we are always taking care of our people. I urge Congress to support this budget's significant pay raise, healthcare, and housing initiatives. Additionally, this budget strengthens our accountability and prevention measures for sexual harassment and sexual assault. Finally, this budget supports improving our mental health and suicide prevention programs. Each of these initiatives is fundamental to taking care of our troops and their families.

We are ensuring that the military departments increase their *childcare capacity,* and the DOD system remains the gold standard of childcare. The DOD operates the country's largest employer-sponsored childcare program, with over 27,000 staff members providing daily care for more than 160,000 children from infancy up to age 12. This fiscal year, the DOD is making a significant investment in constructing new child development centers as well as repairing, renovating, and maintaining existing child development centers to ensure our children are in safe and well-maintained facilities. Funding support from Congress is vital for fully staffed military childcare, and to support efforts to expand capacity in the community. Childcare is key to keeping working families working, reducing the high unemployment faced by military spouses, and ensuring the safety of our military children. Despite the childcare capacity and quality provided by the DOD there are still challenges for military families to access that care or quality care in the community.

This budget equips our servicemembers and families with the tools, skills, and resources necessary to ensure their health and well-being. The health and wellness of our force is a readiness, retention, and recruitment issue.

The Joint Force is committed to *growing our talent* and ensuring that all who meet the requirements to serve are able to serve. The Joint Force competes for the

talent of America's youth along with every other business and organization who seeks our Nation's best and brightest. The Joint Force's objective is to field the most lethal and combat effective fighting force in the world. We will continue to support the accessions of all qualified people to all jobs and positions within the Joint Force.

CONCLUSION

The United States Joint Force is a flexible and adaptable force ready to deter, fight, and win our Nation's wars. Significant threats exist across the globe and the United States is ready to respond to these challenges. The PRC continues its aggressive attempts to revise the global order for its own benefits. It is building up its military might to achieve its goals through the use of force. With its illegal and unprovoked war in Ukraine, Russia attempted to overturn the rules based international order and fracture NATO. Russia's war of aggression and nuclear rhetoric is irresponsible and risks miscalculation and escalation.

International aggression, where large countries use military force to attack smaller countries and change recognized borders, cannot be allowed to stand. The Joint Force will continue to work with the interagency and in cooperation with our allies and partners to deter aggression and threats to the free world. America's network of allies and partners is a strategic source of strength. It is this robust network, this team of teams, that stands against those autocratic, revanchist, and revisionist regimes that are uninterested in a connected and prosperous world.

It is within this framework that it is imperative we modernize our force, training, and doctrine to remain the most capable and ready force on the planet. The United States has been challenged before by many other adversaries. Yet, conflict is not inevitable—our military might makes war less likely by allowing us to deter across the spectrum of conflict. Our contract with the American people is that we, the United States military, will always be ready to protect the Constitution and the fundamental principles of what it means to be American. We will always protect and defend this experiment in liberty, to deter our enemies, and, if deterrence fails, then to fight and win.

Chairman REED. Thank you very much, General Milley. Secretary McCord, do you have a statement?

Mr. MCCORD. No, Mr. Chairman, other than to wish your staff director a speedy recovery.

Chairman REED. Thank you very much. Secretary Austin and General Milley, logistics is not the most exciting topic, but in many cases, it is one of the most crucial topics, particularly in the Pacific where distances are much an enemy as our opposing forces.

First, Mr. Secretary and then General Milley, can you comment upon the investments we are making in modernizing our logistics, particularly INDOPACOM area, Command and control activities that would help deliver these resources to our troops?

Secretary AUSTIN. Thanks, Chairman. As I stated earlier, we in this budget, we are asking to invest some $9.1 billion in the Pacific Deterrence Initiative. That will enable us to strengthen forward infrastructure so we can continue to forward deploy troops.

That will enable us to deter further forward in theater. In addition to that, we have pushed a number of our sustainment elements like fuel further in into the theater, and we continue to make sure that we have a diverse and agile footprint so that we can rapidly respond to any challenge.

But I think that we are investing in the right things and going after the right capabilities to make sure that we can operate further forward.

Chairman REED. General Milley, please.

General MILEY. Yes, Senator. Thank you. The key here is—one of the keys here is ammunition. The Secretary has directed that we analyze all of our ammunition stoppages in light of what is going on in Ukraine.

Well, that is a key area that we need to increase our capabilities here in the coming years, is ammunition. The second piece there is lift. In the area of lift, both sealift and airlift, there is a lot of investments in this budget and previous budgets.

That will be an area that requires continued sustained levels of effort, is in order to move the force, projecting power is a key attribute of the U.S. Military, and we do that through sealift and airlift.

That is the second key point, and the last one, I would say, is the posture. The Secretary has initiated a series with the INDOPACOM Commander, a series of posture adjustments in the Pacific, which should better position us for sustainment, logistical sustainment, if any conflict ever happens.

Chairman REED. Thank you very much. Mr. Secretary, we are in a moment where we are having a challenge getting general officers off the floor of the Senate and to their assigned stations after they have been recommended by the Department of Defense and cleared in terms of their performance and their capabilities.

Can you tell us what the cumulative effects of this would be in terms of denying promotions to people who are going to take key jobs?

Secretary AUSTIN. Thanks, Chairman. The effects are absolutely critical in terms of the impact on the force. This is one of the busiest times or one of the most complex times that we have seen lately.

We see a war, the largest conflict in Europe since World War II. We see an aggressive China operating in the Indo-Pacific. We see Iranian backed elements going after our troops, and there are a number of things happening globally that indicate that we could be in a contest on any one given day.

Not approving the recommendation for promotions actually creates a ripple effect through the force that makes us far less ready than we need to be. If you look at what we have coming up, I mean, there are three, I think—well, five, three-star promotions that are near term, and one of those is a Commander of our fleet out in the Gulf. That is a critical position, and then that starts to multiply, 70 more positions, three-and four-star positions over time.

They include the chiefs of the Army, the Marine Corps, the Navy, and also the Chairman's replacement at some point in time, although nobody wants to see that happen. So, the effects are cumulative and it will affect families, it will affect kids going to schools because they won't be able to change their duty station, and so, it is a powerful effect and will impact on our readiness.

Chairman REED. As I look forward, I have never in my almost 3 decades here seen so many key military positions coming up for replacement. We have the Commandant of the Marine Corps, the Chief of Staff for the Army, the CNO [Chief Naval Officer] of the Navy, and as you mentioned, the Chairman of the Joint Chiefs of Staff by law has to leave in September.

If we cannot resolve the situation, we will be, in many respects, leaderless and at a time of great conflict. So, I would hope we would expedite and move quickly on this front. Thank you. With that, let me recognize Senator Wicker.

Senator WICKER. Thank you, Mr. Chairman. Let me just start with a couple of short answers—I hope these will be. Secretary Austin, first, would you agree that this is the most complex and dangerous threat environment since World War II?

Secretary AUSTIN. Yes, Senator, I would say that is one of the most complex periods that we have seen.

Senator WICKER. General Milley.

General MILEY. Yes, Senator.

Senator WICKER. Over the past 2 years, Congress has added nearly $30 billion to the President's request in fiscal year 2022 and $45 billion to the President's request in fiscal year 2023—$75 billion added over the request of the President. Have these additional resources increased our national security and decreased military risk? Mr. Secretary.

Secretary AUSTIN. They have, Senator. It always helps when you get additional resources, but if you get additional resources with additional requirements, it doesn't help as much.

Also, if we can stop doing some of the things that create a drag on our force in terms of cau]sing us to spend money on things that are not relevant in a future fight, that also helps as well. We appreciate Congress's support in the past for allowing us to get rid of things that are no longer relevant.

Senator WICKER. You are welcome on that. General Milley, same question. Has the $75 billion added to our national defense expenditures—have those funds increased our national security?

General MILEY. Yes, I believe they have.

Senator WICKER. Decreased military risk?

General MILEY. Correct.

Senator WICKER. Okay. Thank you very much. Secretary Austin, the Biden administration has authority to send $1 billion worth of United States weaponry to Taiwan. That is similar to the policy and the authority we authorized with regard to Ukraine. Will the Biden administration exercise this $1 billion and draw down the authority that Congress provided last year?

Secretary AUSTIN. We will, Senator. My team is working diligently to make sure that we have the right capabilities in that particular draw down. Of course, we have the authority. We will need the appropriations as well.

Senator WICKER. Okay, you will need an appropriation to replenish that. Is that correct?

Secretary AUSTIN. That is correct, sir.

Senator WICKER. The Administration will be requesting a replenishment funding for the transferred defense articles. Is that correct?

Secretary AUSTIN. That is correct.

Senator WICKER. Okay. Let me then talk about your assessment with regard to Ukraine, I believe you told me, Secretary Austin, that you believe Ukraine now has the upper hand in the war against Russia. Is that correct?

Secretary AUSTIN. That is correct. This is a highly contested fight, Senator, as you know, and we have seen the tide move back and forth. Most recently we have seen some pretty significant fighting in the Bakhmut area.

Senator WICKER. Right. But just with regard to your optimism about Ukraine having the upper hand, that is what you told me yesterday.

Secretary AUSTIN. It is now—what I was about to say, Senator, is that the Ukrainians have inflicted significant casualties on the Russians and they have depleted their inventory of armored vehicles in a way that no one would have ever imagined.

Now we see Russia reaching for T–54 and T–55 tanks because of the level of damage that the Ukrainians have inflicted on them, and we have in the meantime——

Senator WICKER. But that means reaching for those tanks demonstrates what to you, sir?

Secretary AUSTIN. It demonstrates that their capability is waning, and we have continued to witness them being challenged with artillery munitions and other things, and are reaching out to Iran, are reaching out to North Korea.

I think, we will see an increase in the fighting in the spring as conditions for maneuver improve. Based upon the things that we have done and continue to do, I think Ukraine will have a real good chance——

Senator WICKER. Do you believe—yes, we are pressed for time, sir. Do you believe there is a real chance for significant Ukrainian advancements between now and the beginning of winter?

Secretary AUSTIN. I believe that there is a chance and we are doing everything that we can do to ensure that they have their best opportunity to be successful, Senator.

Senator WICKER. Thank you, and if the chair will indulge me, Mr. Secretary, you have got a pretty big congressional relations office in your shop, do you not?

Secretary AUSTIN. I do.

Senator WICKER. Do you agree that it should have occurred to someone in that office to inform Senators who were debating about Iran last Thursday about what had occurred with regard to attacks in Syria?

Secretary AUSTIN. Senator, I think you know that we take the War Powers Act very, very seriously. After every operation, we are required to debrief Congress and we lean forward and try to ensure that Congress is briefed before we conduct an operation.

We also—in this case, we had an attack in—and we launched an attack on the adversaries in the same time period, same short period of time. Because of that compressed time, we did both notifications at the same time. We should have notified you earlier, and we will endeavor to do so——

Senator WICKER. Well, as a matter of fact, Mr. Chairman, if I might, the attack occurred and counterattack occurred in the wee hours of the morning, and Members of the Senate were not notified until very late in the afternoon or early evening. That is the fact, is it not?

Secretary AUSTIN. No, sir. The attack occurred in the morning and the counterattack occurred evening, our time, eastern time.

Senator WICKER. Okay, and so, after the attack occurred, it did not dawn on anybody in Congressional Affairs to notify Members who were debating this very issue on the Senate floor. I think that is correct.

Secretary AUSTIN. Senator, our goal is that is to make sure that we keep you informed. We will do everything within our power to make sure that we improve our performance.

Chairman REED. Thank you very much, Senator Wicker. Senator Shaheen, please.

Senator SHAHEEN. Thank you. Secretary Austin, General Milley, thank you both for being here this morning and for your service. General Milley, thank you, especially for all of the years that you have given to this country and to all of us.

We will miss you, even if you may not miss these posture hearings. Secretary Austin, I understand that the Department may be in the final stages of the review of information operations that was required by the 2020 NDAA.

Can you give us any insights into what that may show and how important you think information operations are as we look at the modern defense and whether there is money in the budget requested to address expanded information operations?

Secretary AUSTIN. Thanks, Senator. I think what we will find is that that work will show that information operations is increasingly relevant and increasingly valuable in terms of enabling our operations, and also understanding and countering what our adversaries are doing.

So, we will continue to work to refine our policies and procedures and develop talent in this area as well. But this is a key area, and we see it every day as we watch the Ukraine, Russia fight and the relevance of those operations in that fight.

Senator SHAHEEN. Well, one of the areas where information operations have been important is in the Black Sea region, and certainly, we saw with the downing of the drone just how important that region is to our national security.

Can you talk about what the most pressing threats are that Russia poses in the Black Sea and what we are thinking about going forward as a strategy to respond to that?

Secretary AUSTIN. Well, certainly, Senator, Russia would aim to completely control the Black Sea and deny our allies and partners the ability to have continuous access to the sea. You know, I was in the region before this fight started and had engaged with our allies and partners and talked to them about the importance of the access to the Black Sea, encouraged them to work together, and also wanted to make sure that we were doing everything within our power to help them strengthen their capability and strengthen their interoperability. So, this is critical and this is something that I think we need to continue to put energy into.

Senator SHAHEEN. Well, thank you. I was in the region in February, and I can tell you and the countries that I visited, Georgia, Romania, that there was a great deal of interest in the fact that we might have a more comprehensive approach to the region that deals not just with national security, but also with economic and democratic initiatives there.

Over the past several years alone, Congress has appropriated over $1 billion in funding for PFAS [Per- and Polyfluoroalkyl Substances] related activities, testing, remediation. My—the most recent information I have seen suggests that there are more than 700

contaminated military sites across the country, including the former Pease Air Base.

Congress has shown a willingness to accelerate testing and cleanup by increasing funding, and yet the Department claims that it is unable to execute those increased funding levels. We appropriated $517 million or authorized it in fiscal year 2020.

Can you speak to what needs to happen in order for the Department to make better use of the funds that Congress appropriated to—appropriates to address PFAS?

Secretary AUSTIN. We will continue to make every effort to make best use of those funds. I think you see in this budget, we have asked for another $400 million.

To your point, Senator, if funds are not executed in one particular year, I think they roll over to the next year. So, we have the benefit of using the funds that were not completely executed last year, plus the $400 million we are asking for this year.

We will make every effort to make sure that we are doing everything within our—that is possible to utilize the funds, and where we need more, we will come back and ask you for more.

Senator SHAHEEN. Well, thank you. I appreciate that. I hope you will also take a look at our willingness to be transparent with the public where sites have been contaminated because there is a great deal of distrust, I think, about information sharing from the Department of Defense, and least we have seen that in the site in New Hampshire.

I think that undermines our ability to address what needs to be done in those sites to clean up the contamination and to encourage the communities to do what they need to do to address the problem. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shahee. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. For years, we have underinvested in our munitions production and we are starting to reverse that trend but more needs to be done to increase production. Secretary Austin, what is the Department currently doing to increase munitions production capacity and what more does it seek to do in fiscal year 2024?

Secretary AUSTIN. Well, thank you, Senator. Let me thank Congress for what you have done to authorize a multiyear procurement capability. That sends a strong signal to the industrial base.

Also, the numbers that you see reflected in our budget request for procurement sends a strong signal as well. In this particular budget, we are asking for $30 billion to invest in munitions and that helps us go after the right kinds of munitions that we think we need to replenish stocks and to make sure that we get ahead as well. Also, it allows us to invest a bit in the industrial base.

Now, we are engaging the, you know, our partners in the industry and trying to do everything we can to work with them, to expand their capacity and their capability. But to your point, there's a lot more work that needs to be done.

Senator FISCHER. The Committee has worked to modify or remove older and unnecessary contracting requirements so we can get contracting officers to move faster on replacing munitions in Ukraine. Would it be useful to be able to remove or modify these

unnecessary requirements for weapons related to most, really our most pressing challenges in the Western Pacific and in Taiwan as well?

Secretary AUSTIN. Absolutely. Absolutely, it would.

Senator FISCHER. Thank you. General Milley, the current U.S. nuclear modernization plan was originally designed in 2010 when nuclear threats were much less severe than they are today. However, since then, every DOD modernization program, along with every Department of Energy (DOE) infrastructure project and warhead program, has been delayed or it has been reduced in its scope.

Can you tell me how we are going to meet the rapidly growing threats from China and Russia with a force that is smaller and with a force that delivers later than we planned for more than a decade ago? Basically, I am asking you, how are we going to recognize challenges we have today and meet them?

General MILEY. Thanks, Senator. As you know, the nuclear capability of China is growing, and we can cover that in some detail in a classified session, if you so desire.

The recapitalization of the nuclear triad is the Secretary and President's number 1 defense priority. That is what has been one of the most significant contributors to great power peace in the last eight decades. So, it is imperative for us, the United States, to recapitalize that entire system with the silos, the bombers, as well as the subs, but also the NC3 system.

That is really critical, and it does bother me that some of these programs are behind and they are coming in at over cost, over budget. But we are going to get there and it will be a safe, secure, reliable system, guaranteed that, and we will maintain the strategic deterrence that we have kept for 80 years.

Senator FISCHER. Last year, you, along with nearly every other senior U.S. military officer, testified that we need to provide Presidents with more nuclear options than we have today. Do you still agree with that sentiment?

General MILEY. I do. I believe that——

Senator SHAHEEN. Okay, thank you. Yes, is fine.

General MILEY. Sure.

Senator FISCHER. As a Member of this Committee and also as a Member of the Senate Commerce Committee, I have worked for years to promote efficient spectrum management by the Federal Government without endangering the mission critical operations of the Department of Defense.

Coordination among the agencies can be difficult, and it can be slow. Proactive communication among all stakeholders, I believe, is key for that better coordination. That is why I, as Ranking Member of the Strategic Force Subcommittee, I send a letter to the Subcommittee Chairman—with the Subcommittee Chairman, Angus King, to the Department of Defense last year that asked for more details about the Department's concerns with proposed spectrum reallocation in the lower 3G.

DOD's response pointed to the 2020 IDA [Institute for Defense Analyses] report, but there are still far more details that we need to learn about what may or may not work for reallocation in this band. Fortunately, there is an ongoing study, and I appreciate that, the Path study that should provide those details.

General Milley, my time is almost up and I expect my friend from South Dakota will have a conversation with you about this as well. But for the record, and please answer yes or no, is it your best military advice that the ongoing Path study as currently authorized, as currently authorized, should be completed in order to inform the ongoing spectrum negotiations?

General MILEY. Yes.

Senator FISCHER. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Fischer. Before I recognize Senator Gillibrand, let me just remind all my colleagues, there will be a classified hearing in the sciff SCV–217 at the conclusion of this open hearing. Senator Gillibrand.

Senator GILLIBRAND. Thank you, Mr. Chairman. Mr. McCord, I was disappointed that for the second year in a row, the All-Domain Anomaly Resolution Office, or AARO, was not fully funded in the Department's budget request. Understanding that we cannot get into specific budget figures in this form, can you discuss why AARO was not fully funded?

Mr. MCCORD. Senator, I don't have any information from my colleague, Under Secretary Moultrie, that he needed additional funding in this area. It is a relatively new office we are standing up, so I was under the impression, I am under the impression that we have adequate funding for the relatively new State of this. But I will double back with him if there is a concern.

Senator GILLIBRAND. I need you to send a letter to this Committee in writing about why it wasn't fully funded. Several Senators signed a letter to Secretary Hicks asking that it be fully funded in this budget and we specified in a classified annex exactly what funding wasn't being met and its operational funding, its basic operational funding, so I am highly concerned about this.

Secretary Austin, the incidents last month involving the Chinese high-altitude balloon and the three unknown objects highlighted the need for us to continue to improve our understanding of UAPs over United States airspace. Do you intend to ensure AARO receives full funding in the future?

Secretary AUSTIN. I will, Senator, and we—in this budget, we have asked for $11 million in support of the office, of that initiative.

Senator GILLIBRAND. That is not the budget request. Will you investigate why the budget request isn't being met and be part of the response——

Secretary AUSTIN. I will. I will.

Senator GILLIBRAND. Thank you. Secretary Austin, on March 17, Qin Gang, the Chinese Foreign Minister said that the United States and China are heading toward inevitable "confrontation and conflict."

This comes as the STRATCOM Commander testified that "the PRC seeks to match or in some areas surpass quantitative and qualitative parity with the United States in terms of nuclear weapons."

During the cold war, the United States and the Soviet Union developed lines of communication to prevent escalation or outright hostilities during heightened tensions and developed norms and mechanisms to avoid miscalculations.

How would you characterize your relationship with your PRC counterpart, and what steps are you taking to reduce the risk of miscalculations during a period of heightened competition between our countries?

Secretary AUSTIN. Well thanks, Senator. I think you have heard me say two things. The first thing is that Chairman—what the Chairman said earlier that I don't see conflict as being imminent or inevitable.

But I do think it is important that leaders and great powers have the ability to talk to each other, to manage escalation, to manage crises. You have seen me reach out to my former counterpart, Minister of Defense Wei, who has now moved on, and encourage him to keep the lines of communication open.

He has now been replaced by a new minister and I have yet to have the have the ability to engage him, but I will continue to make sure that we reach out. I do think that is critical.

Senator GILLIBRAND. Secretary Austin, we have international legal structures to address the conduct of our forces in war. While we have international treaties that govern the use of space, there is ongoing debate about whether these treaties would apply during an armed conflict, and what types of counterspace weapons are permissible.

What steps is the Department taking in coordination with Department of State to reinforce international norms and whether we can safely rely on our use of space assets, both legally and lethally during a conflict?

Secretary AUSTIN. Well, this is an issue that the interagency of our Administration, we continue to engage on. Secretary Blinken, as you know, also has engaged our allies and partners on this issue at the U.N. [United Nations] and in other fora. We think it is important. The Administration thinks it is important, and this is something that we will continue to work on.

Senator GILLIBRAND. Thank you, Mr. Secretary. I appreciate the policies you issued on March 22d supporting our military families, and it is critical to their well-being and ability to retain strong military force. DOD's own surveys show that 24 percent of our servicemembers experience food insecurity.

Last year, I met with military families on Staten Island who spoke about the challenges they face in basically putting food on the table to feed their kids. However, very few servicemembers are considered eligible for basic needs allowance or the BNA, under existing BNA programs since BAH [Basic Allowance for Housing] is included in family income calculations.

Can you tell me how you intend to ensure that food insecurity in military families have access to the BNA or other measures?

Secretary AUSTIN. We will have the authority next year to move to a higher number, a higher percentage, 150 percent will actually move before we are required to move. We plan to move in July.

That will allow us to help more families. But you have seen this with your support, Senator. You have seen us ask for a pay raise last year, 4.6 percent. You have seen us raise BAH amounts, and you have seen us work to get childcare costs down. So, we are trying to increase the resources and reduce the strain on families and

hopefully that total equation will create benefits for our families and our troops.

Senator GILLIBRAND. But will you consider removing BAH from the calculation for BNA?

Secretary AUSTIN. We will do whatever what is ever feasible, what we are allowed to do by law.

Senator GILLIBRAND. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Gillibrand. Senator Cotton, please.

Senator COTTON. Mr. Secretary, I want to return to the issue of the strikes in Syria last week and Senator Wicker's line of questioning about the timing of notification to Congress. You said that you "should have notified Congress earlier."

These attacks happened against our troops, killing one contractor early in the morning eastern time. Do you believe that you should have notified us that morning while we were voting on amendments directly related to this kind of attack?

Secretary AUSTIN. Again, there is no connection between when we notified you, Senator, and your vote. The Chairman and I were testifying that morning as well, so as soon as we came out of testimony, we began work on crafting response options.

Senator COTTON. Secretary Austin, I don't believe you. I believe that your office specifically withheld notification of this deadly strike against Americans because the Rubio amendment, on which we voted midday, directly touched on exactly this scenario, not repealing these use of force resolutions if the President couldn't certify that Iran was no longer attacking us in Iran, in Syria.

That is what I believe. Nothing you can say is going to change my belief about that, and I got to say, I think I speak for a lot——

Secretary AUSTIN. I just want to say, Senator, that is absolutely not true.

Senator COTTON. Maybe you didn't personally do it, maybe you didn't personally do it, but I believe entirely that people in your office did that. You have a vast legislative operation, as Senator Wicker pointed out. Do you really expect us to believe that they didn't know that we were voting on a Rubio amendment that directly, directly covered exactly this kind of attack? I don't believe that.

I don't believe it. I believe there was a conscious decision made not to inform Congress because you fear that it might lead to the passage of the Rubio amendment, which would kill the entire bill.

But I want to move on to a more important part, which is these attacks in the first place. How many attacks has Iran or its proxies launched against American positions in Iran and Syria since Joe Biden took office?

Secretary AUSTIN. There has been about 83 attacks, I think, since—in the last several years.

Senator COTTON. That is a lot of attacks over 2 years. How many times have we retaliated against Iran or its proxies?

Secretary AUSTIN. We have launched four major strikes, Senator. But an attack can consist of a number of things. It can consist of, a rocket that is fired in the direction of one of our bases but not effective.

Senator COTTON. Mr. Secretary, I am well aware of what an attack could entail. So 79 and 4 is Iran's record right now, and our four attacks have not been against Iran, right, they have been against Iran's proxies in Iraq or Syria or elsewhere. Is that correct?

Secretary AUSTIN. That last attack was against IRGC [Iranian Revolutionary Guard Corps], Quds force infrastructure and——

Senator COTTON. Okay, and after we retaliated, Iran attacked us again, injuring another American, didn't it?

Secretary AUSTIN. They did.

Senator COTTON. We retaliated for that attack on Friday.

Secretary AUSTIN. We have not yet, Senator.

Senator COTTON. So, what kind of signal do we think this sends to Iran when they can attack us 83 times since Joe Biden has become President, we only respond 4.

Maybe it is because they know that until—that we will not retaliate, until they kill an American, which emboldens them to keep launching these attacks which kill Americans.

What is our rules of engagement for on the ground Commanders throughout the region? Are they allowed to engage immediately if their position has been attacked?

Secretary AUSTIN. They can and they do, and there have been several instances of that.

Senator COTTON. I have got to say, I have heard from company and field grade Commanders who have been in the region very recently, and they say there is a lot of confusion over that.

Let me move to a related topic, and that is our operations of unmanned aircraft in the Black Sea. Russia down one of our Reaper aircraft a couple of weeks ago. Have we flown those aircrafts into the exact same space since it was downed?

Secretary AUSTIN. We have flown on the paths that we want to fly in the Black Sea to collect intelligence information.

Senator COTTON. So that is a far—that is far from a yes answer. I said, have we flown in the same airspace? You have said we have flown in the path we want to fly to collect intelligence. So, if we adjusted our flight patterns, have we moved down of that airspace?

Secretary AUSTIN. We will fly the paths that we feel necessary to collect intelligence information.

Senator COTTON. So according to an Administration official from an article in CNN on March 21st, we are not flying in that airspace "to avoid being too provocative." So, are we removing our aircraft out of the space from that which that Reaper flew because we don't want to be too provocative toward Russia?

Secretary AUSTIN. Senator, you may have heard me say immediately after this incident to—that I told my counterpart that we are going to fly the skies, the international skies, and sail the seas as we wish, and so, we continue to fly in that airspace.

Senator COTTON. In the exact same airspace where that Reaper was downed?

Secretary AUSTIN. Again——

Senator COTTON. You haven't pulled back from Crimea or from the Ukrainian or the Russian coasts?

Secretary AUSTIN. I recommend we take this to a closed session.

Senator COTTON. We can and I think it answers the question, though, and it gets to the point I am trying to make here. We con-

tinue to deter ourselves against our adversaries. We let Iran launch 83 attacks against us and we only respond 4 times.

Russia downs one of our aircraft and we pull back from that airspace just like we have been delaying ballistic missile tests over the last 2 year, or over the last year. Just like we let a Chinese spy balloon float across the country when we could have done it across the Aleutians.

Now, I don't necessarily think these are Secretary of Defense calls. I think these are Commander-in-Chief calls. But we shouldn't be surprised when our adversaries get emboldened and more aggressive in all these theaters when we continue to deter ourselves.

Chairman REED. Have you finished, sir? Thank you, Senator Cotton. Let me recognize Senator Blumenthal.

Senator BLUMENTHAL. Thanks, Mr. Chairman. Thank you all for being here. Thank you for your service, not only over many decades, but in this role, and particularly at a time when the threats are as great as any time that most of us can remember.

I have been to Ukraine three times over roughly the last year visiting Kyiv and President Zelenskyy, and recently followed you, Mr. Secretary, to visit our base in Bavaria, where we are training Ukrainian fighters in the use of Bradley armored vehicles and combined arms.

The bond between our soldiers and their fighters is extraordinary because of our respect for their will to fight, and that is what I have seen in the Ukrainian people. They will fight with pitchforks, if necessary, but they need a lot more.

I want to thank you and the President for committing to do whatever it takes. I think I am almost quoting exactly. In my view, whatever it takes includes airplanes, aircraft. Would you agree that as a strictly military matter, and you know a lot more about this than most of us at this side of the table, that that kind of air support from the United States is going to be necessary, and the sooner, the better?

Secretary AUSTIN. Thanks, Senator. First of all, thanks for your continued support and for the support of Congress. It is phenomenal what we have been able to do in what we have helped Ukraine be, the kinds of effects they have been able to achieve based upon our support.

As you know, the United States of America leads the way on that. We talk to our counterparts every week, sometimes multiple times a week, and I meet with them in person every month.

What they need right now more than anything else is air defense, and that is the critical need on the battlefield, and they also need long range fires in armored capability. We are providing them a real substantial package of capability in terms of platforms, but not just that, we are also providing training and we are providing sustainment.

Sir, you witnessed some of that coming together when you were in Grafenwohr, and I really appreciate you going out there and visiting our troops. I think those capabilities will make the biggest difference in the near term, and they must be successful going forward.

We know the spring fighting seasons in front of us here and we want to make sure that they have what they need to be successful.

Senator BLUMENTHAL. I apologize for interrupting, Mr. Secretary, but I want to come back to the aircraft, because as you have identified it very clearly and I agree totally, air defense is critical.

We have a narrow window of time, and in fact, this spring will be crucial. Some of our allies are providing planes, but we have the resources, and only we really have the resources to provide the aircraft necessary for fully robust air defense.

Secretary AUSTIN. If you are talking to F–16s, whenever you make that decision, in order to put together what needs to be put together, to provide that capability, is going to be 18 months or so in the making.

That won't help them in this current fight, and will they have a capability at some point down the road? We all believe that they will. What that looks like, it could look like F–16s. It could look like some other fourth generation aircraft. But we will continue to work with our allies and partners to make sure that Ukraine has what it needs.

Senator BLUMENTHAL. Thank you. Thank you, Mr. Secretary, and again, I want to thank you and the President for your commitment, which I think is deeply appreciated by the people of Ukraine as well. I want to focus on a very narrow issue relating to procurement, which is the helicopter acquisition and development for the FLRAA contract.

A number of my colleagues and myself had asked the Army for an explanation for the award of that contract—it is under challenge right now. Will you commit to provide us with an adequate explanation? So far, the Army has been totally unforthcoming.

Secretary AUSTIN. I will commit, Senator, once the protest is resolved, we will make sure you get a thorough briefing on this issue.

Senator BLUMENTHAL. Shouldn't we have it now rather than at some indefinite point in the future?

Secretary AUSTIN. Well, sir, you know that it is inappropriate to once—while this is under protest, to do that. I commit to you that as soon as we can, we will provide you that information.

Senator BLUMENTHAL. Thank you. I want to ask one last question. Suicide among our servicemembers continues to be a desperately important problem. I will be meeting later today or this week with the family of Master of Arms Seaman Recruit Xavier Mitchell Sandor, who took his own life while he was stationed on the USS *George Washington.*

He was among three who committed suicide while that ship was under maintenance and repair. Similar kinds of suicides have happened on other ships under similar circumstances. The report is still outstanding. There have been no completion of the investigation a year after that event. I know you are very concerned about the troops.

Nobody cares more than you do about the well-being, and I include the Chairman in that sentiment. Can you tell us that additional measures will be taken and that there will be a report forthcoming about Xavier Sandor?

Secretary AUSTIN. I will. I will make sure that Secretary Del Toro ensures that this investigation moves on a timely fashion and in a very thorough fashion.

I would also tell you that I have asked Secretary Del Toro to make sure that he is personally focused on this issue, specifically related to ships that are in maintenance and the berthing associated with those ships.

He has, in this budget, Senator, asked for some $258 billion to address that issue, and I think that is a good start, but I think we need to continue to make sure our leadership is doing the right thing, that we have adequate housing for our young men and women. They are our national assets. I truly believe that he will remain focused on this, but I will as well, so.

Senator BLUMENTHAL. Thank you, Mr. Secretary.

Chairman REED. Thank you, Senator Blumenthal. Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman. Let me begin by thanking all of you for your service to our country, recognizing Secretary Austin, not just for your time in uniform, but your time as Secretary as well. General Milley, recognizing your time as Chairman of the Joint Chiefs, but not only that, but the amount of time that you and your family have served our country, we sometimes gloss over that.

I recognize I don't have a lot of time, but I just want to make this clear, it is not just the time that you spend in the Pentagon, it is the time that you have spent boots on the ground.

You have had operational deployments, including the Multinational Force Observer, Sinai, Egypt, Operation Just Cause in Panama, Operation Uphold Democracy in Haiti, Operation Joint Endeavor, Bosnia, Operation Iraqi Freedom in Iraq, and three tours during Operation Enduring Freedom in Afghanistan.

You have also deployed to Somalia and Colombia. We thank you for your service to our country, sir, and your family as well, because when you deploy, they are deployed as well. Thank you.

Gentlemen, both for Secretary Austin and Chairman Milley, last week you both clarified that you support waiting until the conclusion of the ongoing study before any decision should be made on auctioning parts of or any of the 3.1 to 3.45 gigahertz spectrum band.

My question is, should an auction occur before the study is complete? What are the real-world impacts on national security from a defense and budgetary perspective?

Secretary AUSTIN. It would be devastating, Senator, and it would take us somewhere north of 20 years to try to recover from a loss of that spectrum. Parts of that spectrum are vital to our national defense and the protection of the Homeland.

In order to describe exactly what the specific platforms are, but we would have to go to a classified section to speak in detail about this. But I would tell you that this is not something you can fix overnight once you break it. It will take 20 years plus to recover from that.

Senator ROUNDS. Thank you, General Milley.

General MILEY. Same thing, Senator. I firmly believe that we should wait till the study is measured twice, that one sort of thing. But we don't want to vacate because of the severe national security implications to that.

The sharing is obviously a goal for everybody, but it is how you share and the technical capability to do that, and that is what the study should tell us. We want to make a fully informed decision, and the Secretary and I will be making those recommendations and writing to the President when the time comes.

Senator ROUNDS. Thank you, sir, once again, for Chairman Milley, as the principal military adviser to the President, would you say that it's essential for you to be able to provide an independent recommendation about spectrum sharing and its impact on national security to the President?

General MILEY. Yes, I do. I would also say, though, that every recommendation I make to the President is an independent military best military advice, no matter what the topic. The Secretary is very good about that, and I will always inform the Secretary if I disagree with the Secretary ahead of time.

But he and I were always in there together with the President and I will always make it independent best military advice recommendation. That is why I signed, when I was confirmed, that I would do that with the Senate as part of this Committee, as part of becoming the confirmation process. So, I will always do that and every Chairman should always do that.

Senator ROUNDS. Thank you, sir. Secretary Austin, INDOPACOM has listed an unfunded requirement of $147 million for the development of a missile defense system for Guam.

Can you discuss how that decision by the Department not to fund this INDOPACOM requirement comports with the Department's priority to defend Guam?

Secretary AUSTIN. Thanks, Senator. As you know, we have and we continue to invest heavily in the defense of Guam, and that work is ongoing. Again, there is always choices that we have to make in a specific time horizon, and in this case, that is a capability that I think we can and will consider going forward.

Senator ROUNDS. I think part of the reason for the question is because there has been some criticism on the Department providing a list of unfunded requests. Would you agree that this one should be very seriously considered by Congress?

Secretary AUSTIN. As you know, Senator, we are required, or the Service Chiefs and Commanders are required by law to submit those unfunded requests. I do believe that all of our Commanders and Chiefs believe that what is on there is important.

Now, I have asked our Commanders and our Chiefs to make sure that they build their requirements for readiness and also combat capability into their base budget. We try to do that at every turn. But at some point, in time, there are choices that you have to make.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rounds. Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. I thank all three of you for being here today, and especially for General Milley. Thank you very much for your 43 years of continuous service. I extend to you my thanks and respect.

For Secretary Austin, investments in the military's infrastructure are directly correlated to our readiness and ability to execute

deterrence. However, as the people of Hawaii saw from the disaster at Red Hill, military infrastructure also impacts our cities and towns. Fuel, chemical, and sewage spills have lasting impacts on our lands and erode the trust of servicemembers and their communities.

We must invest in the systems they rely on each day. Basic things like pipelines, power grids, and barracks. Yet this year, in Hawaii alone, there is over half a billion in unfunded infrastructure improvements on the service's unfunded priorities list.

Secretary Austin, how is the Department ensuring that infrastructure maintenance and modernization needs are met before disasters like Red Hill occur? Basically, don't we need to get more of these projects off unfunded priorities lists?

Secretary AUSTIN. These are, to your point, Senator, requirements that are critical and they should be met as soon as possible. In my budget, I have asked for $5.1 billion to increase operational effectiveness and survivability. Part of that has to do with the effects that are caused by climate.

But nonetheless, those are facts or real facts, and so, we will continue to invest in this, but to your point, services should invest in this to make sure that the infrastructure they need to support them is, in fact first rate.

Senator HIRONO. Secretary Austin, you know that I have been very much focused on those kinds of infrastructure needs. What comes out of our pipes, whether electricity stays on—those continue to capture my attention and be assured that I will continue to focus on these issues and the needs being met.

Mr. Secretary, in your tenure, you have issued several policies that increase servicemembers access to childcare, which you have mentioned, institute parental leave, which is very popular, and ensure access to reproductive health care for all women no matter where they are stationed.

These are prudent changes that put our people first, and I appreciate your leadership on these issues. Senator Austin, how did you identify these servicemember needs? Once those requirements were a record, what was the process to implement updated policies?

Secretary AUSTIN. Well, I talked to our troops. I talked to the family members. As I go around the country and around the world, I am very much interested in what their challenges are and how we can do things to make life better for them. With your help, we have been able to do some things.

That includes the things that you have mentioned, Senator, but also the pay raises, the raise in BAH and BAS. We are asking you for another pay raise this year. Probably the biggest pay raise for our troops and civilians in decades. But that is how I get the input by engaging the troops and the family members.

Senator HIRONO. You have been heavily criticized for your decisions to enable particularly women servicemembers to attain reproductive health. I, for one, commend you for that.

I want you to stay the course. In the same vein of wanting to support our servicemembers, I do want to mention that there is the potential for significant cuts to the cost of living of Hawaii's servicemembers. I have noted this before, and I think that these

are huge cuts for Hawaii servicemembers are unjust and unfair, and I hope that there will be a reconsideration of that decision.

I also want to note, I have been asking about missile defense of Hawaii for quite some time. I had a productive meeting yesterday with leaders from your staff about their roles in and plans for the current and future missile defense of Hawaii. While there is certainly more work to be done to establish and execute a long-term plan for the missile defense of Hawaii, I am encouraged to see the Department treating this issue with the seriousness it demands. I remain focused on it, on the issue, as I request updates from your staff.

Thank you very much, Mr. Chairman.

Chairman REED. Thank you, Senator Hirono. Senator Ernst, please.

Senator ERNST. Thank you, Mr. Chair. I just want to State for the record that I am adamantly opposed to the DOD's new policy on allowing travel expenses for those that are going to other states to seek abortions.

I think it is incredibly important that we remain adherent to the Hyde Amendment, which prohibits taxpayer dollars from going toward abortions. I know this is an extension of travel services for family members and those servicemembers, but again, those are taxpayer dollars being spent to fund the extension of an abortion.

I am adamantly opposed. I know that there are others that are on this Committee that agree as well. We are not saying that women can't seek abortions. They can do that, but that is to be privately funded.

So, thank you both, gentlemen, for being here this morning, and Secretary, I do worry that there is a mismatch between strategy and resources at the heart of the President's budget. The national defense strategy calls this a "decisive decade" and commits to act urgently to strengthen deterrence against the pacing threat of China.

General Milley, would investments in posture presence and lethal capabilities like long range fires reduce our risk in the Western Pacific?

General MILEY. Absolutely, long range fires would reduce our risk. Not only the west—anywhere, but for sure yes—That is correct.

Senator ERNST. Thank you, General Milley. I know that you addressed this with Senator Rounds, but Secretary Austin, as we discuss those unfunded requirements, we see that we are three and a half billion dollars short in the INDOPACOM, which includes critical strike capabilities and posture enhancements.

So, I do hope that this is something we can work with those Commanders on those requirements. I think it is incredibly important and I know my colleague from Alaska may address our requirements in defending Taiwan, but it is incredibly important.

If we are saying in the National Defense Strategy that this is a decisive decade, we need to act accordingly. As Congress, we must fund accordingly. Chairman Milley, as you know, our special operations forces are a strategic capability. How can soft help deter and defeat great power competitors?

General MILEY. Well for Special Forces, regardless of theater, relative to a great power competitor, there is ongoing intense competition in the so-called gray space. They play a key role in that area. In addition to that, they can provide tremendous capability in train, advise, assist in indigenous partners and allies and region. That's important.

Also, I would argue that irregular warfare is often an overlooked component. As you start looking at larger conventional war, irregular warfare plays a very key role in all forms of war, and that will play a key role in any great power war as well.

So those are some of the key things, that strategic reconnaissance, there is development of the battlespace events force operations, the whole litmus test or a litany of capabilities that special operations forces bring that have a direct role prior to the onset of hostilities and can contribute to the deterrence of war with any great power.

Senator ERNST. Very good, and I appreciate that because you answered my next question about surrogate forces and partnering with those forces and indigenous actors, and they do help soft compete against great powers, so I do appreciate that. Secretary Austin, will the Department's guidance to the SOF [Special Operation Forces] enterprise place our great power competition above counterterrorism and crisis response mission?

Secretary AUSTIN. I am sorry, Senator, I missed the question——

Senator ERNST. Yes, SOF, as it applies to great power competition, will you be placing their mission with great power competition over the other mission of deterring terrorism?

Secretary AUSTIN. We have to strike a balance, and we see our SOF forces doing that. I know you have talked to our special operations force Combatant Commander. He is looking at this in a very methodical way and making sure that he maintains a balance of capability that can serve both challenges there.

They are doing a great job, and I have seen some of our Tier 1 forces very rapidly transition and start thinking about how they are going to be relevant, not just thinking about it, but developing capability to be relevant in great power competition. At the same time, keeping a good handle on transnational terrorist organizations.

Senator ERNST. Thank you. I appreciate it. I think it is incredibly important that we continue to fund our SOF as necessary because they do strike a balance between great power competition, working in that gray zone, and also deterring terrorism around the globe.

I would just encourage Members of this Committee to continue to focus on the strength within our SOF forces. Chairman Milley, thank you very much for your service to our great United States Army, as well as the Joint Force.

Also, my best wishes to Hollyanne. We know that behind every great leader is someone who supports them thoroughly, and she has been a tremendous force in working with our Gold Star families, with all of the members of their service and their families. So, my best wishes to you and your entire family. Thank you, Mr. Chair.

Chairman REED. Thank you, Senator Ernst. Senator Kaine, please.

Senator KAINE. Thank you, Mr. Chair, and thank you to the witnesses. General Milley, I also want to compliment you on your stellar career, and I also offer the congratulations of your college classmate, my wife, Anne, who I mentioned I would see you today, and she wanted me to extend her congratulations as well.

On the 15th of the month, during our Personnel Subcommittee hearing, Senator Kelly and I asked Secretary Cisneros and Martinez Lopez about implementation of the Brandon Act. I appreciate both of you in your opening statements talked about the need to get a hold of military suicide issues and resources that are being devoted to this.

We asked the Secretaries about Brandon Act implementation and also about a report on Brandon Act implementation that we were supposed to receive that is overdue. I don't really want to get into that with you here today, but just to put it on the radar screen, that during the course of the development of the NDAA, we really want to get into the implementation of the Brandon Act that we passed.

Make sure that it's being implemented. Find out if there are things, we can do to make that implementation easier, and I really want to work on that between now and the time that we take up the NDAA in committee. It is possible that we don't need to do anything more on that space if we are convinced that implementation is moving out.

If we are not convinced of that, we will need to do more, and I just wanted to kind of put that on the record to begin. Secretary, I also want to ask you about your recent trip to Iraq.

I think it was either 2 or 3 weeks ago that you were there and reports suggest you had productive meetings, both with political leadership, Prime Minister Al Sudani, but also with military leadership. Could you describe that visit for the Committee?

Secretary AUSTIN. Well, first of all, let me tell you that our troops are doing well there, and they are enabling and helping their host, the Iraqi security forces, and they are very much valued by the Iraqi leadership. The prime minister was very complimentary of their performance and the value that they add.

Good meeting with the prime minister and his leadership. I think, you know, it is not only me, but other leaders in the region are also saying that the prime minister shows a lot of promise in terms of a person that is willing to work with others to move things forward.

Senator KAINE. Describe the current State of the mil-to-mil relationship. So, talking about the prime minister discussions, but we have got about 2,500 United States troops in Iraq, as you point out. We are being hosted. They are there at the invitation of the Iraqi Government because they value the United States as a partner. Describe a little bit about the current mil-to-mil relationship.

Secretary AUSTIN. I think the mil-to-mil relationship, Senator, is good, really good, and again, I think our partners understand the value that we add to their overall effort. If you unplug that, then what happens with their efforts to maintain pressure on ISIS [Islamic State of Iraq and Syria]?

What happens with their efforts to continue to develop their professional force? I think we are very much appreciated. What I saw

was goodness. I think, you know that the Commander there is doing all the right things and working in conjunction with the Ambassador to continue to move things forward. So, I was really encouraged by what I saw.

Senator KAINE. You have had a number of chapters in Iraq, in 2003, and then in 2010, and then as CENTCOM Commander, and some of these chapters are with an Iraq that was an adversary of the United States. How would you characterize this relationship where they are at their invitation and now, we seem to be working in partnership to help them advance security in their country and in the region.

Secretary AUSTIN. It truly is remarkable, and you cheated me on one of the rotations there. I had three rotations to Iraq——

Senator KAINE. I left one out.

Secretary AUSTIN. But this is something that has developed over time and it is developing in a very meaningful way. It hasn't always been easy. It has been lumpy from time to time. But I think we are in a pretty good place now, and this is something that we are going to have to work on each and every day.

We know, Senator, that not every person in Iraq believes that Americans ought to be there. But the Government is very much appreciative of what we bring in and what we are doing to train and enable their forces. I think we are in a pretty good place.

Senator KAINE. Well, I appreciate that, Mr. Secretary. I think that is important, that one of the capacities the U.S. has shown throughout our history is the, to use a biblical phrase, to beat a sword into a plowshare.

To take a nation that was an enemy, and over time, and as you point out, bumpy, not always smooth, but over time turn the relationship into one of partnership, not one of being an adversary.

That is an important aspect of the United States, Iraq relationship, and it also sends a message to others that that is something that the United States can do and we can be proud of. I appreciate your testimony. I yield back.

Chairman REED. Thank you very much, Senator Kaine. Senator Cramer, please.

Senator CRAMER. Thank you, Mr. Chairman. Thank you both, all three, for your service. A special thank you, General Milley, for your decades of service. I want to jump down to talking back about Ukraine a little bit.

There have been a lot of reasons, rationale, excuses, perhaps for not providing certain advanced weapons systems, some legitimate I am sure, maybe all of them, I don't know. But of course, oftentimes that leads to eventually providing them. But one system we have never offered, and I haven't heard a lot of talk about are the MQ–9s.

But since we just lost one recently in the Black Sea, where it is probably more likely to be recovered by Russia than the United States, and the fact that the Air Force wants to retire 48 older MQ–9s, is there any chance that the United be a reasonable system to offer Ukraine, either one—or maybe start with Secretary Austin.

Secretary AUSTIN. Yes. As we look at this, Senator, as you know, that air domain is a very hostile airspace because of the capability

that the Russians have for air defense. It is not a survivable platform if they try to use that in that environment.

Senator CRAMER. General Milley.

General MILEY. Yes, that is—one, it is not survivable. It is big and slow. It is going to get nailed by the Russian air defense systems. In terms of its capabilities, I am not sure what it will get you beyond the smaller, faster, more nimble UAV systems that we are providing, as well as some other countries are providing. So, I think that it is a good system for certain uses in certain environments, but in the current situation in Ukraine, it may not be the best system.

Senator CRAMER. Thank you. Secretary Austin, I want to now go to back to China a little bit, and you are probably familiar with the what I consider the nearly year and a half of torment that the city of Grand Forks went through while considering an investment by the Chinese Communist Party investors for Fufeng, which would have provided a wet corn milling facility 12 miles from the Grand Forks Air Force Base, 12 miles from the 319th Reconnaissance Wing, and now an SDA [Space Development Agency] ground station for low-Earth orbiting satellites.

After sort of cutting a deal and then going to CFIUS [Committee on Foreign Investment in the United States], where CFIUS has spent 60 days determining they didn't have jurisdiction. Finally, after, I don't know, 14 months or so of all of this, the Air Force finally came out and said it would present a significant risk.

That, I think, has helped kill the project, although I understand there is now a 90 day pause. My hope for all of that is not only that Grand Forks avoided an unfortunate situation, but that many other communities might have avoid it as well.

Could you talk to us just a little bit about either in the context of Fufeng and Grand Forks, or the broader context of are we giving adequate cover and information and coaching perhaps to other communities around the country? Because it is my understanding that this is not necessarily a unique circumstance to Grand Forks.

Secretary AUSTIN. Well, first of all, Senator, let me thank you for your personal leadership on this issue. To the point that you are making, this applies to installations all around the United States of America.

We will continue to emphasize to the Service Chiefs, Commanders, secretaries, and that we have to be vigilant about what is going on outside of our fences. We have got to work with the communities to make sure that we do have some kind of a situational awareness.

We have to advocate for the protection of our bases and installations. Again, every one of these cases will be complex, but there are cases that we must take on. But again, thanks for your leadership in area.

Senator CRAMER. Well, I appreciate you saying it that way, actually, because I think you are right. I think we need to, "take them on," and rather than sort of punt them to the CFIUS process or some other political process, particularly when it comes to the Chinese Communist Party and their involvement, and their ability—not just ability, but obvious willingness to do recon in all sorts of matters and ways, and so I appreciate that.

My hope, like I said, is that the experience that ground force went through is not just in vain to the rest of the country, but rather perhaps sheds light on this issue throughout the country. So, thank you for that.

Again, thank you, General Milley, for your decades of service, and I yield. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Cramer. Senator Warren, please.

Senator WARREN. Thank you, Mr. Chairman, and thank you all for your service to our Nation. This year's Department of Defense requests an $842 billion budget, one of the largest budgets in history.

Now, despite the massive size of this budget request, the Committee is already receiving letters from various parts of DOD saying that they need billions of dollars more. DOD calls these unfunded priority lists, I call them wish lists, and I am concerned about how they distort our budget process.

So, Secretary Austin, if I could let me ask this directly, are you comfortable with the figure in the President's proposed budget that it is sufficient to meet our defense and national security objectives?

Secretary AUSTIN. I am, Senator. As you know, we made this budget request based upon our strategy. Our request is directly linked to the capabilities that we need to execute our strategy, and we spent a lot of time on that.

I have asked the Commanders and Service Chiefs to make sure that they go after warfighting capability and readiness in their base budget, and for the most part we have done that. But again, we are required by law——

Senator WARREN. I understand. So, we are going to go there. We are going to go there, Mr. Secretary. Now, Secretary Gates understood that leaders at DOD can always find a gap or a requirement to justify asking for what he called however many billions dollars more you want.

He reduced wish list by about 90 percent, and he was able to do this during the surge in Afghanistan. Secretary Austin, you have a unique perspective here because before you were Secretary of Defense, you were the Commander of a major Combatant Command, a job that is now held by the people who are asking for unfunded priorities.

When Secretary Gates cut these unfunded lists down, you were Commanding General of United States Forces in Iraq. Secretary Austin, did our national security suffer when Secretary Gates cut down the service wish lists?

Secretary AUSTIN. I can say that while we were in Iraq and Afghanistan, we based upon the support of Congress, we had what we needed to be able to prosecute our operations, and so, we didn't go for—we didn't want for much of anything.

Senator WARREN. Okay. So, let's talk then about the budget process. Each Combatant Commander thinks about how they could spend more money than you have allocated to them in this process that you describe.

I assume these Combatant Commanders act in absolute good faith, but they have a narrow perspective. Secretary Austin, in putting together the overall budget, you have to weigh our global na-

tional security priorities. Do the Commanders submitting these wish lists have to do the same?

Secretary AUSTIN. They are primarily focused on their region and in what they would like to have for their region in order to be successful. But again——

Senator WARREN. I take that as a no. Yes, all right. You know, as my colleagues on this Committee are well aware, I have been using these budget posture hearings to ask Combatant Commanders, folks who occupy the roles like the one you used to serve, about these lists.

Almost all of them have defended their requests, although the justifications vary. Three of them said they needed the items on this list to address unexpected threats that couldn't be considered in the budget process.

But these same Commanders often repeat the same requests year after year after year, suggesting that if there were a real need, they would have worked it into the underlying budget. Secretary Austin, does DOD have sufficient tools to address emerging threats without relying on the unfunded priorities list?

Secretary AUSTIN. We do, and again, we account for that as we build the budget.

Senator WARREN. Okay, and one last question. Do you support removing the statutory requirement to send Congress these lists every year? If so, are you confident that we could do so without jeopardizing national security?

Secretary AUSTIN. I would support that, Senator.

Senator WARREN. Thank you very much, Mr. Secretary. I would also like to submit a letter for the record from Under Secretary McCord supporting my bill with Senator King, Senator Lee, and Senator Braun to end the statutory requirement for these lists. As he notes in the letter these lists are, "not an effective way to illuminate our joint priorities."

We don't let any other part of Federal Government behave this way, and it is for a good reason. The budget process requires making tough choices. I appreciate that the Secretary leads in that, and I would like to submit this for the record, Mr. Chairman.

Chairman REED. Without objection.

[The information referred to follows:]

UNDER SECRETARY OF DEFENSE
1100 DEFENSE PENTAGON
WASHINGTON, DC 20301-1100

COMPTROLLER

MAR 20 2023

The Honorable Elizabeth Warren
United States Senate
Washington, DC 20515

Dear Senator Warren:

I am responding on behalf of Secretary Austin to your letters of December 5, 2022, and January 31, 2023, regarding the submission of unfunded priorities lists (UPLs) to Congress.

The Department appreciates your sustained commitment to our service members, their families, and our entire work force. We are grateful for your leadership, and we share your commitment to maximizing the impact of every dollar Congress appropriates.

The practice of senior military leaders providing to Congress a list of unfunded priorities was initiated by Congress, first as a request and, since 2017, as a statutory requirement. This process was created by Congress and we agree the Congress should reconsider the merits of this approach. Every Department of Defense (DoD) budget supervised and submitted by Secretary Austin is built to implement his National Defense Strategy and represents the Department's highest priorities. The current statutory practice of having multiple individual senior leaders submit priorities for additional funding absent the benefit of weighing costs and benefits across the Department is not an effective way to illuminate our top joint priorities.

Although Secretary Austin follows a similar practice to that of former Secretary Gates by requiring that these lists are submitted for his review, that process alone does not effectively address the underlying issue of requiring individual leaders to submit proposals with no necessary connection to the Secretary's global priorities. Therefore, the Department supports your proposal to repeal the requirement in 10 U.S.C 222a.

In contrast to the UPL requirement, in November 2022, after the Congress had already decided to increase the Department's budget, and in response to multiple Congressional inquiries as to how higher than expected inflation was impacting the Department, DoD provided the congressional defense committees, as drafting assistance for conference, our best assessment of the highest priorities for additional funding, with a focus on addressing unbudgeted inflation. This document was in lieu of, not in addition to, any unfunded priority list submitted under 10 U.S.C. 222a.

That list included upward adjustments for various fact-of-life increases including service member's Basic Allowances for Housing and Subsistence rates, health care costs, additional costs to complete military construction projects, and fuel price impacts. The list also included other critical emergent requirements such as the Civilian Harm Mitigation and Response Action Plan you noted, as well as additional funds to increase capacity to enable the Defense Industrial Base to accelerate the replacement of defense articles being drawn down and provided to Ukraine.

I hope that this information is helpful and look forward to working with you in the 118th Congress. A similar letter is being sent to the other signatories of your letter of January 31.

Michael McCord

Michael McCord

Senator WARREN. Thank you.

Chairman REED. Thank you, Senator Warren. Senator Tuberville, please.

Senator TUBERVILLE. Thank you, Mr. Chairman. General Milley, thanks for being here. Thank you for your service. Secretary Austin, thank for your service, and your call last week. Secretary McCord, thanks for being here today. You are not getting a lot of questions but thank you for being here.

You know, I ran for Senate to serve on this Committee. I ran because my dad, he was a World War II veteran. He earned five Bronze Stars and a Purple Heart, and he died on Active Duty, and I ran to support the warfighter. You know, we owe our freedom to our troops.

For 50 years, our All-Volunteer Force has answered the call. I think you would agree to that. Since 1973, we have asked a lot of our Americans, young volunteers, to fight in Vietnam, Grenada, Bosnia, Somalia, Iraq, Libya, Syria, and Afghanistan. They have never wavered. In boom times and bust, young Americans have raised their right hands to defend the Constitution with their lives, if necessary.

War is hell. You know that better than anybody. Every recruit should know that. But in the last few years, we have put them through a different kind of hell. In one of your first acts, Mr. Secretary, you put our military, every single member, Active Duty and Reserve, through a mandatory training to root out extremists.

That sent a message, Mr. Secretary, that our military is filled with extremists. Our military is one of the most diverse organizations in the world. It is full of patriots. Eight months later, we watched the collapse of Afghanistan. It was the worst defeat of the United States in my lifetime and agony for most Americans who watched on the 20th anniversary of September 11th.

That defeat gutted our troops who served there. The President called it an extraordinary success. That is not what our veterans of Afghanistan call it. Our withdrawal, a big letdown to our allies, a military disaster, and national disgrace. I have talked to leaders all over the world, they have told me the same thing. Not one general or political appointee has been held accountable.

Senator TUBERVILLE. Now, I want to give you an example of accountability. General Milley, May 2021, I sent you a letter asking for, why did we give up Bagram? Now, you did answer, but it was a few months later. Now you have 4,500 people, you know, for the next person in line on the joint staff and a budget of $250 million. We have got to find ways to get information back to Congress.

Secretary Austin, I sent you a question on September 2021. It took almost 4 months. Congress deserves better. America deserves better. We all deserve better. Now we are on the brink of a world war with Russia.

China is openly violating our airspace. But it took Congress to step in and tell our military leaders, you, to stop throwing our troops out who objected to a vaccine. Most of them on a religious factor. Given what we put our troops through in the past 2 years, it is no wonder that the Army missed its goal of 15,000 soldiers. General, you know, that is an entire division.

We can't afford that, and it is getting worse. The Navy and Air Force will probably miss their numbers this year. Yet some of my colleagues claim that the real crisis is my hold on the promotion

of 158 general flag officers. Mind you, these were promotions that the majority leader can bring to the floor at any time.

Those same people claim expanding abortion will make our military stronger. You know, I want to be clear on this. My hold has nothing to do with the Supreme Court decision to the access of abortion. This is about not forcing the taxpayers of this country to fund abortion. That has been a bipartisan consensus for more than 40 years.

The military has performed abortions for years. All were cases of rape, incest, and the harm to the mom. Over the past 40 years, I don't recall one military person ever complaining that we weren't performing enough abortions.

Nor did the military raise alarm that our service men and women were being placed in areas that had restrictive policies on abortion. Poland's restrictive policies. Japan. Djibouti. All these theaters have abortion policy.

Yet our military changed the policy to do this job in these different theaters. As of 12 days ago, you all got the American taxpayer on the hook to pay for travel and time off for elective abortions, and you did not make this with anybody in this room or Congress taking a vote. In fact, this contradicts what Congress has actually voted for. Most of us, some of us in the room, if not all Senators that have been complaining about this, have voted for the Hyde Amendment many, many times.

But now, my colleagues on the left, like this abortion issue is good for a campaign, and that is what this shouldn't be about. I am not going to let our military be politicized. I want our military to be the strongest and deadliest it has ever been. But I also want the Administration to follow the law. As long as I have a voice in this body, Congress will write the laws. Not Secretary Defense, not the Joint Chiefs.

General, you said nothing is more expensive than preparing for war or fighting a war. I truly agree. That is the reason, if we want something to spend money on, let's pass it and let's put it in the NDAA.

You know, I represent Alabama, but I also represent everybody in this country. Everybody, all 320 million. All of us do. Y'all represent the military. But you also are responsible and represent every citizen in this country. That is the reason this country is so strong and we all need to understand that.

Get on the same page. I am willing to work with you. I am not here to fight. I am here—we are all on the same team, and I want to work with you to make this happen. Thank you, Mr. Chairman.

Chairman REED. I think it is appropriate that the Secretary and, or the General—need to respond.

Secretary AUSTIN. Well, thank you, sir, and first of all, let me just say thanks for the support you have given us to this point. I really implore you to reconsider and allow our nominations to move forward. It will make a significant difference for our force. Just to address a couple of things that you mentioned.

First of all, you said that I had our troops focus on rooting out extremism and nothing could be further from the truth. You know, each of our units, troops spent a couple of hours talking about a number of things.

Now, we have always had regulations against extremist behavior. You have heard me say that 99.9 percent of our troops are focused on the right things each and every day. But in this case, a small set of actions can have outsized impact.

On the vaccine mandate, the vaccine mandate, in my view, saved lives and it saved a lot of lives. So, you know, I—we don't see a strong correlation between vaccine mandate and recruiting. We don't see that because we have done the surveys that indicate that that is just not true, that there is not a strong correlation.

Now, on the issue of providing non-covered reproductive health care for our women, I would just say, Senator, almost one in five of our troops are women and they don't get a chance to choose where they are station.

So almost 80,000 of our women are stationed in places that—where they don't have access to non-covered reproductive health care, and I heard from our troops, I heard from our senior leaders, I heard from our Chiefs and also our Secretaries.

This policy is based on strong legal ground, and it is not a law, it is a policy, and so, you know, we obviously don't pass laws in the Department of Defense. But again, I assure you that we have great respect for this body, Congress, and we will do everything within our power to make sure that we continue to work with Congress.

Again, you supported us in a number of ways, Senator. I am personally grateful for that support, and I know my colleagues are as well. Thank you.

Chairman REED. Let me recognize Senator Manchin.

Senator MANCHIN. Thank you, Mr. Chairman. I want to thank all of you for your service and for being here today to testify. I first want to say to General Milley, I want to take a moment to thank you for your 43 years of service, the commitment to our country, and the dedication and sacrifice your family has made for that with you able to serve. I look forward to you have an enjoyment retirement and your second career.

I know whatever it will be, it will be something special, and we look forward to continuing to work with you. Secretary Austin, multiple sources, including retired General Officers, and National Defense Industrial Association, American Enterprise Institute, and your colleague, Mr. McCord, have all recognized the damage failing to pass a budget on time has both in our national security and the taxpayers.

What I am trying to get to, and Mr. McCord, no one knows better than you how damaging delays and CRs [continuing resolutions], have they been. Previously, you noted that from fiscal year 1991 to 2010, the average delay for defense appropriation was 29 days. That was between 1991 and 2010, and that has since ballooned out to 118 days.

Also, we are talking about the American Enterprise Institute. They threw out a rough estimate of $200 million per day, $200 million per day under the latest continuing resolution that covered the start of fiscal year 2023. That has a total of $18 billion.

So, I guess what I am asking is both of yours and Mr. McCord's commitment to get Congress, all of you, to do accurate. I mean, I know you come in here and you preach the high heavens, and we seem to not take it seriously at all.

We are talking real dollars now, real dollars, and they think that basically the budget keeps ballooning out of sight and we have no oversight whatsoever. If we as Congress just did our job on time, we are told that overall, you could save anywhere between 5 to 10 percent of the request you have. That is $40 to $80 billion a year. Is that an accurate statement?

Secretary AUSTIN. I think so, and I defer to Secretary McCord for exact figures——

Senator MANCHIN. Well, let him respond also.

Secretary AUSTIN. But you are absolutely right, Senator, and you heard me say in my opening statement that the best way that Congress can help us in this year going forward is to try to get an on-time appropriation done. You know, without that, we can't do new starts. We can't do a number of things, and you can't get that time back. You know, it is gone, and so that puts us further behind in terms of our competition with adversaries like China.

Senator MANCHIN. Secretary McCord.

Mr. MCCORD. Yes, I would concur. Your figures are accurate, Senator. As the Secretary said, we can't buy back time with money, and that goes on the readiness side if a missed training rotation due to shortage of funds.

But especially harmful on the contracting side, where we have got areas like the triad where we are trying to move the bomber into lower production, that we can't take those next steps under CRs, as you know, and that is the biggest lost opportunity when it comes to moving forward. We are very constrained legally.

Senator MANCHIN. So basically, we have nonproductive money that we are appropriating that is used basically to make up for the inefficiencies of Congress because of our budget process.

Without you having to say anything or confirm that, that is what I am taking away from this little conversation that we have had. I am doing everything I can to make sure we do our job on time. You know, by April 1st, by law, House and Senate was supposed to have a budget.

By April 15th, by law, we are supposed to have one reconciled. By September 30th, by law, we are supposed to pass. That would change the course of what we are doing how we are spending right now, tremendously, rather than cutting anything, just being efficient. So, I would hope that we would all take that seriously.

General Milley, as you know, since the beginning of the Putin's illegal war in Ukraine, the United States has provided over $76 billion in justified funding to support Ukraine in both the military defense of their people in freedom, but also in humanitarian and infrastructure support.

Can you speak to your confidence in the United States, NATO, Ukrainian weapons accountability, and possibly elaborate on the Joint Strategic oversight plan that was announced by this year by the Inspector Generals of the DOD, State Department, USAID. You know, they all——

General MILLEY. As you know, Senator, we do not have any uniformed troops or civilians, for that matter, accompanying Ukrainian forces in the front line. We do have folks working out of the embassy, so they are working at the Ministry of Defense level, and that is as far as our own hands-on accountability goes.

We do have some other means through reporting that the Ukrainians report to us, and I will be happy to talk about that in a classified session. But the there are some means and mechanisms of doing some accountability. It is not as rigorous as you might think. But I think the biggest way to measure the accountability is effectiveness on the Russian forces.

These are anti-tank munitions, this artillery is having a devastating effect on the Russians. As you know, publicly, the Russians have well over 200,000 casualties. Their offensive aspirations have come essentially to a halt.

Their capabilities have been—their ground forces have been absolutely impaled on this Ukrainian bayonet, so to speak, and that is largely due to the resources that the United States and other countries have provided. Although we don't have by name DODIC [Department of Defense Identification Code] sort of accountability, shell number accountability, you can see the accountability on the battlefield.

Senator MANCHIN. Yes, my time is running out. I would love to ask you about the AUMF [Authorization for Use of Military Force], but I am sure you probably talked about the AUMF before I got here. But thank you so much. I appreciate it.

Chairman REED. Thank you, Senator Manchin. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. Secretary Austin, by the way, for both of you, thank you for your service to the country. We really do appreciate it. I do. I know I do. The folks back home do. Secretary Austin, I wanted to ask you a couple of questions sort of along the lines of what Senator Tuberville asked.

You mentioned earlier that you didn't want to spend a lot of time and you thought that there was a drag on our force, and spending money on things that don't make us a fighting force. You just mentioned that you don't get the time back.

With the stand down day to address extremism, that cost the military and taxpayers nearly 5.4 million man hours. As we talk about recruitment, I think it is completely naïve to, when we talk about the numbers, to separate the challenges that we have now from the politics, the divisive politics that have been injected now into the military.

The military stands as this great meritocracy where people can achieve great things. But by infusing divisive DEI trainings, by infusing abortion politics, by infusing COVID vaccine mandates, it has created division in the ranks.

We have heard from those military members, and I sent you a letter last week, and I want to ask you, we talked about in the letter, referenced the $86.5 million for dedicated diversity and inclusion activities. I want to ask you here today, how many DEI related positions exist in the Department of Defense?

Secretary AUSTIN. I can't speak to that specific number. I will take that question for the record, with your permission, Senator.

Senator SCHMITT. Sure.

Secretary AUSTIN. In terms of that number, it is a small percentage of an $842 billion budget. I would just further point out with respect to DEI, I think, you know, Senator, that Congress requires that we have a DEI program. In the 2020 NDAA, it states the Sec-

retary of Defense shall design and implement a 5-year strategic plan for diversity and inclusion in a Department of Defense.

Senator SCHMITT. Yes, I don't—but I don't know what these activities are, which is the purpose of the letter. I don't know what materials are being submitted. We looked, so hopefully the response to the letter will be in fact be responsive to what actually is being pushed with these so-called trainings. Then I do want to ask you, so there were nearly 17,000—well there are over 8,000 military men and women who lost their jobs because of the COVID vaccine mandate. Is that correct?

Secretary AUSTIN. That is about right.

Senator SCHMITT. Okay. So, when we talk about recruitment challenges, are you actively going after to try to get those 8,000 people back?

Secretary AUSTIN. They have the ability to——

Senator SCHMITT. Well, right. No, I am asking, what are your efforts?

Secretary AUSTIN. They have the ability to reapply for readmission——

Senator SCHMITT. Are you recruiting these folks?

Secretary AUSTIN. We are not recruiting, but they have the ability to——

Senator SCHMITT.—Sayonara 8,000 well-trained folks.

Secretary AUSTIN. We are recruiting new recruits.

Senator SCHMITT. Okay, and so, what happens now to the remaining several thousand who didn't get the vaccine? Are you intending to fire them as well? There are several folks that weren't immediately dismissed who refused the vaccine. They are still in the military. Are you planning to fire those folks as well?

Secretary AUSTIN. The vaccine mandate, Senator, has been rescinded.

Senator SCHMITT. So, you don't—now, even though they were refusing when you did have the policy?

Secretary AUSTIN. That is right.

Senator SCHMITT. So, your commitment here today is those folks are not going to lose their jobs.

Secretary AUSTIN. Not for a vaccine mandate, Senator——

Senator SCHMITT. Okay. Well, I would submit that with——

Secretary AUSTIN. If I could, like would like to go back to the——

Senator SCHMITT. Sure.

Secretary AUSTIN.—5 million hours that you mentioned, and I would like to ask the chairman, who submitted that number, where that number came from.

Senator SCHMITT. We would be happy to back it up. If you take the stand down day by the number of folks that didn't work that day, that is where we get the numbers. So, we would be happy to followup specifically. I do have a question——

Secretary AUSTIN. That is not accurate, Senator.

Senator SCHMITT. Okay. Well, how—maybe you can answer, how many man hours were sacrificed that day? You just testified you can't get those hours back. How many hours were sacrificed on the stand down day?

Secretary AUSTIN. Let me ask you and tell you where the numbers came from.

Senator SCHMITT. Okay. Well, maybe you can get us those numbers when you respond to the letter also.

Secretary AUSTIN. As simple as this. You know, when asked to provide that number, his approach was, there are 2.1 million troops, each one each troop spent 2 hours, and that is where the number comes.

Senator SCHMITT. Okay. Well, you can't get the time back, right. Whatever that number was, you can't get that time back. General Milley, I do want to ask you a question, because I am limited on time. I do want to ask you about the Philippines, which I think you had mentioned in your previous remarks about that strength, that relationship continues to grow, which I personally think is critical in the Indo-Pacific.

Can you talk about what some of those efforts, where you think that is headed? I think as we, you know, obviously the allies that are talked about the most, Japan, Australia, and India, but I think the Philippines are critical. Could you talk about the strategic value of strengthening that relationship?

General MILLEY. Again, Senator, but just a point of clarification. It is 2.1 million, 2 hours, in fact, 2 hours per person. That is with where the 5.4 million. That is out of 2.8 billion man hours available, in fact, on a 10-hour workday, 5 days a week for the U.S. Military.

Senator SCHMITT. Okay. Well, whether we are talking about dollars or hours, millions still matter. No, no, I folks, I represent they a million is a big number.

General MILLEY. I am just saying where the math came from, and on the Philippines, but in broad—more broadly than the Philippines, generally the Western Pacific. It is my view that China is, you heard it in the opening statement, is trying to become the regional hegemon within perhaps 10 or 15 years or so.

Part of that, of course, is putting the Philippines and other countries in the region at a disadvantage. Those countries want the United States presence there. They clearly do. There is a really an underreported arms race going on in the Western Pacific right now. These countries are arming themselves up and they very much, with very few exceptions, want the United States there.

That is why the Secretary traveled to the Philippines. That is why we are looking at access, basing, and oversight. That is why we are looking at a repositioning in the Western Pacific. It is a design there to be forward deployed in order to deter armed conflict with a great power, great power being China in this case, and deter Chinese aggression, not only in the Western Pacific, perhaps elsewhere.

So, these are all linked together, tied together. There are many other initiatives ongoing by the services and also by other countries as well. But it is really critical and it is really critical that we get it done right, and we need to move out with a sense of urgency because the next 5 years, I think, are going to be determinative of really what comes in the future with our relationship with China.

Senator SCHMITT. Thank you, General.

Chairman REED. Senator Peters, please.

Senator PETERS. Thank you, Mr. Chairman, and to the three of you, thank you for your testimony here today and thank you for the

work you do. I also want to begin by commending the Department's efforts to invest in and incentivize funding to build semiconductor manufacturing facilities and advanced research and development activities at both the national and the regional levels.

Under Secretary McCord, could you speak to how the fiscal year 2024 DOD budget request takes advantage of the CHIPS Act [CHIPS and Science Act of 2022] that Congress passed recently, that funding, and makes the necessary investments to ensure that we have both a resilient and a robust domestic microelectronics manufacturing ecosystem for both state-of-the-art as well as legacy chips.

Mr. MCCORD. Thank you, Senator. First, I just want to say that the Department really appreciates congressional leadership on the CHIPS Act. It really speaks to the recognition of the whole-of-government approach needed with China.

CHIPS is separate from our budget in the sense that it is now a stand-alone authorization. We had prior to that in the 2022 and 2023 budget started a pretty robust microelectronics effort, Under Secretary Austin, that was really tied to defense specific capabilities like radiation hardening.

What we are doing with CHIPS on top of that then is really that broader industrial base, the fabrication, labs to fabs. I understand that that is now—we are now in our request for solution source selection for the proposals that went out in that first year of CHIPS that Congress created last year.

So, we are moving out now with source selection to actually build out that capability. Then that—again, that sits on top of the more defense specific microelectronics, which is over $2 billion in our budget.

Senator PETERS. Thank you. Secretary Austin, the development of Taiwan's reserve military capacity is without question a key component of ensuring that their military is well prepared to deter, and if needed, to defeat a potential PRC invasion of the island.

However, I remain concerned that the Department is not sufficiently addressing the hardships that exist at the authority and funding level with increased mil-to-mil and civ-mil interactions between the United States and Taiwan. Current policy restricts the level of interaction that United States Forces, particularly the National Guard, have with Taiwan, both CONUS [Contiguous United States] and OCONUS [Outside the Contiguous United States].

Additionally, current restrictions do not allow the Guard to consistently engage with Taiwan under the same authority that the State partnership program utilizes. Rather, other authorities must be utilized to justify and to fund National Guard's involvement in this strategic relationship.

Essentially, what is happening is creating this maze of funding and authorities that restricts consistent engagement that is so important. It creates undue processes and procedures to coordinate and fund cooperation.

So, my question for you, sir, is how is the Department reassessing the relevant authorities and lines of funding to help streamline the National Guard's ability to support security cooperation efforts with Taiwan?

Secretary AUSTIN. We are taking a hard—thanks for Senator. We are taking a hard look at all the things that we can do to increase the capability in the reserve forces. You are right, Senator, this is a—this is critical for them going forward.

Our guard has done amazing work with other countries across the globe. Most recent example, as you know, is the work that they did in Ukraine prior to this invasion, and so that kind of engagement, we think, is critical. So, we are going to continue to find ways to make sure that we are we are helping as much as we can in accordance with the Taiwan Relations Act.

We will relook all of our policies and authorities to make sure that we can streamline this as best possible. In the meantime, we are going to continue to do what we are doing to increase our capability.

Senator PETERS. Secretary Austin, on Saturday, Russia accused Azerbaijan of violating the cease-fire, which ended the 2020 war with Armenia. This comes as Azerbaijan has blockaded the Lachin corridor, and more than 3 months—for more than 3 months, leading to what is a humanitarian crisis in Karabakh.

I recently wrote to you and Secretary Blinken regarding the use of section 907 waiver authority and the potential effects of U.S. support in that conflict. My question for you is the military, is United States military aid supporting the Azerbaijani military in enabling their aggression against Armenia?

Secretary AUSTIN. We are clearly not enabling aggression, Senator. As you know, we have had a relationship with them and we have provided assistance in some cases, but in all cases, in use monitoring is really important and we have been focused on that. So, we have we have taken a responsible approach to this, and again, we do not support, will not support aggressive activity.

Senator PETERS. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much. Senator Peters. Senator Mullin, please.

Senator MULLIN. Sorry, my microphone came off there. Thank you, Chairman, and thank you all for being here. General Milley, I want to thank you again for the phone call and the conversation we had yesterday. I greatly appreciate your time on that. As we stated in that conversation, I wanted to have something for the record.

Before I begin with the rest of my questions, I would like to touch base on the disastrous withdrawal from Afghanistan with American troops. Will you commit to providing a complete after-action report on the withdrawal to Congress that provides accountability and transparency for the American people, for the closure of lives that were lost and the people left behind?

General MILLEY. Absolutely, and the Secretary of defense has directed that we do that, and that is done by the Joint Staff in CENTCOM as well. But also, the Department of Defense is doing that, so I absolutely commit to that.

Senator MULLIN. Thank you. General, as you know, the industrial base is going through some changes right now.

Prior to the Russian invasion of the Ukraine sites, or invasion of Ukraine, sites like McAllister's Army ammunition plant, we are planning on seeing to see a decrease in productivity.

Since this invasion, there's obviously been a new emphasis on where we are moving. Can you speak to what we are seeing with plans like McAllister and the ammunition depots, what the plan is and the future looks like for the industrial era?

General MILLEY. Yes, the—thanks, Senator. The defense industrial base, as the Secretary said, has had several different sessions to include the SecDef and others within the Department to really go over the defense industrial base in some detail.

One of the big lessons coming out of Ukraine is the incredible consumption of conventional munitions and the conduct of what is really a limited regional war. So, a great power war, if that were to ever happen, God forbid it does, the consumption rates would be incredible.

The Secretary tasked us to go back and review all of the various operational plans and the COCOMS to determine if our estimates are correct, because if those estimates then feed into these budgets to buy the ammunition, that study is ongoing.

But we can tell you that, for example, 155 ammunition, which is in high demand in the Ukraine fight, we report out daily in a written report to the Secretary of Defense on all the various ammunition statuses that we have.

I won't go over that in an open session, but in a closed session, we can do that if you would like. The bottom line is the defense industrial base is critical to the defense of the United States, and our ability to produce, manufacture and produce the logistical capability, especially munitions, is fundamental.

You mentioned McAllister. I had an opportunity to visit McAllister. That is an incredible facility with incredibly skilled workers that are highly motivated and it is really a one of a type facility. It is an amazing place.

Places like that exist elsewhere in the United States as well, and we need to pay great attention to that defense industrial base if we are ever going to successfully compete and hopefully not actually have a war with the great power.

Senator MULLIN. What is interesting is the relationship between the public and private service there. A lot of our industrial areas around the country, especially in McAllister, where we have the public sector working with the private sector and delivering missions on time.

I think there is a great amount of pride there, that I think the communities that have the ability and actually the desire to help are standing ready, and McAllister is no different.

General MILLEY. That is great. The workers there are off the charts incredible. Skilled workers, highly motivated.

Senator MULLIN. Focus on Fort Sill just a second. General Rainey stated recently, the Army Futures Command will be reviewing their use of cross-functional teams. Fort Sill in Lawton, Oklahoma is currently home to two cross-functional teams. As the original architect of this system, while serving as Army Chief of Staff, can you speak to the usefulness of the future of these programs, sir?

General MILLEY. Yes, they the Army Futures Command and the priorities that the Army laid out for modernization 6, 7 years ago are still what they are working on. They have had the most suc-

cessful modernization programs they have had in decades as a result of that Futures Command.

Key to that was the cross-functional teams led by General Officers in each case. Those cross-functional teams were designed intentionally to be temporary until those programs are brought online. For example, long range precision fires, feature vertical lift, the next generation combat vehicle, those are programs that once they get brought online and brought into the force, those cross-functional teams will go away.

But it has been a highly successful and innovative organizational concept. What General Rainey is talking about now is the next step, getting it to the next level, because those programs are well underway. So, he is not talking about getting rid of those CFTs. He is talking about looking at the next set of CFTs.

For example, all the main sensing would be one. There is several of these others that they are looking at, and they have not made any decisions yet. The Army hasn't. But Secretary of the Army will make those decision in due time.

But it is an excellent program, it is an excellent Command, and they are really moving out very, very well in the modernization of the U.S. Army.

Senator MULLIN. Thank you for clarifying that. I yield back.

Chairman REED. Thank you, Senator Mullin. Senator King is recognized and will take over as I go vote, and the vote is on, for those who have not yet voted.

Senator KING. Thank you, Mr. Chairman. Secretary Austin, I just want to clarify a couple of things about vaccines and vaccine mandates. I am told that a routine mustering into the service requires something like 13 vaccinations. Is that accurate?

Secretary AUSTIN. I think it is nine, Senator. Depending on where you are going. At any one point in time, that number can increase up to about 13, sir.

Senator KING. Depends on the on where the soldier, sailor, marine, or guardian will be assigned.

General MILLEY. Right.

Senator KING. That is just routine. That is part of the military for as long as we can remember. Is it true, General, that—or sorry, Mr. Secretary, that General Washington mandated vaccination against smallpox in the Continental Army at the time of the Revolutionary War?

Secretary AUSTIN. That is true.

Senator KING. The purpose of this vaccination mandate had nothing to do with politics. It had to do with saving lives and maintaining readiness, did it not?

Secretary AUSTIN. That is exactly right.

Senator KING. I remember being on a call when we were in sort of lockdown here with regard to the USS *Teddy Roosevelt,* where the—in early March, April, and May 2020, the virus ripped through the ship.

I think over 1,000 people tested positive because of the nature of their close military proximity. Doesn't that make vaccinating against an infectious disease all the more important in the military?

Secretary AUSTIN. To me and to all of my colleagues, it absolutely does, Senator. I told chairman a number of times that in my lifetime, the only thing that I have seen that has been able to disable a carrier is this vaccine.

Senator KING. It is interesting because General Washington said that, when it alerted John Hancock about the vaccine, he said, this is the most dangerous thing to our troops, more dangerous than the sword of the enemy.

Exactly what you just said. General Milley, I want to thank you for the integrity that you have demonstrated in your position. I remember, and I am sure you, too, to questioning you at your confirmation hearing.

My question was, will you tell the truth, will you give your best military advice, even if it doesn't suit the leadership that you were working with at the time? You have done that, and I want to thank you for that and for the extraordinary service that you have provided to this country throughout your career, but over the last 4 years.

I appreciate your keeping your word to me and this Committee from the date of your confirmation. General Austin, allowing the intelligence about the imminence of the Russian invasion was, I think, a brilliant move by the Administration at the beginning.

However, why are we telling everybody in the world what we are sending and when we are sending it? This morning I learned on National Public Radio, and I suspect Putin did, although I don't know if he listens to National Public Radio, how many tanks have arrived in Ukraine and when they are going to be deployed. Why do we—why do we broadcast that information?

Secretary AUSTIN. Well, we certainly try not to, Senator. As you know, as various countries provide contributions, they are proud of those contributions, and sometimes we find our colleagues providing a bit too much information. But I——

Senator KING. You understand my question?

Secretary AUSTIN. I do. I do. When I meet with our colleagues here, and I meet with them every month, this is a point that I will continue to drive home that the Russians are absolutely focused on where this equipment is and what it is doing. So, we have got to help ourselves.

Senator KING. I fully agree. A couple of questions. I am going to submit for the record about ISR [Intelligence, Surveillance and Reconnaissance] capability, both in NORTHCOM and SOUTHCOM, which was in their unfunded priority list. But you can make a strong case that should have been in the base budget if ISR is so important, particularly in counter-drug, where people are being killed every day. I think my calculation is about 20 people have died in this country of overdoses since this hearing started this morning.

To not have sufficient ISR and resources to interdict what we can find, I think is a misallocation of resources. I am going to submit that for the record. Finally, General Milley, probably the word that has been used the most today is readiness.

The question I have is, are we preparing for the right war, in terms of the change nature of war that you have seen over the course of your career. If a conflict comes, it is going to start with

cyber, electronic, directed energy, space. Are we adequately taking account of the changing nature of conflict so that we are not preparing for the last war, but for hopefully there won't be another one, but if there is another conflict, that is where our effort should be going?

General MILLEY. Really briefly, Senator, I think we are in a pivotal period here, a transition period, where we have a method of war that is based out of an industrial age sort of thing, and we are moving to a different operational environment sometime in the future.

So, think about things like robotics, artificial intelligence, hypersonics, cyber. There is a wide variety of technologies that are coming at us very, very quickly. And the country that maximizes and optimizes those technologies for the conduct of warfighting is going to have a decisive advantage, at least at the outset of the next war.

Now, at the same time, you can't throw the baby out with the bathwater. We are in a transition period, so we are still going to need ships and planes and tanks, et cetera. But we are in that transition period, and I think this budget, and the last one, and future budgets are going to have to move us in the direction of modernizing the force, transforming this force into a future operating environment that is probably not very far away, probably about 10 years or so, and we need to move all with a sense of urgency.

Senator KING. Thank you. I agree, and the R&D [research and development] emphasis in the last budget, in this budget, I think is one of the most important policy directions that this budget represents. On behalf of the Chairman, Senator Sullivan.

Senator SULLIVAN. Thank you, Mr. Chairman, and I want to thank our witnesses, General Milley, in particular, for your service, and General Austin, as well General—I am sorry, Mr. Secretary. I appreciate you highlighting the suicide issue in your opening statement. As you know, that is hitting the forces in Alaska particularly hard.

Still having a hard time getting our arms around that. It is still happening, so working together on that one is a high priority of mine, and I appreciate you putting a lot of attention to that. I first want to begin by quickly covering an oversight issue deeply concerning to Members of this Committee, which was an abuse of the President's Commander-in-Chief authority when he gave a campaign speech last fall with Active Duty marines as political props.

This wasn't a speech about Veterans Day or Memorial Day or speech about the heroic actions of the marines in Iwo Jima or the chosen reservoir. It was the most partisan political speech of the President's 2 years in office where he disparaged tens of millions of Americans that he claimed threaten the Republic, did not respect the Constitution, on and on and on. Really harsh partisan campaign speech, and there flanking the President of the United States were two Active Duty marines.

Shameful, outrageous, infuriating. I have raised this issue with both of you and other military leaders and how inappropriate this image was to our republic. General Milley, you have talked about how the military needs to stay out of politics. I assume in good faith on both of your parts that you didn't know this.

But what I want is a commitment from both of you the next time some White House staffer thinks it is a good idea to politicize the military with a political speech like this, with two Active Duty marines or anyone else standing by the President, that both of you will put your foot down and not only say no, but say hell no. Can I get your commitment on doing that to this Committee?

Secretary AUSTIN. Senator, I think you know that I am opposed to any type of politicization of the military, and I will not comment on my President's actions.

Senator SULLIVAN. You think that was appropriate, Mr. Secretary?

Secretary AUSTIN. Again, Senator——

Senator SULLIVAN. Do you think that was in your personal opinion, General Milley—you have been speaking about this. Look, I thought both you were just—you guys are going to go, no. I have got a bunch more questions. But if we are debating this, let's have the debate. Do you think that was appropriate, General Milley?

You have spoken about not politicizing the military. That is just outrageous, and by the way, Democrats and Republicans agree with me. So, this isn't even that controversial. The President made a mistake and politicized—go read the speech. What do you think, General Milley?

General MILLEY. I am firmly committed to a nonpartizan, nonpolitical military.

Senator SULLIVAN. Okay, so if the White House has an idea to do something like that again, will both of you commit to this Committee to tell whoever the staff is, hey, don't do that. Bad idea. Marines shouldn't be——

General MILLEY. I will speak for myself. I have been asked in the past in two different administrations on things just like that, and I have always said, keep the military out of politics.

Senator SULLIVAN. I am surprised we are having a debate on this. Unfortunately. I am burning a lot of time. It is an important issue, though. I think we all would agree. I am going to next turn to Senator Wicker's point on the budget. Budgets are a reflection of an administration's priorities.

This Administration is now three different times in a row, submitted inflation adjusted cuts to the Department of Defense, while many other Federal agencies have gotten double digit increases. This was the 2022 budget. You see, the DOD was last, second last with a 3 percent cut. The 2023 budget, same kind of issue.

We are down there last. That was actually a 4 percent cut. In this budget, once again, one of the down here with 3 percent cut, while other agencies, EPA almost 20 percent. Both of you said this is the most dangerous time since World War II. This current budget shrinks the Army, shrinks the Navy, shrinks the Marine Corps.

Doesn't that embolden our allies like Xi Jinping and Putin, not deter them? General Milley, in your personal opinion, do you support a budget that actually shrinks three of the four services, particularly the Navy? The Congress here has been very clear that we want to grow the Navy. The Chinese are looking at our Navy naval fleet and we are shrinking it.

That is the budget. The President probably assumes correctly that this Committee will bump it up significantly. But do both of you support a budget that shrinks three of the four services?

What would you say to the issue of emboldening our allies when they see budgets like this that we 3 years in a row have to rectify by adding significant funding to them. I will ask both of you, gentleman.

Secretary AUSTIN. Well, Senator, first of all, let me thank you for your continued support for DOD. We really appreciate what you and your colleagues have done over the years. I think you heard me say earlier that we went through great pains to link our budget request to our strategy.

We are going after the capabilities that we think we need to be successful in any endeavor, and so, I am satisfied that this budget gives us what we need. It is an $842 billion budget. Again, I think it allows us to go after the right capabilities.

Senator SULLIVAN. General.

General MILLEY. Senator, as I said in my opening statement, I think the uniformed military can defend this country with an $842 billion budget. That is a lot of money, and I think if we put it in the right place against the right priorities, we will be able to adequately defend this country.

Senator SULLIVAN. In your personal opinion, do you agree with shrinking the Army, Navy, and Marine Corps?

General MILLEY. The size of the forces—I will go one into one here. When I was Chief of Staff of the Army, I had advocated for about a 525 to 50 size ground——

Senator SULLIVAN. This budget takes it to 450.

General MILLEY. Right, and so, I advocated for that because my analysis of future combat indicated that. This strategy, though—this is a strategy informed budget. This strategy and starting under General Mattis, or Secretary Mattis and now Secretary Austin, this strategy takes us to an essentially a one war strategy, a one war strategy with a main effort being China.

So, the question is, what forces are going to be required to confront or potentially fight China? I think the Army and Marines definitely have a role to play, but the weight of the effort is going to be the Navy and the Air Force—the Navy and the Air Force. Senator Sullivan: Budget shrinks the Navy.

General MILLEY. It does buy a couple of ships for a temporary period of time. I talked to the CNO [Chief Naval Officer] last night at length about this to make sure that I was clear on the Navy piece of it. The ships that are being decommissioned and divested of are having significant maintenance—in fact that the ships for the amphibs, they have been in the yard for years. They are costing way more money just a repair than are worthwhile.

So, they are trying to shift to the next generation of amphib. You will see the curve, I think, when they submit their shipbuilding plan, you will see the curve going up in the not-too-distant future. So, there is a temporary downward spiral of a couple of ships in the overall shipbuilding program.

But this budget buys nine. If you are down two, the net effect is you down two ships out of a 296 ship Navy. Then it goes down to 293, and then it starts coming back up. Now, is that huge? I

think the capability of those ships matters. As we all know, the capability of our ships are different than the capability of the Chinese ships.

I know that the Chinese have a lot of ships. However, we not only have the United States Navy, we have the United States Navy working with the Japanese Navy, working with the Australian Navy, working with the British Navy, work with the French Navy.

If you start adding up these navies, China is not only outnumbered, but they are outgunned, and in terms of capabilities, if you look at just what I think is the most lethal capability in the United States Navy today is the submarine.

Our subs, the Chinese Navy or the Russian Navy are not even in the same ballpark as our submarine force. Our submarine force can bring people to their knees just by themselves. So, our Navy and this budget—we never have enough things that we always—we always want something else. But this budget adequately protects the American people.

I am not going to—I can't compare it against the rest of the President's priorities. But this $842 billion budget buys a lot of kit, a lot of training. We are focused on two things, lethality and readiness, lethality and readiness, that is all we do every day. 24,000 live fires last year. The 24,000 of those—you talked about a continuing—I am sorry, Senator.

Senator SULLIVAN. No, no, I thought it was a good answer. Thank you, Mr. Chairman. Mr. Secretary, General, appreciate your service. Again, thank you.

Chairman REED. Thank you, Senator Sullivan. Senator Duckworth, please.

Senator DUCKWORTH. Thank you, Mr. Chairman. Mr. Chairman, earlier this month a former soldier was sentenced to 45 years in prison for attempting to murder U.S. servicemembers, for attempting to provide material support to terrorists, and illegally transmitting national defense information.

In fact, Mr. Metzler, the convicted gentleman, provided sensitive details about his unit, including information about its location, movement, and security to members of the extremist organization Order of the 9 Angles, a white supremacist, neo-Nazi and pro-jihadist group.

Mr. Chairman, I ask unanimous consent to enter into the record a RAND report dated 2021 that is entitled Reducing the Risk of Extremist Activity in the United States Military.

Chairman REED. Without objection.

[The information referred to follows:]

September 2021

Perspective
EXPERT INSIGHTS ON A TIMELY POLICY ISSUE

MAREK N. POSARD, LESLIE ADRIENNE PAYNE, LAURA L. MILLER

Reducing the Risk of Extremist Activity in the U.S. Military

In recent years, news headlines have highlighted the involvement of current or former U.S. military personnel in protest violence;[1] supremacist groups;[2] the January 6, 2021, insurrection at the U.S. Capitol;[3] and other forms of violent extremism spanning different political and ideological spectra.[4] The threat of extremism is not new, but the proliferation of social media has made it easier for radical ideas to spread quickly and for extremist groups to organize, even reaching into the military community (e.g., service members, military spouses, military dependents, civilian employees, and contractors) to expand membership and gain operational capabilities.

The U.S. Department of Defense (DoD) has long prohibited service members from actively advocating for extremist activities.[5] DoD policy establishes the expectation that commanders detect prohibited activities, investigate them, and take corrective action. It also relies on commanders to help minimize the risk by intervening early, "primarily through counseling" when they observe "signs of future prohibited activities."[6] Thus, commanders have a dual mandate to enforce current policy violations and anticipate future violations by personnel. DoD policy also places great responsibility on commanders to appropriately weigh the potentially competing interests of national security; service members' right of expression; and good unit order, discipline, and effectiveness.[7]

In this Perspective, we outline a framework to help commanders reduce the risk of extremism in the military. First, we provide highlights from research on extremism, including a framework for understanding these types of activities. Second, we use this framework to outline four strategies for reducing the risk of extremism in the military. Third, we recommend a community-based approach that leverages existing military programs to better support commanders as they carry out their responsibilities to prevent and mitigate exposure to extremism within the military.

Key Points

- *Extremism* is a term used to characterize a variety of attitudes, beliefs, and behaviors that often are on the extreme end of the political, religious, or ideological spectrum within society (e.g., white nationalist, anarchist).
- Extremist beliefs, affiliations, and activities are constantly evolving.
- Service members, military families, and civilian employees might actively or passively associate with extremist groups.
- DoD prohibits active involvement in extremist activities, but laws place limits on what activities the military can and cannot restrict or punish.
- Current policy requires commanders to intervene when they observe extremist activities or behaviors that might lead to future extremism.
- We present a framework to assist DoD in reducing the risk of extremism in the military.
- We make five recommendations, each focusing on a community-based approach that leverages existing DoD programs to help commanders and their subordinates prevent, detect, intervene, and measure extremist activities earlier rather than later.

Seeking Identity, Meaning, and Social Bonds, Service Members Might Find Them in Extremist Movements

Recent news headlines raise questions about the extent to which and the reasons why current and former members of the U.S. military would associate with extremist movements. For example, in 2017, U.S. Marine Corps Lance Corporal Vasillios Pistolis was imprisoned over his participation in the violent white supremacist "Unite the Right" rally in Charlottesville, Virginia.[8] In another case, the government charged U.S. Army Private Ethan Melzer with conspiring to murder his fellow soldiers by allegedly sharing sensitive details about his unit's upcoming deployment with a neo-Nazi and white supremacist group to facilitate an attack.[9] In January 2021, the government arrested ousted ex-soldier and self-proclaimed "hardcore leftist" Daniel Baker, who is accused of making online threats and attempting to organize violence against fascists, white supremacists, conservative protestors, and U.S. military officers.[10]

Individuals labeled as *extremists* (1) identify with beliefs and organizations that are on the far end of political, religious, or ideological spectra within a society and (2) advocate for activities that are outside societal norms and laws. These individuals often draw meaning from the

identity that they apply to themselves and others based on their group affiliations (e.g., race, gender, religion, nationality, political beliefs). Studies have identified a variety of factors that lead people to join extremist movements, such as having a passion for political change, looking for a sense of belonging, and seeking excitement.[11] One former leader of a white nationalist group claims that new members are often seeking to form a sense of identity, community, and purpose[12]—some of the same reasons that people join the military.[13] Research has identified at least four types of experiences that people tend to follow into extremism:

- *life events*: traumatic life events that prompt people to consider extremist views as a framework to understand their trauma
- *propaganda*: consumption of extremist material, including books, music, or online content
- *recruitment*: interactions with members of extremist groups that either reach out to individuals or that individuals seek out after self-radicalizing
- *social bonds*: social interactions with other members of extremist groups, especially if individuals are feeling lonely or isolated.[14]

There is no single factor that sufficiently explains why people become active in extremist causes. Often, a combination of factors leads individuals to become increasingly active in extremist activities. This ratcheting up of involvement might help people construct a new identity that is defined by an extremist ideology. Specifically, research has proposed that extremist identities become problematic when they (1) consume a large part of one's life[15] and (2) are defined by extreme hatred or prejudice toward other groups of people.[16]

Current and former military personnel might come into contact with extremist beliefs or groups on their own initiative, be exposed to those beliefs or groups online or through friends or family, or be approached by extremists seeking to recruit them.

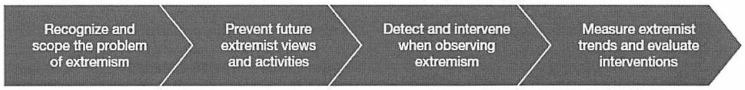
Framework for Reducing the Risk of Extremism in the Military

Figure 1 shows a four-part framework we use to categorize the ways in which the military could combat extremism. We first provide an overview of the framework, and then we examine each element more closely. The first part is to recognize the problem of extremism and define *extrem-*

Abbreviations

ACLU	American Civil Liberties Union
CAT	Community Action Team
DAF	U.S. Department of the Air Force
DHS	U.S. Department of Homeland Security
DIBRS	Defense Incident-Based Reporting System
DoD	U.S. Department of Defense
FBI	Federal Bureau of Investigation
FRG	Family Readiness Group
MWR	U.S. Army Family and Morale, Welfare and Recreation
NIBRS	National Incident-Based Reporting System
OSD	Office of the Secretary of Defense

FIGURE 1
Framework for Reducing the Risk of Extremism Within the U.S. Military Community



ist activities. The military has already done this through policy, public statements by military leadership, and a one-day "stand down" of activities to discuss extremism in the military.[17] Some experts argue that the scope of extremism should be narrow, with the goal of isolating the most-dangerous members participating in fringe elements of these movements.[18] Others argue that a broader scope can help identify those supporting extremists or provide an early warning about those at risk of becoming extremists. Our proposed framework focuses on addressing these early warning signs of extremism.

Second, the military could better leverage existing violence prevention programs to prevent service members from becoming involved with extremist groups. Some examples of existing prevention resources within the military are chaplains, mental health counselors, the Family Advocacy Program, and Military OneSource.

Third, this framework focuses on detecting extremist activities and designing interventions to respond to them. The military has existing authorities to detect broad patterns of extremism in its ranks; for instance, the military is authorized to coordinate with civilian law enforcement agencies, conduct defense criminal investigative services, and track extremist activities online. Leveraging existing resources designed to support the military community could help commanders detect early signals that might lead to future extremist activities, and then the commanders could intervene. People in existing programs, such as chaplains, counselors, and other sources of support, might become aware of emerging extremist groups, ideologies, rumors, and misinformation being circulated. Although those sources cannot violate their professional and ethical codes or standards for confidentiality, privacy, and the protection of sensitive health information, they could be encouraged and provided with a means to share general information about those trends so commanders could address them across the population at large.

Finally, our framework includes measuring extremist activities and using the results to inform the evaluation of programs designed to prevent, detect, and intervene when commanders become aware of signs of extremist activities. DoD currently tracks bias motivations in the Defense Incident-Based Reporting System (DIBRS), but it might need to reevaluate and revise these reporting codes in DIBRS and consider whether alternative forms of data collection would be useful to measure extremist trends in the future.

Part 1. Recognize and Scope the Problem of Extremism

The first part of our proposed framework is to recognize and define the problem of extremism. Military leadership has publicly recognized this problem, as is evident from the policies against it, recent statements made by U.S. Secretary of Defense Lloyd J. Austin III and various senior civilian and defense leaders, and the 2021 DoD order for commanders to conduct a one-day "stand-down" to discuss extremism with personnel.[19]

Defining the problem of extremism has been a challenge, however, because there is no widely accepted set of criteria for making that determination. In an attempt to draw the line for legal purposes, U.S. courts have tried to balance freedom of expression with the need to protect the public from disruptions and threats.[20] U.S. military courts have focused on the degree to which extremist behaviors were either damaging the reputation or public esteem of the military ("service discrediting") or harming good order and discipline, two concepts that are outlined in the Uniform Code of Military Justice.[21] The U.S. Department of Homeland Security (DHS) and the Federal Bureau of Investigation (FBI),[22] however, focus their definitions on how a particular belief system motivates someone to commit acts of violence. There are also definitions of extremism employed by private and nonprofit organizations. The Anti-Defamation League, for example, uses a broad definition of extremism that includes any "religious, social, or political belief systems that exist substantially outside of belief systems more broadly accepted in society."[23]

Historically, the military has struggled to identify and manage personnel whose beliefs might lead to future problems. During World War II, for example, the Army created the 620th Engineer General Services Company as a holding unit for personnel, many of them German-born, whom commanders suspected of being disloyal to the United States.[24] During the Vietnam War, basic military functioning was undermined by racial conflict within the ranks, some of which involved violence—including attacks against officers and enlisted leaders.[25] During the 1980s, following reports of service members involved in Ku Klux Klan activities, then–Secretary of Defense Caspar Weinberger released a memo broadening the policy against participation in hate groups, stating that active participation in white supremacy groups was "utterly incompatible" with military service, and authorizing commanders to discipline or even discharge those involved in disruptive activities.[26] Although the memo did not forbid joining these groups, the American Civil Liberties Union (ACLU) criticized the policy as overly broad.[27] In 2013, the ACLU also criticized U.S. Army Equal Opportunity training materials that characterized a variety of beliefs as extremism, including some held by evangelical Christian, ultra-Orthodox Jewish, and Ku Klux Klan groups.[28]

It is beyond the scope of this effort to develop a standardized definition of extremism. However, to further illuminate the complexity, we review select definitions from federal law enforcement agencies, DoD, and the military Services.

How Law Enforcement Agencies, the Department of Defense, and the Military Services Define Extremism

This section focuses on definitions of extremism used by selected federal law enforcement agencies, DoD, and each of the military departments as of the date this document was written. These definitions varied in scope. For example, some federal law enforcement agencies narrowly focus on the link between ideological beliefs and unlawful actions. In the U.S. military, however, the focus more broadly includes participation in activities that undermine good order and discipline or are service discrediting.

Federal Law Enforcement

As required by law, the FBI and DHS, in consultation with the Director of National Intelligence, developed definitions for terms related to domestic terrorism.[29] Their definitions for extremism are not identical to one another, but both the DHS and FBI define *domestic violent extremist* as

> an individual based and operating primarily within the territorial jurisdiction of the United States who seeks to further their ideological goals wholly or in part through unlawful acts of force or violence. It is important to remember that the mere advocacy of ideological positions and/or the use of strong rhetoric does not constitute violent extremism, and in some cases direct or specific threats of violence must be present to constitute a violation of federal law.[30]

Department of Defense

DoD policy related to extremism recognizes that "a service member's right of expression should be preserved to the maximum extent possible."[31] Furthermore, it notes that, while balancing the rights of service members, no commander should be indifferent to conduct that undermines unit effectiveness.

The policy also delimits prohibited and preventive activities. First, DoD policy states,

> Military personnel must not actively advocate supremacist, extremist, or criminal gang doctrine, ideology, or causes, including those that advance, encourage, or advocate illegal discrimination based on race, creed, color, sex, religion, ethnicity, or national origin or those that advance, encourage, or advocate the use of force, violence, or criminal activity or otherwise advance efforts to deprive individuals of their civil rights.[32]

Furthermore, the policy instructs personnel to reject active participation in criminal gangs or other organizations that advocate such prohibited views, activities, and illegal discrimination. Some examples of active participation include fundraising, demonstrating or rallying, recruiting, training, and wearing gang colors, clothing, or tattoos. The policy gives commanders authority to use a variety of administrative and disciplinary actions:

> The functions of command include vigilance about the existence of such activities; active use of investigative authority to include a prompt and fair complaint process; and use of administrative powers such as counseling, reprimands, orders, and performance evaluations to deter such activities.[33]

Second, DoD policy requires actions to prevent extremist activities. Specifically, the policy instructs commanders to intervene early (primarily with counseling) when they observe signs of potential future policy violations or actions

Current policy places a significant amount of responsibility on commanders to not only identify current violations of policies that prohibit extremist activities but also anticipate when behaviors might suggest a future policy violation.

that could undermine good order and discipline. For example, the policy states that possessing literature associated with extremist causes, ideology, doctrine, or organizations is not necessarily prohibited, but it signals that further investigations or counseling might be warranted.

Put simply, *current policy places a significant amount of responsibility on commanders to not only identify current violations of policies that prohibit extremist activities but also anticipate when behaviors might suggest a future policy violation.*

Military Departments

Military department policies reiterate key elements of the DoD policy and provide more detail for specific implementation. For example, guidance from the U.S. Department of the Air Force (DAF) prohibits personnel from active advocacy of "supremacist, extremist, or criminal gang doctrine, ideology, or causes."[34] These causes include the advocacy of "illegal discrimination based on race, creed, color, sex, religion, ethnicity, or national origin." Furthermore, prohibited causes include advocacy for "the use of force, violence, or criminal activity" that deprive the civil rights of others. DAF policy also highlights that efforts to counter violent extremism must be balanced, because "commanders must preserve the service member's constitutional right of expression to the maximum extent possible, consistent with good order, discipline, and national security."[35]

The U.S. Department of the Army policy on extremist organizations and activities, Army Regulation 600–20, which was revised in July 2020, is designed to be used in conjunction with DoD Instruction 1325.06. This Army policy prohibits extremist activities. Specifically, the revised policy clearly states that "it is the commander's responsibility to maintain good order and discipline" and notes that "every commander has the inherent authority to take appropriate actions to accomplish this goal."[36] The Army defines extremism by a variety of views that groups are advocating for, including hatred, intolerance, or discrimination based on race, sex, gender identity, sexual orientation, or ethnicity. It also includes the use of violence to deprive people of their individual rights; support for terrorism, sedition, and violence against the United States or

DoD; and unlawful violence to achieve political, religious, discriminatory, and ideological goals.

Furthermore, Army policy prohibits a wide variety of activities if associated with extremist groups; for instance, policy prohibits participating in public demonstrations or rallies, attending meetings on or off duty, fundraising activities, recruiting or training others to join such groups, holding apparent leadership roles, distributing literature on or off military installations, or receiving financial assistance from others associated with extremist groups.

Similarly, the U.S. Department of the Navy's policy prohibits participation in organizations that espouse supremacist causes. It also prohibits participation in organizations that create illegal discrimination based on race, creed, sex, religion, or national origin; advocate the use of force against the United States or subdivisions of the government; or seek to deprive individuals of their civil rights. This policy defines *participation* as conduct that is performed alone or with others (e.g., rallies, fundraising, recruiting, training) and describes the link between prohibited activities and impacts on good order, discipline, or mission accomplishment.[37]

Furthermore, the Navy's military personnel policy outlines a process for administrative or disciplinary actions for personnel who are involved in "any substantiated incident of serious misconduct resulting from participation in supremacist or extremist activities."[38] This policy describes relevant prescribed misconduct that relates to "illegal discrimination based on race, creed, color, sex, religion, or national origin" or "advocating the use of force or violence against any federal, state, or local government[s]."[39] The policy also lists various types of violations (e.g., insubordinate conduct, maltreatment of subordinates, rioting, provoking speech or gesture, assault, disloyal statements), noting this list is not exhaustive. More recently, the U.S. Marine Corps issued an order that consolidates various policies to prohibit a variety of activities, including "hazing, bullying, ostracism, retaliation, wrongful distribution, or broadcasting of intimate images, and certain dissident and protest activities (to include supremacist activity)."[40]

To summarize, the department-level policies share many of the same features, including prohibitions on extremist and supremacist ideology and active advocacy of these beliefs. These policies primarily focus on service members. All policies focus on illegal discrimination or depriving personnel of civil rights and prohibit violence against others or the government. The list of groups mentioned in these policy documents are not exhaustive, and there are a variety of potentially marginalized groups who might become targets. The policies also rely on the judgments of commanders to adjudicate policy violations, but there appears to be less guidance for commanders on how best to identify future violations and preserve service members' right of expression. We conclude that DoD, military department, and Service policies should maintain a standard definition of extremism and provide more guidance for commanders on how best to balance the rights of service members with unit functioning and national security interests. Furthermore, policy should also include guidance on a broader variety of members within the military community who might exhibit extremist behaviors (e.g., military families, military dependents, civilian employees, and contractors).

Part 2: Prevent Future Extremist Views and Activities

The second part of our proposed framework is to design programs to prevent members of the military community from associating with extremist groups or beliefs. Figure 2 outlines some of the features of extremism and proposed corresponding types of interventions. This encompasses activities within narrow definitions of extremism (labeled here as "extremist manifestations") and broader emotions, beliefs, and activities (characterized as "initial states" and "initial manifestations") that might be precursors to those extremist manifestations. The features displayed in Figure 2 are not necessarily linked as a linear process. The goal of these prevention programs should be to counsel individuals when they exhibit initial states or manifestations of extremism—two of the three attributes of extremism that are displayed in Figure 2—and to alert leaders to signs of misinformation, recruitment, and emerging groups that might be posing a threat to the military community.

The initial states of extremism include feelings and emotions, such as frustration and anger, that might not be noticed by others because they might be kept internal and are also common human emotions.[41] In the case of

FIGURE 2
Features of Extremism and Levels of Intervention

Initial states	Initial manifestations	Extremist manifestations
Internal emotions about society, institutions, culture • Anger, frustration, outrage • Dissatisfaction, distancing • Alienation, "otherness" • Revenge, hatred • Grievance, distrust, rejection of authorities and society • Disempowerment, lowered resilience to radicalization	Beliefs and actions more visible to friends, families, colleagues • Lack of participation in political processes • Negative feelings at lack of status, recognition in mainstream society • Acceptance of views that violence is acceptable, justifiable, necessary • Online interactions with extremists • Involvement in sharing extremist material	Activities often shared with like-minded others • Recruitment, radicalization, mobilization of others • Criminality to aid extremist groups • Membership, indoctrination, training in extremist groups • Terrorism, traveling to commit an act of terrorism
Prevention	**Early intervention**	**Aggressive intervention**
Preliminary prevention and detection by military community	Early and intensive intervention by military community	Aggressive intervention using law enforcement

SOURCE: Adapted from Baruch et al., 2018.
NOTE: This figure organizes three broad sets of features. It is not a linear progression of stages, and one might exhibit some or all of these features simultaneously.

extremism, however, the risk is that these intense, hostile feelings can be directed toward the wider society, culture, and authorities. Mentors and service providers, such as counselors and chaplains, can help members manage these feelings in productive ways and find legitimate channels for members to register their grievances.

Initial extremist manifestations are more-clearly visible identifiers of violent extremism—for example, dropping out of political processes and mainstream cultures, accepting extremist group narratives regarding the justification of and need for violence, and interacting with extremist groups and materials.[42] These attributes might be cause for concern for family members, military peers, or commanders, but to preserve the rights of service members, a sophisticated approach to addressing them will be needed, particularly when no policy has been violated.

Finally, extremist activities might be shared with wider groups of individuals who also hold similar beliefs. And, in some cases, these activities may cross into support, or justification, of violence that includes criminal activities.[43] These are the more clear-cut activities for which law enforcement should be contacted.

Existing military programs could augment commanders' efforts, particularly with the initial states and initial manifestations of extremism. These resources include but are not limited to chaplains; mental health counselors; Family Readiness Groups (FRGs); the Military Crisis Line; Military OneSource; the U.S. Army Family and Morale, Welfare and Recreation (MWR) program; and Air Force Community Action Boards. Behavioral and mental health resources and counseling are indispensable for identifying and countering extremism, and a majority of these programs might embrace psychosocial approaches that examine a combination of psychological and environmental factors.

Chaplains are a key line of defense for service members' existential, spiritual, or moral concerns.[44] They can be a point of referral for those in need of behavioral health care services and also provide privileged communication that other service providers would often be required to report.[45] Furthermore, perceived stigma associated with mental health treatment is a complicated barrier to seeking behavioral health interventions,[46] so some service members might be more inclined to seek out the support of military chaplains instead of counselors.

Extremist activities might be shared with wider groups of likeminded individuals and sometimes cross the line by supporting and justifying the use of violence, up to and including committing a criminal offense.

Rather than deciding to seek counseling on their own, service members might be encouraged or required to do so by their commander or other relevant personnel. One study examined how active-duty military personnel choose between options for help with emotional or mental health concerns and reported that soldiers generally seek out *civilian* mental health professionals for family and substance abuse problems, whereas *military* mental health professionals are primarily consulted for stress management, depression, anxiety, combat or operational stress, or anger management.[47]

Established in 2012, DoD's Military Family Readiness System comprises a diverse set of policies, programs, services, resources, and practices to support and promote family well-being. Commanders are supposed to work within this system when addressing many of the service member attitudes and behaviors that fall within the initial states and initial manifestations of extremism. Service member and family well-being fosters family readiness, which in turn enhances service members' readiness.[48] DoD's Military Family Readiness System includes such resources as FRGs (and their equivalents in the Services), the Military Crisis Line, and Military OneSource. As official command-sponsored and command-resourced organizations, FRGs offer assistance, mutual support, and a network of communications between family members, the chain of command, and community resource providers.[49] The Military Crisis Line is a free, confidential resource for service members. Military OneSource offers support for nonmedical counseling (e.g., marriage counseling, stress management) and referrals to other types of resources. Military mental health professionals address such issues as suicidal and homicidal thoughts; experiences of sexual assault, child abuse, or domestic violence; alcohol and substance abuse; and serious mental health conditions that require medical treatment. MWR and its partners offer education and counseling services for such issues as suicide prevention and survivor outreach.[50]

Air Force Community Action Boards and Community Action Teams (CATs) are another viable resource for coordinating strategies to identify and address patterns related to signs of initial states or initial manifestations of extremism. These are entities at the installation, major command, and headquarters level composed of representatives from diverse organizations (e.g., leadership, law enforcement, service providers) who coordinate periodically to identify and monitor the needs of the various populations within the military community (i.e., service members, their families, Air Force employees) and develop strategies to address them. For example, Air Force Instruction 90-5001 encourages commanders to consult with CAT members, Community Support Coordinators, and Violence Prevention Integrators to enhance well-being and resilience within their units.[51]

Part 3: Detect and Intervene When Observing Extremism

The third part of our proposed framework is to detect early trends of extremist activity at the installation level and then intervene at these installations, accordingly.[52] Coordination between military and civilian law enforcement and collection of open-source intelligence are two strategies for detecting these trends.

First, civilian and military law enforcement agencies have useful information they could share on which groups

pose the greatest threats for service members online and in the areas surrounding particular installations, as well as whether they observe indicators of extremist affiliations, such as symbols or slogans.[53] Military leaders, educators, and service providers could draw upon these resources for education, training, and informational awareness activities. For example, installation-level Air Force CATs (or equivalents in other Services) could develop a toolkit to provide access to videos, reports, bulletins, or other materials that could inform unit or community programming. The toolkit could offer ideas on organizations to contact for guest speakers who could educate and warn members about particular extremist groups and their beliefs, activities, and recruitment tactics. This information could help provide counter-messaging or inoculation against narratives and propaganda by extremist groups.

There are various criminal investigative services across DoD that might encounter evidence of extremist activities during investigations, either directly or indirectly. These include the Defense Criminal Investigation Services,[54] Air Force Office of Special Investigations,[55] U.S. Army Criminal Investigations Command,[56] and Naval Criminal Investigation Service.[57] Although they need to preserve the integrity of their investigations, there might be patterns or broader trends they could then share with military leaders and service providers to aid in detection, stop the spread of harmful information, and engage in other countermeasures. The Office of Law Enforcement Policy and Support within the Defense Human Resources Activity could also help coordinate the detection of extremist activities and sharing of information across DoD.

Second, the internet has made it easier for extremist groups to interact with a broader variety of potential members. New machine learning techniques can aid in searching for online trends of extremist involvement.[58] For example, models can be trained to detect extremist communities on such social media platforms as Twitter and to infer the degree to which users who appear to have current or past associations with the military are engaging with these extremist groups. From these online discussions, insights could be drawn to inform headquarters-prepared materials targeting misinformation, recruitment language, and so on for broader use by the military community. However, there are risks associated with the use of artificial intelligence and machine-learning tools, including privacy concerns, false positive or negative results, and algorithmic bias that require continuous recalibration by a human-in-the-loop.[59]

Detection and intervention are not solely the domain of law enforcement or data analysts. Service providers might have information about potential risks for extremist activity, although they might not always recognize it as such. Chaplains, psychologists, social workers, Military and Family Life counselors, psychiatrists, and health care providers might be providing support for individuals exhibiting the initial states or initial manifestations of extremism. These support service providers must preserve their professional and ethical obligations regarding confidentiality and act in ways that promote rather than undermine help-seeking behaviors and treatment. We do not imply that these professionals should report every individual who feels frustrated with the government, feels alienated from others, or is withdrawing from political processes, for example, but in the course of their work they might become aware of information that could be impor-

tant for detecting and intervening to counter extremism. Such information might include

- extremist materials appearing on the installation (e.g., left in the chapel or hospital waiting rooms)
- emerging extremist groups, movements, or causes
- rumors or misinformation being spread that could stoke the flames of social conflicts (e.g., race, gender, sexual orientation)
- justifications of extremist activities that resonate with members
- poor reputation of military channels for filing complaints or appeals, or service members' lack of awareness of these channels.

Sharing this type of information—not tied to any particular individuals—could inform efforts to keep abreast of ever-evolving groups and social movements, to actively dispel myths and misinformation or dismantle justifications that could increase the risk of adopting extremist views, and to improve the awareness and functioning of complaint channels to encourage people to work within them.

It is important that providers (1) understand the types of aggregate information that they could share with commanders that would be helpful and (2) have a safe way to share this information.

Part 4. Measure Extremist Trends and Evaluate Interventions

The last part of our proposed four-part framework involves the measurement of extremist trends and subsequent evaluation of the early interventions previously described. DoD already collects some data on extremism using the DIBRS, which records law enforcement activities and statistics within the military and reports criminal data to the FBI as required by the Uniform Federal Crime Reporting Act of 1988.[60]

One data element in DIBRS is "bias motivation." *Bias* is defined as "a performed negative opinion or attitude toward a group of persons" (e.g., racial, religious, ethnic or national origin, sexual orientation, or disability groups).[61] Table 1 displays some of these codes in DIBRS.

There are several potential areas of improvement for data collection related to extremism in the military. First, the codes used in DIBRS might not always align with those used in the FBI's National Incident-Based Reporting System (NIBRS).[62] For example, NIBRS has a code for "Anti-Native Hawaiian or Other Pacific Islander" while DIBRS has a separate code just for "Anti-Pacific Islander." DIBRS has separate bias motivation codes for seven religions, while NIBRS has 14 codes for religious bias. Furthermore, NIBRS has a code for "Anti-lesbian, gay, bisexual, or transgender (mixed group)" while DIBRS has no code for transgender bias.

Second, there might be biases in how incidents are reported to DIBRS. For example, incidents in the FBI's NIBRS are not necessarily representative of all incidents among the U.S. population,[63] and some have reported a nonresponse rate in reporting by law enforcement agencies to the FBI.[64] The same might hold true for DIBRS. Furthermore, some have raised concerns in the past about the reliability of data from the DIBRS.[65] Thus, there might be a need to continuously review what is reported to DIBRS (i.e., consistent use of correct motivation bias codes), the frequency of reporting (i.e., consistent reporting by the Services over time), and the sharing of data with the FBI to ensure that broad trends related to

TABLE 1
Bias Motivation Codes in the Defense Incident-Based Reporting System

Race and Ethnicity	Religion	Sexual Orientation	Mental and Physical Disabilities	Unknown Bias
• AW = Anti-White • AH = Anti-Black • AD = Anti-Arab • AM = Anti-Hispanic • AC = Anti-American Indian • AB = Anti-Alaskan • AE = Anti-Asian • AT = Anti-Pacific Islander • AR = Anti-Multi-Racial Group • AZ = Anti-Other Ethnicity	• AO = Anti-Jewish • AI = Anti-Catholic • AN = Anti-Islamic (Moslem) • AU = Anti-Protestant • AS =Anti-Multi-Religious Group • AA = Anti-Agnostic • AY = Anti-Other Religions	• AQ = Anti-Male Homosexual • AK = Anti-Female Homosexual • AL = Anti-Heterosexual • AG = Anti-Bisexual	• BA = Anti-Mental Disability • BB = Anti-Physical Disability	• AX = Unknown Bias

SOURCE: DoD, 2020, p. 26.
NOTE: Table 1 does not display the code "NB = None (no bias)."

extremism are captured between civilian and military law enforcement organizations.

Third, there could be alternative ways to collect data on trends related to extremism and how they might relate to intervention activities. For example, the Army's iSALUTE program is an online reporting tool for members of the Army community to report suspected extremist activities.[66] As military leaders release new tools, there will be a need to continuously evaluate these data sources and subsequent interventions.

Conclusions and Recommendations

This Perspective outlines a framework for reducing the risk of extremism in the U.S. military. It provides a brief review of relevant background information about extremism and presents a four-part framework for mitigating such activities. The first part is recognizing and defining the problem of extremism, which the military has already done. The second part is preventing future extremist activities from occurring across the ranks, and the framework outlines ways for the military to accomplish this. The third part involves using strategies to detect what might be precursors of extremism and helping commanders intervene accordingly. The fourth part describes ways for the military to measure extremist trends and evaluate interventions using an evidence-based approach.

Conclusions

We have identified four conclusions using this framework.

First, current DoD policies clearly prohibit extremism in the military and place significant responsibilities on commanders to implement this policy. Specifically, policy requires commanders to take corrective action when they observe active forms of extremist activities. It also requires commanders to intervene when they observe behaviors that *might* lead to a future violation of policies that prohibit extremism. This is a tremendous responsibility, particularly given that commanders are not subject-matter experts in extremism and that, even for experts, this would be difficult, because many of the precursors to extremism are common (e.g., frustration with society, institutions, and culture) and do not lead to extremism.

Second, there is no widely accepted definition of extremism that delineates where to draw the line between *extremism* and beliefs and behaviors that are simply *outside the norm*. That presents challenges for commanders in trying to balance the rights of service members with detection of current extremist policy violations or problematic behaviors that have a high probability of leading to extremist activity in the future.

Third, policy largely focuses on extremist activities by service members. The problem of extremism emerges from and affects the broader military community, meaning not only service members but also their families and civilian employees.

Fourth, DoD has several existing support programs that could be better leveraged to support commanders in implementing DoD's ban on extremist activities while protecting the rights and needs of those they serve. Such programs could also help a broader variety of members of the military community (e.g., military spouses, dependents, civilian employees, contractors) to detect and intervene earlier rather than later when they observe extremist activities that affect the military.

Recommendations

We offer five recommendations that inform a strategy to support commanders in mitigating extremism within the military.

DoD efforts to combat extremism should engage the wider military community, not focus solely on service members. Given the diversity of the U.S. military community, any policies or programs designed to prevent or detect extremism should consider *all* members of the military community—in partnership with relevant civilian community members—as potential partners in the fight against extremism. In 2019, there were more than 1.3 million members on active duty, but also more than 1 million members of the Ready Reserve, more than 200,000 members of the Standby or Retired Reserve, almost 900,000 DoD civilian employees, more than 965,000 military spouses, and more than 1.6 million children of members.[67] Additionally, military installations and deployed environments can include contractors, personnel from other agencies, and members of other nations' militaries. Any member of these groups might adopt and promote extremist beliefs and act upon them, including becoming active or passive members of extremist groups promoting racial supremacy, religious extremism, or specific social or political issues. Commanders and supervisors face major challenges detecting early signs of extremism across the various members in the broader military community, many of whom commanders will rarely if ever directly meet. Anti-extremism efforts focused just on active-duty personnel will miss key sources of information and opportu-

nities for influence. Such military activities and resources as stand-downs, town halls, information campaigns, and channels to share tips with leaders should also engage the broader community, including active and reserve component personnel, spouses and partners, children, civilian employees, and contractors.

Efforts to address extremism should take a community-based approach that leverages existing military programs. Responding to early signs of extremism is preferable to waiting until initial extremist states manifest in ways that directly affect military readiness or preparedness. Service providers from the various support agencies already do help individuals find more-acceptable ways to manage emotions, such as frustration and anger directed toward authority figures or certain segments of society. Community service providers could also think about broader ways to counter the influence and impact of extremist groups. For example, they could

- provide general guidance on how to break cycles of outrage and hate and to manage personal relationships with any friends or relatives who hold extremist views or are involved in violent extremist groups
- organize activities to dispel stereotypes and myths promulgated by hate groups and to illuminate the harm of hate speech, targeted threats, and other extremist activities
- organize real-time live or virtual question-and-answer sessions with reformed extremists to understand the impacts of extremism and how people disengage from these groups.

Service providers could also alert leaders to signs of misinformation, recruitment, and emerging groups that might be posing a threat to the military community.

A community-based approach would also emphasize the need to support unit and broader installation-wide morale, welfare, and recreational activities to strengthen the military identity, community, and sense of belonging. These may counterbalance extremist recruitment strategies, which seek to build rapport, camaraderie, and loyalty at the small-group level as a bridge to introducing extreme beliefs and actions. A stronger sense of unit cohesion and community well-being can make personnel and their families more resistant to these strategies within the military community.

The Office of the Secretary of Defense (OSD) should continue to coordinate information-sharing between civilian and military law enforcement agencies. Extremist groups are volatile by nature. Such groups might form, evolve, splinter, or disintegrate relatively quickly, only to reemerge later in new forms. The tracking of these trends will require cooperation among federal law enforcement agencies (e.g., FBI), state and local law enforcement agencies, military law enforcement organizations (e.g., Army Criminal Investigation Command), and domestic intelligence and security agencies (e.g., DHS and the Defense Counterintelligence and Security Agency).

OSD and the military departments should employ machine-learning technologies to help detect broad, emerging trends of extremism that might affect members of the military community. The internet and social media have reduced the costs of creating, sustaining, and growing extremist organizations—not only in the United States but also around the world. Many of these online data are publicly available, and recent advances in machine-learning methods would allow trained professionals within OSD and the military departments to spot early patterns of extrem-

ist activities that might target members of the military community.[68] Such tools are useful for identifying broad trends at the installation level, using de-identified data. We distinguish this approach from law enforcement analyses of individual-level identifiable data for investigation purposes. The use of these machine-learning tools does carry risks, including privacy concerns, false positive or negative results, and algorithmic bias. Thus, we recommend continuous recalibration of these tools that involves a human-in-the-loop.

OSD should continually measure existing extremist trends and evaluate programs designed to prevent, detect, and intervene when members of the military community express extremist views. There is a paucity of data on trends surrounding the prevalence of extremist activities in the military. For example, extremism might occur at the nexus of civil-military relations, whereby civilian extremist groups attempt to recruit members of the military community; but civilian and military law enforcement agencies might not always share information about possible extremism. The bias motivation codes used in DIBRS and the process for collecting and reporting bias-motivated incidents should align with the FBI's NIBRS. This integration would ensure that trends in extremism are shared between civilian and military law enforcement agencies. Furthermore, as the Services and OSD develop new tools for collecting data on extremism, opportunities will arise to identify best practices for measuring extremist activities over time.

Cautionary Points on Implementation

This section discusses four cautionary points on the issue of scope creep when implementing policies designed to reduce the risk of extremism in the U.S. military. First, policy should avoid loosely applying the label of *extremist* to *all* people who exhibit initial states of extremism. Not all people who express anger, frustration, outrage, or feelings of alienation are or will become extremists. Second, we are not suggesting that the military should assign the mission of combating extremism to any of its existing community support services. These services are a set of tools out of many (e.g., law enforcement entities, counterintelligence efforts, mental health services) and should be part of a comprehensive strategy to combat extremism.

Third, the military should avoid using its community support services as an extension of law enforcement. Chaplains, mental health counselors, and FRGs should support personnel and their families versus collecting evidence on individuals for future law enforcement actions.[69] These services can help provide information about misinformation, patterns, and external groups but must not undermine their

Community support services are a set of tools out of many that should be part of a comprehensive strategy to combat extremism.

own efforts, ethics, or professional standards. Finally, "early interventions" refer to leveraging existing support services to prevent people from ever taking up active involvement in extremism that requires disciplinary actions. Preventive work can be achieved through helping individuals manage difficult feelings and life experiences and guiding them to more-productive channels for expressing their grievances and bringing about change.

Closing Thoughts

The vast majority of military personnel and their families are not extremists. But even a small number of people engaged in extremist activities could damage the U.S. military's reputation, its force, its members, and the larger community. Extremist activities can also be harmful to the individuals who are radicalized and their friends and family. DoD has existing programs that support personnel and their families, promote diversity and inclusion, and prevent violence. A community-based approach that leverages these existing programs could help the military to prevent service members and their families from associating with extremist groups and to respond sooner—and more effectively—when they do.

Notes

1 Thompson, Winston, and Hanrahan, 2018.
2 Wilkinson, 2020.
3 Dreisbach and Anderson, 2021.
4 Shammas and De Vynck, 2021.
5 DoD Directive 1325.6, 1996; DoD Instruction 1325.06, 2012.
6 DoD Instruction 1325.06, 2012, p. 10.
7 DoD Instruction 1325.06, 2012.
8 Thompson and Winston, 2018.
9 U.S. Department of Justice, 2020.
10 Shammas and De Vynck, 2021; *United States v. Baker*, 2021.
11 Helmus, 2009.
12 Picciolini, 2020.
13 Helmus et al., 2018.
14 Brown et al., 2021.
15 Burke, 1980.
16 Fromm, 1973.
17 Austin, 2021.
18 Jenkins, 2021.
19 Garamone, 2021.
20 Williford, 2019.
21 DoD, 2019b; *United States v. Wilcox*, 2008.
22 DHS and FBI, 2020.
23 Anti-Defamation League, undated.
24 Ricks, 2011.
25 Cortwright, 1990.
26 Gross, 1986.
27 United Press International, 1986.

[28] Murphy, Rottman, and Sher, 2013; Sher and Rottman, 2013.

[29] DHS and FBI, 2020.

[30] DHS and FBI, 2020, p. 2.

[31] DoD Instruction 1325.06, 2012, p. 1.

[32] DoD Instruction 1325.06, 2012, p. 9.

[33] DoD Instruction 1325.06, 2012, p. 9.

[34] DAF Instruction 51-508, 2018, p. 14.

[35] DAF Instruction 51-508, 2018, p. 14.

[36] U.S. Department of the Army Regulation 600-20, 2020, p. 30.

[37] U.S. Department of the Navy, 1997.

[38] U.S. Department of the Navy, 2008, p. 1.

[39] U.S. Department of the Navy, 2008, p. 1.

[40] U.S. Marine Corps, undated; U.S. Marine Corps, 2021.

[41] Baruch et al., 2018.

[42] Baruch et al., 2018.

[43] Baruch et al., 2018.

[44] Kim et al., 2016.

[45] See Rule 503 in DoD, 2019b.

[46] Kazman et al., 2020.

[47] Morgan et al., 2016.

[48] National Academies of Sciences, Engineering, and Medicine, 2019.

[49] U.S. Army, undated.

[50] MWR, undated.

[51] DAF Instruction 90-5001, 2019.

[52] For a similar approach that collected data on individual members of the U.S. Air Force community using surveys but aggregated them to the installation level, see Sims et al., 2019.

[53] National Gang Intelligence Center, 2015.

[54] DoD, 2010.

[55] Grabosky, 2020; Losey, 2020.

[56] Ethridge, 2020.

[57] McMahon, 2020.

[58] Marcellino et al., 2020.

[59] Brown et al., 2020.

[60] DoD Instruction 7730.47, 2020.

[61] DoD Instruction 7730.47, 2020.

[62] U.S. Department of Justice, 2021.

[63] Addington, 2008.

[64] McCormack, Pattavina, and Tracy, 2017.

[65] DoD, 2014; U.S. Government Accountability Office, 2010.

[66] U.S. Army, 2021.

[67] DoD, 2019a.

[68] Marcellino et al., 2020; Marcellino et al., 2021.

[69] For a discussion of how some heavy-handed responses to extremism may fail, see Brown et al., 2021.

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About the Authors

Marek N. Posard is a military sociologist at the RAND Corporation and an affiliate faculty member at the Pardee RAND Graduate School. His primary area of research focuses on social problems in military organizations. Posard's research has focused on a variety of topics, including unit cohesion, the countering of disinformation efforts, military families, the recruitment and retention of personnel, and modeling the will to fight. Most of his research uses survey, experimental, or qualitative methods. Posard holds a Ph.D. in sociology.

Leslie Adrienne Payne is a political scientist at the RAND Corporation with a combined background in social and political science and qualitative research methods. Since 2012, much of her research has focused on counterinsurgency, counterterrorism, and civilian-military relations. Payne holds M.A. degrees in security policy studies and international political theory. She is currently working toward her Ph.D. in defense studies.

Laura L. Miller is a senior social scientist at the RAND Corporation. For nearly 30 years, she has studied the lives of military personnel and their families through surveys, observations, discussion groups, interviews, and analyses of military policy and personnel data. Research topics include military culture and organization, deployment experiences, social integration, social problems, health and well-being, military spouse education and employment, unit cohesion and morale, and civil-military relations. Miller holds a Ph.D. in sociology.

About This Perspective

In recent years, news headlines have highlighted the involvement of current or former U.S. military personnel in protest violence; supremacist groups; the January 6, 2021, insurrection at the U.S. Capitol; and other forms of violent extremism spanning different political and ideological spectra. The threat of extremism is not new, but the proliferation of social media has made it easier for radical ideas to spread quickly and for extremist groups to organize, even reaching into the military community (e.g., service members, military spouses, military dependents, civilian employees, and contractors) to expand membership and gain operational capabilities.

This Perspective outlines a framework to help commanders reduce the risk of extremism in the military. First, we provide highlights from research on extremism, including a framework for understanding these types of activities. Second, we use this framework to outline four strategies for reducing the risk of extremism in the military. Third, we recommend a community-based approach that leverages existing military programs to better support commanders as they carry out their responsibilities to prevent and mitigate exposure to extremism by members of the military community.

RAND National Security Research Division

The research reported here was completed in July 2021 and underwent security review with the sponsor and the Defense Office of Prepublication and Security Review before public release.

This research was sponsored by the Office of the Secretary of Defense and conducted within the Forces and Resources Policy Center of the RAND National Security Research Division (NSRD), which operates the National Defense Research Institute (NDRI), a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense intelligence enterprise.

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Acknowledgments

We are grateful for Melissa Bauman's dedicated work to improve the prose of this report. Further, we acknowledge early contributions by Aaron Frank and S. Rebecca Zimmerman to the initial scoping of this work. We also thank Ryan Brown of RAND and Morten Ender from the United States Military Academy at West Point for their thoughtful reviews.

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PE-A1447-1

Senator DUCKWORTH. Thank you, Mr. Chairman. This report states, and I will just briefly say this, the vast majority of military personnel and their families are not extremists, but even a small number of people engaged in extremist activities could damage the United States military's reputation, its force, its members, and the larger community.

Extremist activities can also be harmful to individuals who are radicalized and their friends and family. That said, as someone who wore the uniform for 23 years, I mean, I was just a reservist and a guardsman, did not reach the ranks of the gentleman here or even some of my colleagues on the other side of the aisle.

I have to say I am offended at the implication that conducting extremist training means that our military is filled with extremists. Just as I personally am appreciative of the fact that we have sharp training and by conducting sharp training, we are not saying that every member of the military is a harasser or a perpetrator of military sexual assault.

Similarly, my entire time since I have left the military has been spent working on mental health for our troops. By providing mental health training and resiliency training, we are not saying that the military is filled with people who are about to commit suicide.

This is simply part of readiness. So, that said, I am going to switch. I just want to put this on record because it is very offensive to me to very politically say that extremism in the military and training against it is saying that the military is full of extremists.

The military is full of the bravest, most amazing men and women who do the best job that they can, and they need to be equipped to do their jobs. That means that they need to be equipped with the training to recognize sexual harassment when it occurs, to recognize extremism when it occurs, to recognize signs of hidden wounds of war, when it occurs so that we can keep our units in the highest levels of readiness. Okay, I am done with that.

Last month, I led a CODEL [Congressional Delegations] to Japan in Indonesia, and I am planning to going back to the region twice more in just the next few months, and this, in June, Senator Sullivan and I will be leading a delegation to the Shangri-La Dialog.

Mr. Secretary, I believe you are going to be speaking there, and I look forward to hearing your remarks there. In August, I am planning to take a bipartisan group of my colleagues to visit the Philippines, Indonesia, and Thailand to spotlight the importance of opportunities that our nations have to partner together.

Mr. Secretary, in your testimony, you highlighted the DOD's enhanced maritime security with the Philippines and exercises with Thailand. In what other ways does the Department's budget request support our allies and partners in Southeast Asia? And how are you program to achieve integrated deterrence in this area of the Indo-Pacific?

Secretary AUSTIN. Well, thanks, Senator, and certainly you with a PDI, Pacific Deterrence Initiative, we are asking you for some $9.1 billion to improve infrastructure in the region so that we can position our troops further forward and we can be more interoperable. You know, presence matters.

We see a significant investment in the AUKUS agreement, Australia, and the UK, and the United States are working together to provide the Australians a conventionally armed nuclear powered submarine capability. And another pillar of AUKUS calls for us to work together on key technologies like AI and hypersonics and long-range fires.

I think that kind of thing, building interoperability is really, really key. We are doing some of the same things with the Japanese as we work to become more interoperable with them. We are helping our partners and allies strengthen their capabilities in terms of cyber.

I think all of those things will add value. But we are seeing things in the region now that we weren't seeing 2 years ago, the Japanese doubling its defense investment more access to the Philippines.

As you know, 2 years ago, we were about to get kicked out of the Philippines. But we have moved to strengthen our relationship, and I just think that is powerful.

Senator DUCKWORTH. Thank you. I just want to touch on the cyber piece. In fact, last year, I included—I am sorry, in 2021 NDAA, I included legislation that authorized the Department of Defense to establish a pilot program to enhance cybersecurity, the resilience and the readiness of the military forces of Vietnam, Thailand, and Indonesia.

General Milley, next month I will introduce legislation to expand this important program to include Malaysia and the Philippines.

Can you comment on the value of direct engagement with our overseas partners to help build their cyber skills?

General MILLEY. I can. Not only cyber skills but any of the military skills. We have excellent military to military relations with so many countries. If you look at, for example, the contact group in Europe that the Secretary has organized, 54 countries show up to support Ukraine and obviously there is only 30 and NATO's so many countries from around the world in Asia.

It is particularly important, I think, given the dynamic nature of the geostrategic environment in Asia. So, the more countries that we have with us, whether it is cyber or anything else, is critically important.

In the world of cyber, though, we know that cyber and space are two domains now of armed conflict, including the traditional ones of land, sea and air. So, as we modernize the force and move into cyber space, those two domains are going to be fundamental to success in any kind of conflict.

Working with our allies and partners in the region and developing their capabilities along with ours, I think will go a long way to deterrence. If necessary, if deterrence fails and it is necessary, then it will go a long way to prevailing in the armed conflict.

Senator DUCKWORTH. Thank you, and thank you for your remarkable career of service to this Nation and also that of your wife. She not only directly saved lives herself in a very hands-on way, quite literally, but also her work on mental health for our troops is continuing to pay off dividends. Thank you.

Chairman REED. Thank you, Senator Duckworth. Senator Budd, please.

Senator BUDD. Thank you, Mr. Chairman, and again, thank you all for being here today and for your time. It has been very helpful. You know, this week, the Senate will likely vote to repeal the 1991 and the 2000 to authorizations of use of military force against Iraq.

Now, one of the amendments considered was whether to replace the 2000 to AUMF with an authorization for the use of force against Iranian backed militias in Iraq.

That vote failed but I think there is an important issue here that needs to be addressed. Now, despite the likely repeal of the 2002 AUMF, the United States still has forces in Iraq at the invitation of the Iraqi Government to train, advise, and to assist Iraqi forces. We also have forces in Syria conducting operations against ISIS.

Now, given Iran's continuing malign activities in the region, our forces are at risk of attack from Iranian backed militias, and in fact have been attacked by those militias more than 80 times, including just last week, resulting in the death of a United States contractor and injuries to U.S. servicemembers.

Secretary Austin and General Milley, a brief yes or no, please. Do you agree that the President has both the authority and the responsibility under Article 2 of the Constitution to protect the United States and our forces from attack and the threat of imminent attack? Again, yes or no, Secretary Austin

Secretary AUSTIN. I do, Senator.

General MILLEY. Yes, same——

Senator BUDD. Yes. Thank you. But despite the more than 80 attacks by Iranian backed militias, the United States has only re-

sponded with force just a handful of times. In my view, that is unacceptable. Secretary Austin, earlier you told my colleague, Senator Cotton, that our last the retaliatory strikes against IRGC infrastructure, it was against infrastructure doing.

Now, does that mean a building or a warehouse? The question behind the question is really why not target the IRGC leadership or officers directing these attacks?

Secretary AUSTIN. Thank you, Senator. We can be more specific in closed session, but it included a headquarters element building and also storage sites where key munitions were being stored and other capabilities were being developed, and there were people in those facilities.

Senator BUDD. Thank you for that. The point being that we need to reassert deterrence and our current responses don't seem to effectively do that. Weakness only breeds more aggression. Weaknesses are provocative.

If we only respond when they kill an American, they will continue attacking, hoping to injure as many as possible. There is no reason why this Administration should not respond more forcefully should Iranian backed militias threaten United States Forces in Iraq or in Syria. It is important for the American people to know that it is not because the Administration doesn't have the legal authority to do so. This Administration simply seems to lack the will.

Secretary Austin, another issue that needs to be addressed is the Department's use of taxpayer dollars to facilitate abortions. Now, I join my colleagues in publicly denouncing the policy changes, unfortunately made at your direction, to authorize unasked, uncharged absences and travel pay for those seeking abortions.

The military is not a place for social agendas. So, I will ask you here, will you rescind those abhorrent policies?

Secretary AUSTIN. What I will say, Senator, is, number one, this policy does not fund abortions, and I want to be clear on that. This policy provides access to non-covered reproductive health care. As I said earlier, almost one in five of my troops, our troops are women.

Senator BUDD. Very aware. But I understand that ultimately it is taxpayer dollars that are for this uncharged absences and the travel expenses related to that. I understand your point, but I still think that is not the right answer.

Until these policies are rescinded, I am going to also have to consider holds against DOD nominees in solidarity with my colleagues. Mr. Secretary, you can fix this, 158 holds, in essence, are there. You can fix this in nearly in an instant, so I would encourage that. Shifting gears, a bit——

Secretary AUSTIN. Sir, I would encourage you to help us make sure that we have the leadership in place to lead our magnificent——

Senator BUDD. I would agree with you, completely agree with you, and you can fix that nearly instantaneously with a change in policy. So, thank you. We understand, Secretary Austin, that the Committee has heard from most of the Combatant Commanders so far earlier this year.

I have asked each of them about foreign military sales and how that's working in their areas of responsibility, and each have said

that the process is not fast or flexible enough to meet our partners' defense requirements and that we are at risk of losing our security of partner of choice status to China.

So what efforts are the Department taking internally to streamline the FMS [Foreign Military Sales] process, and are there issues that you think need to be addressed by Congress?

Secretary AUSTIN. A year ago, I put together a tiger team to address this specific issue, and you are right. I mean, there are a number of our allies and partners who clearly want to see capability be provided quicker.

I fully understand their concerns. So, we are doing everything we can to identify logjams and work through those to speed up things. Industry is coming out of a 2-year trough there because of COVID, as you know, sir, and, you know, it will take a little time for our industry to catch up.

But we are going to do everything we can to make sure that the bureaucracy is not slowing things down. And we will continue this work. But I don't disagree with you that this is something that requires consistent focus on, and we are going to do that.

Senator BUDD. Thank you both. I yield.

Chairman REED. Thank you. Senator Kelly.

Senator KELLY. Thank you, Mr. Chairman. Secretary Austin, earlier today at this hearing, Senator Ernst asked General Milley about conflict in the INDOPACOM region, and the General's response referenced the importance of irregular warfare. So, Secretary Austin, I have been rather disappointed with the halting and repetitive process that DOD has exhibited as it attempts to establish the irregular warfare center.

As you may recall, the IW [Irregular Warfare] Center was authorized by this Committee back in 2020, and the project was intended to honor Arizona Senator and former Armed Services Committee Chairman John McCain's legacy of support for the concept of a whole society approach to our national security.

He knew that traditional military strength isn't enough in today's geopolitics and that we also need to succeed in the irregular and in the competition spaces, not just in conflict. In recognition of the original intent for this project, this Committee supported naming the Center for Senator John McCain. Now, I have also been working closely with this Committee and the Department to ensure that we leverage expertise and ideas from universities to help our Nation get after these significant challenges.

The original authority identified the McCain Institute at Arizona State University as a site to be reviewed as a location for the establishment of the center. I appreciate your memo, Mr. Secretary, from July 2022 affirming your decision to create the Center for Security Studies in irregular warfare and directing DOD to act expeditiously, including in determining allocation.

But now we are nearly 3 years down the road and we have had numerous duplicative site reviews and we are still waiting for a final decision, and what I don't think we need is a new basing process. We need a decision.

It is clear to me that it is time to move forward with Arizona State University and ensure that the IW Center can deliver on its promise for DOD and the Nation. So, Mr. Secretary, can I have

your commitment that you will look into these delays and push the Department to come to a final decision on this?

Secretary AUSTIN. Certainly, Senator, you have my commitment that I will look into the delays. You know, what I have required the team to do is to make sure that we have a process that is transparent and also that avoids outside influence and to make sure that we are aboveboard. But I will certainly look into it and get a brief back to you on specific delays that we have encountered.

Senator KELLY. Well, thank you. Thank you, General, because 3 years is just, it is too long, and this is, as General Milley pointed out, is just as important if we wind up in a conflict in the Western Pacific. So, thank you, Mr. Secretary.

General Milley, last year, Congress authorized multi-year procurement contracts as a way to boost our Nation's dwindling supply of munitions and to purchase additional systems in support of Ukraine, and this has had a meaningful impact on a lot of Arizona businesses who produce some of these critical munitions. Multi-Year procurement can save the Government a lot of money. It can save it a lot of money over the long run and provide much needed stability for manufacturing business, while also ensuring that our military and our key partners and allies have the munitions that they need.

General Milley, can you please, in the time I have remaining, just talk about the impact that multi-year procurement has had so far in securing weapons, both for the United States but also for Ukraine. Has this been beneficial? And do you think that the munitions that Congress authorized for multi-year procurement is enough, or should we have more products being considered for multi-years?

Chairman REED. You have 19 seconds.

General MILLEY. So first, multi-year contracts are essential, and passing a budget on time with no continuing resolution is essential to ensure we have multi-year contracts. So, those two things are linked, and I cannot emphasize that enough. That is important, and it has had a big impact, positive impact on Ukraine, and it will help to replenish our stocks as well.

Senator KELLY. Do you think we should expand it to some other products?

General MILLEY. I do.

Senator KELLY. Thank you. Thank you.

Chairman REED. Thank you, Senator Kelly. I would ask, I have been very tolerant of the time, but I ask people to stay within 5 minutes. We are running quite late. Senator Scott, please. Thank you.

Senator SCOTT. Only for Senator Rosen and me. Only for us two. Thank you. Thank you for—thank you guys for your service. Thank you for all the men and women that serve. On the Personnel Subcommittee for Armed Services, Senator Warren and I had a presentation on how bad we are doing on recruiting.

Our recruiting numbers are pretty pathetic right now. It seems like, I remember I joined in 18 and joined the Navy. We knew who our enemies were, we knew what the military's role was and I think unfortunate.

A lot of Americans are a little concerned. There is recent polling data from the Reagan Institute and the National Independent Panel on Military Service and Readiness, showing us that many Americans and majority of Active Duty servicemembers find the military to be politicized and focused on what divides us instead of what unites us.

If that is true, what can you do and what are you doing to make sure, because I think Senator Sullivan was bringing up the fact that we shouldn't have marines in pictures like that and with speeches.

What are you doing to make sure our military is not perceived to be a political arm of whoever, whoever the President is, doesn't matter whether the Republican or Democrat.

Secretary AUSTIN. Well, first of all, I would just do two things. First, in terms of the satisfaction of the troops that are in the ranks and how we view ourselves. Senator, I would just point to the fact that we have the highest reenlistment rates probably that we have seen in several decades.

What that means is that people are satisfied with the opportunities they are provided and with the development that they are receiving. The second thing is with respect to recruiting, as you know, there are a number of things that have combined to create headwinds, and they include the lowest jobless rate that we have seen in many, many years. Also, 2 years of COVID, and, you know, Senator, without recruiters not having access to high schools and centers of influence for 2 years will have a profound impact on our ability to recruit. Our leadership in the services is doing the right thing. I mean, our Secretaries, our Chiefs are doing the right things.

They are they are investing, beginning to invest the right moneys in advertising and encouraging their recruiters to be in the right spaces. They are hiring the right people to be recruiters, and I used to be a recruiter, so I am not guessing at what this takes. I know how hard this is and what you need to do to be successful. They are beginning to do those things again, and I think we will see this—we will see the trends move in a different direction.

Senator SCOTT. So, the next year, we will have good numbers?

Secretary AUSTIN. Next year, you will have better numbers. We will be where we want to be probably the year after that. It took 2 years to get us to where we are because of COVID. It will take a little bit longer to get to get turned around.

General MILLEY. Senator, I have had many thanks and conversation with all the chiefs on this whole topic. Yes, we have a recruiting challenge, no question about it. I do think there is a cause-and-effect link to COVID and I am not blaming that. But we do know that recruiting numbers are directly linked to contact time.

Because kids have been in high schools and we haven't had the recruiters in high schools, contact time is very, very low. So, consequently, you have much lower recruiting numbers as one key factor. Another key factor is just the familiarity with the American citizenry, with their military.

Now we are at an all-time high, 50 year high of re-enlistment, which is incredible, actually. That indicates that the people in the military are satisfied with what they are doing every day.

So that is an all-time 50 year high. But 80 percent, 70 to 80 percent in that range, depending on the service, of our folks in uniform are in uniform who have a family member in uniform, either a father, mother, brother, sister, aunt, uncle, grandfather, grandmother, something along those lines.

So, it is familiarity with the military that makes a difference, I think, in terms of recruiting, and that is what we got to get out. We have to get out more into the society. We got to make sure we increase our contact time significantly.

On the politicization piece, look it, I have tried from day one to make sure that we have an apolitical, nonpartisan U.S. Military. If we have anything other than that, that is a danger to the Republic.

We must remain a nonpartisan, apolitical military that is fundamental to this country and that is what I am committed to. That is what all the generals are committed to, and that is what you have right now, and that is what we want to continue to keep.

Senator SCOTT. General Milley, I like your answer to Senator Sullivan on you being able to compete against China. Do you actually believe that all the countries you named will show up if China invades Taiwan?

General MILLEY. I think in different ways, yes. Perhaps not all with combat forces and that sort of thing. I think allies operate differently. Every country operates in its own strategic interest at the moment in time. But I do know that we have an incredible network of allies and friends around the world.

In the Pacific, we have a series of bilateral defense treaties that are ratified by the Senate, and those are ironclad, you know, with the Republic of Korea, Japan, Philippines, Thailand, Australia. These are treaties that we are committed to fight on their behalf sort of thing. So, I think we have a network of allies and partners that gives us a strategic advantage over China or Russia, for that matter. If you look at who China's friends are, it is not very many.

They are operating in a purely transactional way around the world. They are trying to garner as many natural resources as they can from around the world. But there is not a lot of people who are "friends" with China.

There are many, many countries that are very tight, very close with the United States, and that is a great strength of ours, and I do think they would be there in time of need.

Chairman REED. Thank you, Senator Scott. Thank you very much. Senator Rosen, please.

Senator ROSEN. Well, thank you, Mr. Chairman. I really appreciate holding this hearing. I want to thank each of the witnesses today for testifying for your service to the country.

General Milley, I know this is going to be your last time before the Committee, and I want to thank you for your decades of distinguished service leading the brave men and women of our Armed Forces and really navigating so many challenges worldwide. We all appreciate your service.

So, we are going to—I am going to talk a little bit about combating Iranian aggression, because attacks on the United States installations and servicemembers by Iran's terrorist proxies are increasing, particularly by rocket and drone attack.

The Pentagon estimates that hundreds of American troops have been killed by Iranian backed militias, including, as we have discussed already today, a deadly attack last week on a United States base in Syria.

There are families across the country without their loved ones as a direct result of Iranian aggression. I can't repeat that enough, a direct result of Iranian aggression. Yet Iran's regime has never been held accountable for orchestrating attacks against Americans. So, Secretary Austin, I appreciate that in this latest instance, last week, the United States responded with airstrikes against individuals connected with the IRGC.

But just as you told my colleague, Senator Cotton, Senator Budd, we know there have been about 83 such attacks by Iranian proxies on United States forces in Syria in the past 2 years alone. We have only retaliated four times.

So why has the United States responded so infrequently, particularly when these militias are most pervasive threat, the most pervasive threat to U.S. and coalition forces in the region?

Secretary AUSTIN. Well, first of all, as was stated earlier, our troops have the ability to certainly protect themselves, and there have been responses, local responses to certain types of activity in those—our troops always have the ability to do that. In terms of major responses, strikes, you are right, there has only been four of those.

At the three tours I spent in Iraq I can tell you that me and my troops received a lot of attacks from Iran. But when we respond, we want to make sure that, Iranian backed militias, we want to make sure that that we are going after the element that is responsible for whatever that activity is. So, it takes a little time to develop attribution.

Then we want to make sure that we are holding the right element accountable, and we are doing everything that we can to protect our troops, and so, all of those things go into our consideration when we plan a response option.

Senator ROSEN. Well, I have two questions. One for you, General Milley, another one for you, Secretary Austin. So, the first one is for General Milley to followup. What can we do proactively to counter these militias before they injure and kill American servicemembers? Then, Secretary Austin, can you tell us, do our Commanders who I know want to do more, have the necessary authorities to target Iran's proxies other than the ability for self-defense? So, General Milley, we will start with you.

General MILLEY. In terms of proactive measures, what we are looking at is force protection in all of the various camps and outposts in the Central Command area of operations, specifically in Iraq and Syria, where these attacks occur. They have, we think, adequate force protection in terms of the kind of rocket and missile defenses.

They are able to, in fact—forward responses is probably an understatement because we end up shooting down a lot of these incoming UAVs, for example. If a rocket or a 107 rocket or something like that is going to miss the compound by 2 or 3 or 4 or 5 kilometers, that is a significant amount.

Really what we owe you is some better numbers actually on attacks that I would categorize as actual attacks on the compound, and missing a compound by 2 or 3 kilometers, that may or may not—we don't know what that was necessarily. So, we owe you some better numbers.

But to get to your point about proactively, we have to work closely with the Iraqi Government for those Shiite militia groups that are inside Iraq. We have to continue to work with our partners in the region for the attacks that are occurring in Syria. So, working with our indigenous allies and partners is key, and then also putting these groups on notice, the various Shiite militia groups who know who they are, letting them know that we will respond affirmatively and forcefully if they attack our troops.

We have done that. There are some of these groups that are much more aggressive than others, and we have actually in the past done some things to those groups that are not necessarily on the front page of the paper.

There are activities that are occurring that do act as a proactive measure. The last thing I would say with respect to Iran. Messaging Iran is critically important. The Iranian Government is a complex, large organization, and the supreme leader may or may not be making every single decision.

We do know that the Iranian Revolutionary Guard force and specifically their Quds force, which is designated a terrorist organization, that group there is what we need to be targeting and targeting them very harshly over time, and that is exactly what we plan on doing.

Senator ROSEN. Thank you. I know my time is up. But Secretary Austin, just asked if we have the necessary authorities, quickly.

Secretary AUSTIN. I think we do, Senator, and this is something that we need to continue to review as we go forward. We certainly have the right to self-defense. We have authorities under the 2001 AUMF, and that enables us to do what we need to do to in or counter ISIS efforts.

But again, as we go forward, it is always good to look at the authorities and make sure that we evolve them if that is required. You have my commitment to work with leadership and with you to continue to do that.

Senator ROSEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rosen. The Committee will stand in recess until 12:55 p.m., and we will reconvene in closed session in SVC–217. Thank you, gentlemen.

[Whereupon, at 12:38 p.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR TIM KAINE

NON-DEPLOYABILITY POLICIES

1. Senator KAINE. Secretary Austin, it came to my attention during visits to the Mid-Atlantic Regional Maintenance Center following the suicides of four sailors that a contributing factor to the stressors at the command was a manning policy that allows for a 60 percent increase in the assignment of personnel (30 percent for limited duty and 30 percent for pregnancy/post-partum) with no additional resources to support a population that requires extra care and attention. What is the Department of Defense's ("Department") position on the assignment of temporarily non-

deployable servicemembers and ensuring that there are the proper policies and resources in place to support their rehabilitation and reintegration?

Secretary AUSTIN. One life lost to suicide is too many. That is why I am committed to addressing mental health issues and suicide in the Force. In May, I directed the Department to take critical, immediate actions informed by the work of the Suicide Prevention and Response Independent Review Committee that I stood up in 2022, to increase access to behavioral and mental health and servicemember wellness.

Specific to temporarily non-deployable servicemembers, the Department provides broad latitude to the Secretaries of the Military Departments to consider all aspects of a member's ability to serve, for retention and assignment purposes. The Department does not normally restrict the assignment of servicemembers who are temporarily non-deployable for a medical condition, except for pregnant servicemembers beyond 36 weeks of gestation, where there is a medical travel restriction for servicemembers or the servicemember's spouse. The Department is committed to, and has a vested interest in, aiding servicemembers to address and remedy conditions that result in a non-deployable status, and it is important that servicemembers maintain continuity of care.

PRE-POSITIONED WAR RESERVE MATERIEL

2. Senator KAINE. Secretary Austin and General Milley, what is your assessment of the Department's long-term pre-positioned war reserve materiel requirements, such as those associated with the National Defense Sustainment and Logistics Review?

Secretary AUSTIN. Maintaining effective prepositioned equipment and war reserve materiel requirements is critical to our ability to project power around the world, respond to global contingencies, and execute war plans. Our reinforcement of NATO's eastern flank following Russia's February 2022 invasion of Ukraine demonstrated the value of prepositioned equipment. DOD forces rapidly deployed from the United States, drew prepositioned armored brigade combat team equipment, and built battle-ready formations with significant combat power to deter aggression against NATO. Moving forward, we are pursuing a range of investments to replenish and improve our prepositioned equipment in Europe as we also add new prepositioned capabilities—including long-range fires and logistics—in the Indo-Pacific region. These investments are key to maintaining our deterrent posture and warfighting advantages.

General MILLEY. Prepositioned War Reserve Material (PWRM) is strategically located to facilitate a timely response in support of Combatant Commander requirements during the initial phases of an operation and provide a quick response across a range of military operations.

The services made instrumental investments and must continue to grow PWRM capability and capacity. There will likely be some challenges in sufficient storage space, storage locations, perishable assets material degradations and an aging fleet of prepositioning ships.

Services will have to continue to prioritize resources and mitigate some risk derived from insufficient funding through the use of retrograde equipment, sourcing requirements from other Combatant Commands, and/or utilizing theater transportation from Active components.

DEPLOYABILITY RATES

3. Senator KAINE. General Milley, during your opening statement you said that operational readiness rates are higher now than they've been in many years and that currently, 60 percent of the active force could deploy to combat in less than 30 days and 10 percent could deploy in less than 96 hours. How are these readiness rates determined and could you provide additional data, especially related to strategic lift capabilities, to support these figures?

General MILLEY. Determining operational readiness rates is governed by DOD and Joint Staff policies: DODD/DODI 7730-series and CJCSI 3401.02B—Force Readiness Reporting. These documents detail the requirements for all operational units to periodically report resource category levels (C-levels), as well as unit capability assessments for designed and assigned missions as informed by Mission Essential Task (MET) assessments. The C-levels reflect the status of the unit's resources (personnel, equipment/supplies, and training) measured against the resources required to undertake the wartime missions for which the unit is organized and designed. The operational readiness rates specifically for the strategic lift capabilities (all components) are extremely similar to those of the active force. Additional readiness data is available at the classified level.

HYPERSONICS TECHNOLOGY

4. Senator KAINE. Secretary Austin, the Nation's current capability for developing and testing hypersonic technology is slow and expensive, resulting in our hypersonic technology maturity being behind the current, pacing threat. To address this gap, the Multi-Service Advanced Capability Hypersonics Test Bed (MACH-TB) program was created to increase the rate and reduce the cost of the Nation's hypersonic test flights. Last year, a team of several industry partners was named to leverage commercially available launch vehicles for hypersonic payloads. This will offer the Department of Defense (DOD) a national hypersonic testing capability that can be leveraged by a broad range of U.S. Military hypersonics programs, DOD research programs, industry partners, and academia stakeholders. Could you please explain the value of leveraging commercially available launch vehicles for hypersonic testing?

Secretary AUSTIN. We have made significant progress as a result of our hypersonic investments over the last 2 years. In the last year alone, we have performed 12 successful hypersonic flights tests, and we plan to conduct 20 hypersonic test flights this year. Our fiscal year 2024 budget request also invests $11 billion to deliver a mix of hypersonic and long-range subsonic missiles.

Use of commercial launch vehicles is one of the primary enablers for our hypersonic testing. Commercial launch vehicles can provide proven launch capabilities at reduced cost and complexity when compared to traditional DOD launch vehicle providers. Commercial launch providers will deliver turn-key launch services that increase accessibility and reliability of DOD hypersonic flight tests. Work with commercial launch vehicles can also help us develop and validate technologies prior to integrating them into advanced weapon systems. By using these turn-key solutions to our advantage, the Department can conduct hypersonic flight testing more frequently and more affordably.

5. Senator KAINE. Secretary Austin, how do programs like MACH-TB program benefit the DOD and the U.S. national security strategy in the near term and long term?

Secretary AUSTIN. Our strategy relies on delivering the right mix of capabilities to support our warfighting concepts, which includes delivering the right mix of long-range fires, including both hypersonic and long-range subsonic missiles. In the near-term, MACH-TB enables rapid risk reduction for hypersonic prototypes, accelerating delivery of new capabilities to the Warfighter. In the long-term, MACH-TB allows an affordable and accessible approach to developing new technologies that will enable next generation hypersonic weapons.

6. Senator KAINE. Secretary Austin, what is the importance and associated timing of full-scale hypersonics flight tests and the expansion of critical test infrastructure?

Secretary AUSTIN. We are in a global technology competition that will shape the future of warfare. This requires the Department to develop the right defensive and offensive systems to remain ahead of our adversaries. Deterrence today and tomorrow requires integrating capabilities into new operational concepts, and hypersonics are a logical and necessary addition to our mix of capabilities. As a result, we have made significant progress, performing 12 successful hypersonic flight tests in the past year. The fiscal year 2024 budget invests $11 billion to deliver a mix of hypersonic and long-range subsonic missiles, and the Department plans to conduct 20 hypersonic test flights this year.

Through the fiscal year 2024 budget request for $29.8 billion for missile defeat and defense, we are also pursuing a layered counter-hypersonic defense strategy by increasing our investments in interceptors, and the Department has procured the glide-phase interceptor for an additional layer of defense. As we continue to further develop these capabilities, the Department will work closely with the defense industrial base to ensure that they can produce the right mix of munitions the joint force needs today and in the future.

7. Senator KAINE. Secretary Austin, how can we ensure that the DOD, industry partners, and academia stakeholders work together on requirements definition and program execution of MACH-TB and other programs to further the Nation's hypersonics capabilities?

Secretary AUSTIN. Our hypersonics test bed, also known by the acronym MACH-TB, has established a working group composed of stakeholders from DOD, industry, and academia. This working group meets quarterly and is structured to identify hypersonic experiment requirements, allocate experiments to available flight tests, and develop an execution plan for the flight test campaign.

Bringing together the right stakeholders from the Department, industry, and academia will help ensure our hypersonic capabilities continue to advance at the pace and scale necessary to maintain deterrence and, if necessary, fight to win.

RECRUITING

8. Senator KAINE. Secretary Austin, how have school restrictions on the release of Armed Services Vocational Aptitude Battery (ASVAB) scores (Option 8) affected recruiting in the past 10 years?

Secretary AUSTIN. We are working every day to recruit America's best talent, and the Department does not have any data to indicate that school restrictions on the release of test scores have negatively impacted recruiting in the past 10 years. Rather, we have been facing multiple years of headwinds. Notably, the pandemic created significant challenges, keeping recruiters out of schools and communities for more than 2 years. Also, a historically strong economy and tight job market are creating fierce competition for talent. We must address these headwinds and connect with young people, their families, and community leaders to show the value of public service, and the Military Departments are working hard to do just that.

QUESTIONS SUBMITTED BY SENATOR ANGUS KING

INTELLIGENCE SURVEILLANCE, AND, RECONNAISSANCE (ISR) SUPPORT TO COMBATANT COMMANDS

9. Senator KING. Secretary Austin, your statement submitted to the Committee does not address your title 10 obligation to serve as the single lead agency of the Federal Government for the detection and monitoring of aerial and maritime transit of illegal drugs into the United States. The Northern Command (NORTHCOM) and Southern Command (SOUTHCOM) Commanders testified last week that they need more ISR and domain awareness support and assets, yet these are listed on their unfunded priorities list—not in their base budget. Why are the 'small' amount of domain awareness and ISR assets—so vital for the Homeland and today's threat—NOT in your base budget?

Secretary AUSTIN. Our strategy drives our budget, and we are focused on ensuring the right mix of capabilities to meet its objectives. The Department is acutely aware of the need to enhance persistent surveillance of the aerial and maritime approaches to North America. I have been working closely with Combatant Commanders and the Military Services to understand and advocate for resources necessary to protect our Nation against an increasingly wide range of threats.

Intelligence, Surveillance, and Reconnaissance remains a priority for the department, and we will continue to ensure we have significant ISR capability. However, we also must ensure that we have the flexibility and agility to outpace our competitors in the future. This is about having the right mix of capabilities, and it requires getting the capability to process, exploit, and disseminate the ISR we collect. Ultimately, our budget is designed to implement the 2022 National Defense Strategy and we will continue to invest in the right mix of capabilities today and into the future.

10. Senator KING. Secretary Austin, who oversees the counterdrug and counter-transnational criminal organization mission for the Department? Does this same person also oversee and provide recommendations for ISR investments to fulfill your title 10 obligations to help curb the flow of illegal drugs into the Homeland?

Secretary AUSTIN. I oversee policy and operations for all of DOD. The Under Secretary of Defense for Policy (USD(P)) approves DOD counterdrug and counter-transnational organized crime strategy, policy, and plans consistent with national strategies and DOD strategy, policies, and objectives. Under the authority, direction, and control of the USD(P), the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict (ASD SO/LIC) oversees and approves DOD efforts for the detection and monitoring of suspected illicit drug aerial, maritime, and surface traffic bound for the United States.

The Combatant Commanders are responsible for counterdrug operations in their respective areas of responsibility, including requesting intelligence, surveillance, and reconnaissance (ISR) assets using the Global Force Management process. The USD(P) and ASD SO/LIC participate in this process and provide recommendations to me on the allocation of ISR assets globally. When those assets are unavailable due to higher priority missions, we pursue government-owned/contractor-operated aircraft, contract aircraft, and periodic deployments of DOD aircraft as part of a training mission. Using this approach, we have increased the number of flight hours by more than 2,000 hours since 2018 in support of the counterdrug mission.

QUESTIONS SUBMITTED BY SENATOR JACKY ROSEN

MAINTAINING OUR DEFENSE TECHNOLOGICAL EDGE

11. Senator ROSEN. Secretary Austin, global competition for a skilled workforce, declining investments in research and development (R&D), the DOD contracting challenges, and the science, technology, engineering and mathematics (STEM) workforce gap are all impediments eroding our technological edge with our adversaries. Meanwhile, China is investing heavily in advanced technologies such as artificial intelligence, biotechnology, and quantum computing. That's why I am working to establish a public-private partnership pilot program to accelerate the scaling, production, and acquisition of advanced capabilities for national security by creating incentives for trusted investment in American small businesses working on innovative defense technology. How might a public-private partnership that catalyzes investment in advanced capabilities help maintain our technological edge, especially with regard to China?

Secretary AUSTIN. It is critical that we draw on all elements of national power to continue to outpace the PRC, including through public-private partnerships. The Department is focused on leveraging America's capacity for innovation to deliver cutting edge capability to the battlefield as fast as possible. That is why the fiscal year 2024 budget invests $145 billion in RDT&E—the largest ever—and continues to build bridges with America's dynamic innovation ecosystem. This includes investments of $1.8 billion for artificial intelligence, $687 million for the rapid defense experimentation reserve, and $115 million for DOD's new Office of Strategic Capital to drive American investment in critical technologies. Our capital markets give us an advantage over adversaries like the PRC, and we need to fully leverage those markets. The Office of Strategic Capital will allow us to drive private capital into the critical technologies our warfighters need most.

Additionally, we are actively working to reverse the downward trend in small business prime contractors. The Department encourages use of other transaction authorities, which offer flexibility and drives innovation by inviting non-traditional companies to participate in the defense industrial base. Cooperation is critical to building the talent we need and DOD will continue to increase talent exchanges with industry to cross-train and grow talent in high-end technologies across the Department.

CYBER SURGE CAPACITY

12. Senator ROSEN. General Milley, our Nation faces unprecedented cyberattacks and a consistent shortage of cyber talent at DOD and other Federal agencies, which together pose a significant risk to our national security. To address these challenges, I am working to find solutions to provide the Department with qualified civilian personnel to support the Department's cyberspace operations and ensure we have the talent needed to defeat, deter, and respond to malicious cyber activity, especially at times of greatest need. How might non-traditional cyber reserve models be a possible pathway to recruit personnel who might not otherwise choose to join the active or reserve components, or who might lack the physical eligibility, but possess valuable cyber skills?

General MILLEY. Deputy Secretary of Defense Dr. Kathleen Hicks signed the 2023–2027 DOD Cyber Workforce (CWF) Strategy, which sets the foundation for how the Department will foster a cyber workforce capable of executing the Department's complex and varied cyber missions. The strategy enables the Department to prioritize retaining highly skilled cyber talent by closing workforce development gaps.

Through the CWF Strategy, the DOD CIO ensures alignment with the Joint Staff, United States Cyberspace Command, and Services to focus Department efforts on cyber-related human capital initiatives in support of the 2022 National Defense Strategy. Additionally, a forthcoming Cyber Workforce Strategy Implementation Plan provides a list of initiatives that outline how the Department will pursue a comprehensive approach to overcome cyber talent shortages.

One of the initiatives is to establish mechanisms for surge capability for mission needs. The Department of Defense has a well-established group of Reservists and National Guardsmen that are highly trained and positioned to fill this gap. Even with these personnel the Department requires more surge cyber capability and the Department is exploring expanding the scope beyond traditional service and looking at all possibilities to fill this need.

One non-traditional pathway for creating more surge capability is a USCYBERCOM initiative to create a Cyber Alumni Program. Instead of the traditional Reserve model, it allows the mission owner to maintain a connection with

Service Members and Civilians that have separated from the Joint Force. Personnel that participate in this program are eligible to retain their security clearance and gain access to additional professional development opportunities. This initiative gives the mission owner access to a searchable Alumni data base of skilled professionals that may be eligible to surge when the time comes to respond to an increase in cyber activity.

COMMUTING ASSISTANCE FOR SERVICEMEMBERS

13. Senator ROSEN. Secretary McCord, airmen stationed at Creech Air Force Base and servicemembers stationed at many rural or remote installations have to commute many miles to base from where they live. Creech has very limited housing nearby, so the vast majority of airmen live in Las Vegas, which is about 45 miles away. It's an even longer commute for those who have to drop off their kids at the child development center or utilize other services at Nellis Air Force Base, which is on the opposite end of town. Does DOD have the existing authorities to provide these servicemembers with a gas stipend or something similar to make their commute less expensive as they deal with rising costs or is this something the services would need help from Congress to address?

Secretary MCCORD. In general, outside of congressionally approved programs like the Mass Transit Benefit Program [5 U.S.C. § 7905.], commuting costs are considered a personal expense of the servicemember.

The Department also notes that a gas stipend, as suggested in the question, would be considered taxable income for members under the Internal Revenue Code. At this time, the Department has no authority to provide reimbursement for single-occupant motor vehicles used for daily commuting from servicemembers' domicile to their assigned duty stations.

The Department does, however, have a program in place that Services can use to incentivize hard-to-fill assignments (37 U.S.C. § 352), and a program to account for the cost of living in high-cost areas (37 U.S.C. § 403b). Currently, Creech Air Force Base does not qualify for either of these programs.

MIDDLE EAST SECURITY COOPERATION

14. Senator ROSEN. General Milley, the Deterring Enemy Forces and Enabling National Defenses (DEFEND) Act—which Senator Ernst and I introduced last year and which was included in the Fiscal Year 2023 National Defense Authorization Act (FY23 NDAA)—advances an integrated air and missile defense architecture between the United States, Israel, and Arab states to protect against Iranian aggression in the Middle East. I appreciate the discussions you and I have had about this issue. Can you provide an update on Central Command's (CENTCOM) efforts to develop an integrated air and missile defense architecture in the Middle East, and to promote Israel's integration into regional partnerships?

General MILLEY. USCENTCOM is working diligently with allies and partners across the Middle East to design, plan, and resource an integrated air and missile defense architecture. Over the past 18 months, USCENTCOM has started multiple efforts with the interagency and regional partners to forge a multi-lateral construct to counter aerial threats in the Middle East. These efforts include combined training exercises, FMS/FMF cases, and liaison officer exchanges, often at the multilateral level. USCENTCOM supports security-related engagement between Israel and other nations in the region inherent in the Abraham Accords and diplomatic initiatives such as the Negev Forum.

USCENTCOM's efforts to develop an overarching security architecture now includes Israel. USCENTCOM and Israel are planning and conducting joint training events that significantly increase the interoperability of United States and Israeli military forces. Notably, in January 2023, United States and Israeli forces conducted EXERCISE JUNIPER OAK. This exercise included a large-scale live fire event with over 140 aircraft, 12 naval vessels, High Mobility Artillery Rocket Systems, and Multiple Launch Rocket Systems.

POTENTIAL UKRAINIAN COUNTEROFFENSIVE

15. Senator ROSEN. General Milley, Russia committed significant manpower and equipment to launch offensives in Ukraine this winter. Their gains have been limited, and their losses have been significant. Nonetheless, the defense of these towns has not come without costs to Ukraine. Are we providing the Ukrainian Armed Forces with the necessary capabilities and quantities to successfully reclaim territory in a coming counteroffensive and if not, what is required that they could immediately employ to reclaim their sovereign territory from Russian forces?

General MILLEY. The United States is fully committed to ensuring Ukraine has the capabilities it needs for a successful counteroffensive. Along with our allies, we have consulted with Ukrainian leaders as they have planned their military operations to resist Russia's illegal full-scale attack on their sovereign territory.

We have trained Ukrainian Armed Forces (UAF), focusing on: basic individual combat tasks, collective combined arms maneuver tasks, and proficiency on donated weapons systems and equipment.

We are providing Ukraine arms and equipment to support both upcoming operations to liberate territory from Russian occupation and to maintain the defense of territory from further Russian advances. United States and ally assistance has included supply of critical weapons systems and ammunition: Armored ground vehicles, air defense weapons; unmanned aerial vehicles; Ammunition for High Mobility Artillery Rocket Systems (HIMARS); Tube-Launched, Optically Tracked, Wire-Guided (TOW) missiles; Artillery ammunition, (including precision-guided rounds); demolition munitions and obstacle clearing equipment; High-speed Anti-radiation missiles (HARMs); other precision aerial munitions; mortar systems and ammunition; AT–4 anti-armor weapon systems; anti-tank mines; Claymore anti-personnel munitions; grenade launchers, small arms and associated ammunition.

16. Senator ROSEN. General Milley, what is your assessment of how short-range drones and one-way attack anti-tank munitions are being used in this conflict and their effectiveness given the electronic environment?

General MILLEY. The utilization of short-range drones follows the historical airpower progression from primarily intelligence, surveillance, and reconnaissance purposes to a relatively low-cost offensive capability. The small drones provide increased ability to observe and target ground forces, while providing greater standoff for Ukrainian forces, while also shortening the targeting process.

Effectiveness depends not just on the uncrewed aerial system (UAS) itself but also on the operator's proficiency in target recognition and knowing what munition is most effective against what target. Munition effectiveness varies on target type (e.g., tank, infantry fighting vehicle, or troop formation).

One-way attack munitions have shortened the targeting cycle and enabled the Ukrainian Armed Forces (UAF) to attack specific targets without human input after munition launch.[1] This application of UAS technology has the twofold effect of destroying Russian fielded equipment and forces, and demoralizing Russian troops.

17. Senator ROSEN. General Milley, what lessons have we learned about these kinds of weapons for our own force and defense industrial base?

General MILLEY. We have learned that drones and one-way attack (OWA) UAS strikes are effective, but not decisive in themselves. We observed Russia implement defense mechanisms, such as fencing and use of alternative materials that degraded the effectiveness of UAS munitions and OWA strikes. UAS support targeting efforts and help to shape force protection, but they are vulnerable to electronic warfare. We must enhance resiliency of UAS systems, increase electronic protection measures to make them more survivable in highly contested environment, while remaining cognizant of their relatively short lifespan and high attrition. No single materiel or non-materiel enabler can tip the scales one way or the other. It is the cumulative effect of these capabilities, ably employed.

QUESTIONS SUBMITTED BY SENATOR MARK KELLY

F–16S TO UKRAINE

18. Senator KELLY. Secretary Austin, I organized a letter to you with a bi-partisan group of 8 Senate colleagues, requesting that you take a hard look at what it would take to provide F–16 fighter jets to Ukraine. I would like to thank you for your prompt response to this letter and the analysis your team provided. You highlighted that F–16s are currently Ukraine's seventh priority, and that it would take 12–18 months to train pilots, in addition to a significant length of time to deliver jets. I understand this, however we cannot be short-sighted when it comes to Russia. It is imperative that the Russians don't win this war-or any other war they decide to start. Providing modern fighters to Ukraine needs to be part of a long-term Euro-

[1] Information provided by Joint Counter UAS Office (JCO)

[2] "The Ukraine/Russia Conflic: Monthly Threat Report from March 2023" National Ground Intelligence Center, 10 April 2023

pean deterrence strategy against Russia. Please explain the long-term strategy regarding providing military equipment and fighter jets to Ukraine.

Secretary AUSTIN. The United States, in partnership with allies and partners, is focused on building Ukraine's capabilities to defend its territory for both the near and long term. We are in constant contact with Ukraine's military leadership regarding their evolving capability requirements. Our focus has been ground-based air defense capabilities to protect Ukraine's people and critical infrastructure, artillery, and armored vehicles. We are working with allies and partners to lay the groundwork for Ukraine to be prepared in the months and years ahead to utilize fourth-generation fighter capability, which we see as an important element of Ukraine's future force to deter and defeat Russian aggression in the longer term. This work begins with training, but will also include maintenance and sustainment planning.

General MILLEY. Our primary focus remains providing UKR with the capabilities it needs to defend its territory. No single materiel or non-materiel enabler can tip the scales one way or the other. It is the cumulative effect of these contributions, ably employed, that will put Ukraine in a position of relative advantage.

Currently, air defense is a critical concern for Ukraine and its people as Russia targets critical national infrastructure. Delivering effective fires is also a critical concern'to enable the Ukrainian Armed Forces to conduct combined arms maneuver. As part of a comprehensive approach, western multi-role fighter aircraft can contribute to both air defense and delivering fires. We, along with our allies, are exploring options to ensure the most impactful equipment and capabilities are making it to Ukraine at the right time.

19. Senator KELLY. Secretary Austin, what did DOD learn from the assessment of Ukrainian pilots at Morris Air National Guard Base (ANGB) earlier this month?

Secretary AUSTIN. The Ukrainian military has inspired the world by fighting bravely and effectively against the further invasion of their sovereign country by Russia. The two Ukrainian pilots who traveled to Tucson participated in a pilot familiarization event with the United States Air Force. The familiarization event was part of our routine military-to-military dialog designed to build mutual understanding of how each Air Force operates, not an assessment or a training event. We continue to support Ukraine through the provision of capability and weapons and platform training, and in coordination with our allies and partners.

20. Senator KELLY. Secretary Austin, how did that assessment inform our analysis on providing aircraft in the short term?

Secretary AUSTIN. The equipment we provide to Ukraine is based on a collective prioritization, driven by Ukraine's input, of the capabilities required to be successful on the battlefield, while balancing United States readiness requirements, training, sustainability, and other factors. The familiarization event was not an assessment. Rather, it was part of an existing program to build mutual understanding of how each Air Force operates.

21. Senator KELLY. Secretary Austin and General Milley, did it inform other aspects of United States support to Ukraine, e.g. planning support?

Secretary AUSTIN. As stated, the pilot familiarization event was part of our routine military-to-military dialog to build mutual understanding of how each Air Force operates.

General MILLEY. With an assessment pool of only 2 Ukrainians it's difficult to generalize the assessment to inform broader planning support. However, the after-action report identifies that prior to future highly technical training of this caliber the Ukrainians would require formal English training.

22. Senator KELLY. Secretary Austin. how does it inform our plans to potentially support F–16s or other fighter jets in the long-term?

Secretary AUSTIN. For now, we remain focused on providing what is most effective and what is most urgently needed for the counter-offensive, and on supporting training the Ukrainian military. Our priorities are ground-based air defense capabilities to protect Ukraine's people and critical infrastructure, artillery, and armored vehicles. We are engaging our allies and partners to lay the groundwork for Ukraine to be prepared in the months and years ahead to utilize fourth-generation fighter capability. Fourth-generation aircraft will be an important element of Ukraine's ability to deter and defeat Russian aggression in the longer term. Training, sustainment, and maintenance planning is an important first step.

23. Senator KELLY. Secretary Austin and General Milley, how has the prolonged conflict in Ukraine changed the calculus with regard to what military equipment we

are willing to provide our partners and allies over the course of the current conflict (beyond the spring if the conflict continues)?

Secretary AUSTIN. We have provided more than $32 billion of security assistance to Ukraine, focusing on the capabilities that are most urgently needed for success on the battlefield. The Ukrainian military has used this assistance to inflict tremendous damage on Putin's forces. Many of the same capabilities that are having the greatest effect in Ukraine, including air defense systems, portable anti-tank weapons, and cannon and rocket artillery, are also in high demand from other allies and partners globally.

We are committed to ensuring that the Department of Defense can support the defense needs of both the United States and our partners, and with the support of Congress we have invested nearly $3 billion to support the expansion of the U.S. industrial base to increase critical manufacturing capacity for these key systems and weapons.

Decisions to provide specific systems to all partners and allies are made in a comprehensive and deliberate manner by the Department and our interagency colleagues, taking into account the need to balance the operational requirements of our partners with the urgency of maintaining U.S. readiness and protecting critical U.S. technologies. These decisionmaking processes consider a wide range of factors, including our partner's capacity to absorb the system into their inventory and support it through its lifecycle, the partner's ability to train on the system to employ it safely and effectively, and the partner's ability and willingness to maintain accountability and protection for the system.

General MILLEY. The conflict in Ukraine has given the United States Military greater insight into the requirements to conduct large-scale combat operations. Taking into consideration worldwide inventory, and the ability of the U.S. and global defense industrial base to produce and replenish needed capacity, the U.S. must always balance requests from allies and Partners against meeting our own requirements. There are certain numbers of munitions and types of systems that we cannot provide our allies and partners because it creates unacceptable risk to our ability to defend the Homeland, and meet operational and contingency requirements elsewhere.

MULTI-YEAR PROCUREMENT

24. Senator KELLY. General Milley, you indicated that it would be prudent to consider expanding this authorization to additional munitions. Please provide further details about what specific munitions should be authorized for MYP, and the impact this would have on United States weapons supply and in support for Ukraine.

General MILLEY. We thank Congress for the multi-year procurement and other flexible acquisition authorities granted in recent legislation. MYP authorities will improve taxpayer buying power, bolster inventory, and provide a more stable and predictable demand signal to industry.

The Department is constantly evaluating its munitions inventories and munitions procurement strategies. Our President's Budget 2024 request includes plans to pursue MYP for five munitions and will continue to identify additional opportunities to leverage existing MYP authorities, and recommend additional authorities, where it makes sense and provides value to the Government.

25. Senator KELLY. General Milley, please explain how MYP affects the Indo-Pacific Command (INDOPACOM) area of responsibility (AOR). How will this increase our supply of weapons in the AOR, are there any impacts or concerns regarding weapons storage in the AOR, and what impact would all of these factors have in a potential China conflict?

General MILLEY. MYP generates savings through the use of Economic Order Quantity (EOQ) financing to procure greater quantities of munitions using a buy-to-budget strategy. The greater quantities of munitions can be deployed to the INDOPACOM AOR to deter or, if necessary, defeat China.

INDOPACOM supports MYP to acquire long-lead materials and components to support the acquisition of critical munitions to enhance the U.S.' ability to prosecute the National Defense Strategy; USINDOPACOM is also addressing future in-theater munitions storage requirements in parallel with targeted MILCON projects, bilateral agreements, and the dispersal of critical munitions postured across the theater.

QUESTIONS SUBMITTED BY SENATOR ROGER WICKER

PRC SURVEILLANCE BALLOON

26. Senator WICKER. Secretary Austin, thank you for your response to the questions that Senator Rubio and I sent on February 8 regarding the Chinese surveillance balloon. I have additional questions. Please answer them in an unclassified form, except where a classified response is necessary, and please submit all unclassified answers in an unclassified format. Since these questions are for the public record, I expect that all unclassified answers will not be classified as controlled unclassified information (CUI), which would limit its distribution. On February 6, you called me on an unclassified line to provide an update on the high-altitude balloon (HAB). At the time, you indicated that you were not personally aware of the HAB on January 29, while it was still over Alaska, because you were traveling in Asia. You also couldn't recall when you first learned of the HAB's existence. In your March 27 response to the letter that Senator Rubio and I sent on February 8, however, you write that you were first notified of the HAB on January 27, prior to it entering United States airspace. Can you please explain the difference between what you told me on February 6—which was that you had not known for a few days because you were traveling in Asia—and what you wrote in your letter, which is that you knew about the HAB and were tracking it all along?

Secretary AUSTIN. I was first notified about the high-altitude balloon (HAB) by my senior military assistant on the evening of January 27, 2023, prior to it entering U.S. airspace. I received daily updates from NORAD, USNORTHCOM, and other agencies. The HAB then re-entered U.S. airspace on January 31, 2023.

27. Senator WICKER. Secretary Austin, General VanHerck told us last week that he would have been prepared to present options to shoot down the HAB while it was over Alaska. Your letter makes it clear that you never requested options to shoot down the HAB until it traversed Alaska and Canada, and then reentered the United States. Why?

Secretary AUSTIN. The NORAD/NORTHCOM Commander assessed that the balloon did not present a kinetic threat to North America. Working with the Canadian military, NORAD/NORTHCOM began immediately taking action and developing additional options to better characterize the incursion. NORAD continued to track the PRC HAB, ensuring the Department could protect sensitive sites against foreign collection. On January 29, 2023, I departed for travel to the Republic of Korea and the Philippines. Also on January 29, 2023, the NORAD/NORTHCOM Commander advised me and Chairman Milley that he was looking at options to engage the balloon should that be directed. The balloon re-entered U.S. airspace on January 31. That evening, President Biden, through his national security Advisor, directed the military to immediately refine and present options to shoot down the PRC HAB. I, through Chairman Milley, asked for options to shoot the PRC HAB down. On February 1, 2023, while in the Philippines, I convened a meeting with senior military officials to review options to take down the PRC HAB safely, while closely monitoring its path and intelligence-collection threat.

28. Senator WICKER. Secretary Austin, does Northern Command (NORAD) currently have the ability to incorporate open source tracking of private and commercial balloons into the air defense picture?

Secretary AUSTIN. Yes. NORAD and USNORTHCOM also work closely with the Federal Aviation Administration (FAA) when unknown, suspect air tracks appear on radar. Additionally, the FAA has prescribed rules governing the operation of "unmanned free balloons" in the United States in 14 CFR Part 101.

29. Senator WICKER. Secretary Austin, following the public acknowledgment of the HAB, the Department of Defense said that it was aware of multiple previous Chinese surveillance balloons that had entered United States sovereign airspace. Who in the Department would have been responsible for developing options to counter balloons, in light of the Department's awareness of this threat and did that official or office develop those options? Why or why not?

Secretary AUSTIN. I cannot speak to how previous Administrations or previous Secretaries organized the Department's response to any balloons entering U.S. sovereign airspace. As the PRC HAB incident was unfolding, I received updates and advice from USNORTHCOM, NORAD, OSD Policy, and others. On January 29, 2023, the Commander of USNORTHCOM and NORAD advised me and Chairman Milley that that he was looking at options to engage the balloon should that be directed. Working with the Canadian military, NORAD and USNORTHCOM imme-

diately began to develop options to better characterize the incursion. NORAD continued to track the PRC HAB, ensuring the Department could protect sensitive sites against any intelligence collection.

30. Senator WICKER. Secretary Austin, prior to this case, did NORAD have courses of action (COAs) for addressing adversary operation of high-altitude, unmanned reconnaissance aircraft within the 12 nautical mile (NM) line, or over territory?

Secretary AUSTIN. The primary missions of NORAD include providing aerospace warning and aerospace control for North America, and NORAD supports USNORTHCOM in U.S.-only missions, including addressing high-altitude unmanned aircraft surveillance threats to sensitive sites.

The Department allocates forces in Alaska to support USNORTHCOM and NORAD responsibilities, and those forces provide aerial defense for North America. DOD supports homeland defense requirements in Alaska through coordination between the Air Force, USNORTHCOM, NORAD, and USINDOPACOM, to include forces permanently stationed in Alaska and a layered defense network within the Alaska Air Defense Identification Zone. This approach ensures DOD is able to support homeland defense requirements, Indo-Pacific campaigning, and warfighting.

31. Senator WICKER. Secretary Austin, if so, were the HABs considered in light of the COAs?

Secretary AUSTIN. HABs have been considered in operational planning/COA development by the Department.

32. Senator WICKER. Secretary Austin, if not, what is NORAD's future approach to any form of high-altitude reconnaissance that violates U.S. airspace?

Secretary AUSTIN. USNORTHCOM and USINDOPACOM are prepared to respond to future HABs that violate U.S. airspace.

33. Senator WICKER. Secretary Austin, was a National Event Conference (NEC) held at any point for the HAB? Was one held for the Unidentified Aerial Phenomena (UAP) that were engaged by NORTHCOM aircraft after the Chinese HAB?

Secretary AUSTIN. Upon the PRC HAB reentering U.S. airspace on January 31, 2023, President Biden, through his national security Advisor, directed the military to immediately refine and present options to shoot down the PRC HAB. On February 1, 2023, while in the Philippines, I convened a meeting with senior military officials to review options to take down the PRC HAB safely, while closely monitoring its path and intelligence collection threat. A similar course of action was taken with the three unidentified aerial objects that were ultimately shot down.

34. Senator WICKER. Secretary Austin, some commercial HABs have altitude capabilities up to 100,000 feet. Can NORAD maintain tracking of any adversary airframes that might operate at that altitude?

Secretary AUSTIN. In coordination with other Combatant Commands, the Intelligence Community (IC), and mission partners, NORAD has the ability to maintain tracking of objects that might operate at 100,000 feet altitude.

35. Senator WICKER. Secretary Austin, at what point was weather modeling of the HAB's flight path first incorporated into the planning? When was a flight path over the contiguous U.S. first assessed?

Secretary AUSTIN. Weather modeling and flight path trajectory were considered throughout. It was between January 30 and 31 that the flight path trajectory indicated CONUS overflight.

36. Senator WICKER. Secretary Austin, Under Secretary of Defense for Policy Colin Kahl led the Department's public response to the HAB, providing multiple off-the-record media briefings and briefings to Congress. What steps, if any, did Under Secretary Kahl take to notify his superiors and develop response options from January 27 to January 31, while the balloon was in Alaskan and Canadian airspace?

Secretary AUSTIN. Under Secretary Kahl provided me with advice and counsel, alongside senior military leaders, to ensure that the Department was in the best position to respond to the PRC HAB in a responsible and timely manner. Once President Biden gave his authorization to the Department to take the PRC HAB down, the Department executed those orders.

37. Senator WICKER. Secretary Austin, did Secretary Kahl make any recommendations pertaining to the HAB during that period, or direct his staff to develop options, and, if so, please explain?

Secretary AUSTIN. Under Secretary Kahl was among the senior DOD officials that advised me as the PRC HAB incident was unfolding. Thanks to this deliberate and coordinated approach, we were able to enhance our understanding of a sensitive PRC surveillance program.

38. Senator WICKER. Secretary Austin, until Under Secretary Kahl informed the press that three Chinese surveillance balloons had entered United States airspace during the previous administration, that information had been classified. I am concerned that Under Secretary Kahl leaked this information for partisan ends, because he left out an important fact, which was that the Trump administration was not aware of those previous balloons at the time, and therefore had no opportunity to counter them. You wrote in your March 27 response to the letter that Senator Rubio and I sent on February 8, "all information provided in unclassified settings had been appropriately cleared for release," but you provide no information to support that claim. When, and through what process, was the information regarding prior Chinese surveillance balloons cleared for release, and who cleared it for release? Please provide all documentation to substantiate your response.

Secretary AUSTIN. As I explained in my prior correspondence, I have no reason to believe that any member of the Department disclosed classified information at any point during the unclassified engagements with Congress or the public. All information provided in unclassified settings had been appropriately cleared for release. The United States downgraded and authorized for release a series of talking points in response to the overflight of the PRC HAB, including talking points regarding HAB flights over U.S. territory in prior years. The Department received the cleared points after they were downgraded and prior to any public statements about this topic. Any suggestions that a U.S. Government official, including Dr. Kahl, disclosed this information is inaccurate.

SECURITY ASSISTANCE TO UKRAINE

39. Senator WICKER. Secretary Austin, in response to Senator Blumenthal's question concerning critical needs for Ukraine, you said that "long-range fires" are among the critical battlefield needs for the Ukrainian Armed Forces (UAF). Army Tactical Missile Systems (ATACMS) are important long-range fire capability, but the Biden Administration has rejected its transfer to the UAF. Have the Ukrainians requested ATACMS?

Secretary AUSTIN. The equipment we provide is based on a collective assessment of the capability Ukraine needs to be successful on the battlefield, not system requests, while balancing U.S. readiness requirements, training, sustainability, and several other factors. Our assistance is also shaped by my frequent conversations with the Ukrainian defense minister, Chairman Milley's talks with the Ukrainian Chief of Defense, and by the constant interactions that USEUCOM has with the Ukrainian Armed Forces.

The Department remains in regular contact with our Ukrainian partners to assess and support their requirements. We are laser focused on getting Ukraine the weapons and equipment it needs to be successful on the battlefield.

It is our assessment that the GMLRS munitions and launcher capabilities that have been provided to Ukraine can reach the vast majority of targets in Ukrainian territory. The Department is also in the process of procuring the Ground Launched Small Diameter Bomb for delivery to Ukraine, which will significantly enhance Ukraine's precision long-range fires capability.

Based on Ukraine's successes on the battlefield, our near-term and long-term investments are paying off. We believe that the extraordinary efforts we are taking, alongside our allies and partners, will continue to get Ukraine what it needs to be effective.

40. Senator WICKER. Secretary Austin, if long-range fires are among UAF's critical needs for battlefield success, then why has the Administration denied their transfer?

Secretary AUSTIN. We have provided more than $32 billion of security assistance to Ukraine and are in constant contact with Ukraine's leadership to understand their requirements. We are focused on providing what is most effective on the battlefield, and what they need to be successful, such air defense capabilities to protect the Ukrainian people and weapons and equipment to retake territory on the ground. Ukraine has been effective, inflicting tremendous damage on Putin's forces.

Ultimately, all of our security assistance decisions for Ukraine are based on a collective prioritization of Ukraine's battlefield needs, while balancing United States readiness requirements, training, sustainability, and other factors. Priorities include providing Ukraine with critical long-range fires capabilities, such as High Mobility Artillery Rocket Systems and corresponding munitions, which can range the vast majority of targets in Ukrainian territory. The United States also committed to provide Ukraine with the Ground Launched Small Diameter Bomb, which will significantly enhance Ukraine's precision long-range fires capability.

MARCH DELEGATION TO EGYPT

41. Senator WICKER. Secretary Austin, during your visit to Egypt on March 8, 2023, press was prevented from covering your meetings with senior Egyptian officials. Previous defense secretaries have refused to proceed with meetings when the press has been prevented from covering them. Can you please explain what happened, from the Department's perspective, in terms of press access to your meetings?

Secretary AUSTIN. The Department is committed to freedom of the press, and we consistently provide the news media with timely and accurate information. This includes conducting regular press briefings, responding to public inquiries, and answering press queries. My invitation and hosting of credentialed, independent media on my trips, to include my recent visit to the Middle East, is one example.

Prior to travel, my team, alongside a variety of stakeholders such as the Department of State and host countries, negotiates press access for planned events. The Department of Defense considers the traveling press as integral to the success of the U.S. delegation and includes them in all press events and open engagements.

My team consistently pressed for access by all members of the accredited press corps traveling with me before, during, and after the visit to Egypt. After the trip, the Government of Egypt in followup engagements informed my team that they draw a distinction between official press affiliated with the United States Government, such as official photographers and social media experts, and the traveling press corps. This distinction on their part led to misunderstanding between our two sides that ultimately impacted travel press access. Our concerns with this lack of press access were subsequently raised directly with Egyptian counterparts from DOD and State Department Policy and Public Affairs offices.

The position of the Department of Defense is and continues to be that all accredited press traveling with my delegation should have equal access to my official open and public engagements. We will make this clear in adva]nce to any host nations—including Egypt—going forward.

42. Senator WICKER. Secretary Austin, why did the meeting proceed despite the press being prevented from covering it, per usual?

Secretary AUSTIN. The United States and Egypt are cooperating closely to address a range of shared interests, including de-escalating conflicts, addressing humanitarian crises, supporting a negotiated two-State solution to the Israeli-Palestinian conflict, and expanding regional security integration. My meetings in Egypt were a critical opportunity to reinforce the Department of Defense's support for addressing human rights and fundamental freedoms, as well as advancing our work to mitigate civilian harm during Egyptian Armed Forces' operations. I emphasized a range of United States priorities and concerns during my meetings with President Sisi and Minister of Defense Zaki that advanced my Department's focus on implementing the National Defense Strategy and the United States Government's emphasis on regional security and stability.

43. Senator WICKER. Secretary Austin, did you relay anything to the Egyptian Government about the manner in which the press was treated during your visit? Please provide any correspondence you had related to this issue.

Secretary AUSTIN. My team consistently pressed for access for all members of the press corps traveling with me before, during, and after my visit to Egypt. Specific challenges related to my March visit to Egypt were raised directly with Egyptian counterparts.

44. Senator WICKER. Secretary Austin, what measures, if any, does the Department plan to take to ensure proper press coverage of your engagements in the future?

Secretary AUSTIN. The Department of Defense will continue to insist on access to open and public engagements for all members of the accredited press corps traveling with me.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

CHINESE SPY BALLOON

45. Senator COTTON. Secretary Austin, when did you first become aware of the spy balloon? If you submit an answer labeled CUI, please explain in detail why your answer merits that label, since these questions are for the record.

Secretary AUSTIN. I was first notified about the high-altitude balloon (HAB) by my senior military assistant on the evening of January 27, 2023, prior to it entering U.S. airspace. The HAB then re-entered U.S. airspace on January 31, 2023.

46. Senator COTTON. Secretary Austin, General VanHerck told us last week that he would have been prepared to present options to shoot the balloon down on January 28, but you didn't request any until February 1 when the balloon had already finished its journey across Alaska and Canada, and then reentered the United States. Why didn't you request options sooner? Why did you leave NORAD airspace unprotected for at least 5 days?

Secretary AUSTIN. The NORAD/NORTHCOM Commander assessed that the balloon did not present a kinetic threat to North America. Working with the Canadian military, NORAD/NORTHCOM began immediately taking action and developing additional options to better characterize the incursion. NORAD continued to track the PRC HAB, ensuring the Department could protect sensitive sites against foreign collection. On January 29, 2023, I departed for travel to the Republic of Korea and the Philippines. Also on January 29, 2023, the NORAD/NORTHCOM Commander advised me and Chairman Milley that he was looking at options to engage the balloon should that be directed. The balloon re-entered U.S. airspace on January 31. That evening, President Biden, through his national security Advisor, directed the military to immediately refine and present options to shoot down the PRC HAB. I, through Chairman Milley, asked for options to shoot the PRC HAB down. On February 1, 2023, while in the Philippines, I convened a meeting with senior military officials to review options to take down the PRC HAB safely, while closely monitoring its path and intelligence collection threat.

47. Senator COTTON. Secretary Austin, when General VanHerck told you—or perhaps your senior military aide—that he was prepared to shoot down the balloon in Alaskan airspace on January 28, did you have the legal authority to order the shoot down?

Secretary AUSTIN. Shooting down the HAB was lawful under domestic and international law. DOD has express statutory authority to act to protect against threats to sensitive military installations, including against surveillance from unmanned aircraft. The action we took occurred within U.S. territory against an unmanned foreign surveillance balloon that entered and was operating unlawfully in U.S. airspace.

48. Senator COTTON. Secretary Austin, how could a Chinese balloon conducting a spy mission not be considered a threat?

Secretary AUSTIN. The NORAD/NORTHCOM Commander assessed that the balloon did not present a kinetic threat to North America. Working with the Canadian military, NORAD/NORTHCOM began immediately taking action and developing additional options to better characterize the incursion. NORAD continued to track the PRC HAB, ensuring the Department could protect sensitive sites against foreign collection. On January 29, 2023, I departed for travel to the Republic of Korea and the Philippines. Also on January 29, 2023, the NORAD/NORTHCOM Commander advised me and Chairman Milley that he was looking at options to engage the balloon should that be directed. The balloon re-entered U.S. airspace on January 31. That evening, President Biden, through his national security Advisor, directed the military to immediately refine and present options to shoot down the PRC HAB. I, through Chairman Milley, asked for options to shoot the PRC HAB down. On February 1, 2023, while in the Philippines, I convened a meeting with senior military officials to review options to take down the PRC HAB safely, while closely monitoring its path and intelligence collection threat.

49. Senator COTTON. Secretary Austin, I appreciated General VanHerck's candor last week. He fulfilled the promise he made when he was confirmed to give us his honest assessment, even when it's politically uncomfortable. Will you commit that there will be no retaliation against General VanHerck for his honest testimony last week?

Secretary AUSTIN. I am grateful to General VanHerck for his service to our country. Retaliation is unacceptable and will not be tolerated in my Department, including for testimony before Congress.

QUESTIONS SUBMITTED BY SENATOR MIKE ROUNDS

LANDMINES

50. Senator ROUNDS. General Milley, you have been outspoken on the need for landmine alternatives to be available to the Joint Force to shape engagement areas to kill enemy ground forces and to protect friendly forces. At Munich you described how the Ukrainians have been effectively using these capabilities to destroy Russian armor. Can you describe how the new systems we are developing have self-deactivation / self-destruct capabilities, so they would not harm civilians after hostilities cease?1

General MILLEY. All current U.S. policy-compliant landmine systems incorporate self-destruct and self-deactivate features that exceed the requirements of the Certain Conventional Weapons (CCW) Amended Mines Protocol II. The Army's legacy compliant systems, the Family of Scatterable Mines, have demonstrated extremely high self-destruct and self-deactivate reliability. Throughout lifecycle testing, no armed mined has failed to self-destruct.

The Army is developing new systems to replace the aging inventory of legacy Family of Scatterable Mine systems. These new systems are fully compliant with the U.S. anti-personnel landmine policy and therefore are not designed or intended to be exploded by the presence, proximity, or contact of a person nor will they incapacitate, injure, or kill one or more persons. These systems are also designed to self-deactivate and leave non-hazardous remnants on the field after either a pre-set time or when forces on the ground determine that they are no longer needed.

The requirement for the new systems in development will far exceed the CCW Amended Mines Protocol II requirement with a minimum self-destruct reliability of 99 percent. Additionally, the newly developed mines will have less than 1 in 10,000 probability (e.g. 99.99 percent reliability) of being hazardous after 120 days.

51. Senator ROUNDS. General Milley, is it true that the size and composition of the U.S. Army is based on the assumption that these capabilities would be available to enable our troops to fight and win a ground war?

General MILLEY. Many different variables affect the required size and composition of the U.S. Army and its ability to meet current and future challenges. These vary significantly based on the mission, and various factors of the operational environment, but are not limited to: training, experience, equipment, sustainability, enemy threat, and mobility. President's Budget Fiscal Year 2024 requested end-strength delivers a ready and capable Army able to achieve the Department's modernization goals.

52. Senator ROUNDS. General Milley, have the Ukrainians proven that these are capabilities required to fight and win any future land war?

General MILLEY. The United States has not actually provided Ukraine with the new capabilities. It has provided older anti-tank/vehicle mines that are compliant with U.S. policy.

Landmines have been critical for Ukrainian success against the Russian ground forces. The Ukrainians employ landmines to canalize Russian armored forces, putting them into engagement areas and making them vulnerable to the 60,000 anti-tank weapons systems that we've provided.

The Ukrainian experience demonstrates how the capabilities of policy compliant landmines would increase the effectiveness of U.S. Forces in future conflict by enhancing the effectiveness of friendly fires, denying adversaries the use of terrain, disrupting enemy sustainment operations, and inflicting damage to enemy forces. If developed and used in accordance with international laws, treaties, and agreements, landmines can remain an effective deterrent and defensive option.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

SPECIAL OPERATIONS FORCES (SOF) IN GREAT POWER COMPETITION (GPC)

53. Senator ERNST. General Milley, how can SOF help deter or defeat great power competitors?

General MILLEY. Our Special Operations Forces are vital to achieving the defense priorities outlined in the National Defense Strategy across the spectrum of conflict. SOF operations and activities in support of integrated deterrence ensure Joint Force advantage in great power competition, crisis, and conflict. SOF accomplish this while maintaining critical crisis response capabilities and continuing efforts to counter Violent Extremist Organization activities. Our adversaries increasingly employ irregular, unconventional, asymmetric, and hybrid / gray-zone activities to challenge the United States and hold our interests as well as those of our allies and partners at risk. Authoritarian regimes undertake these malign activities to contest the rules-based international order and advance their interests.

In response, our SOF are uniquely positioned to provide the means to deter, detect and illuminate, disrupt, and when required defeat our adversaries' competitive strategies. In competition, the DOD may not be in the lead for the USG. Our SOF are well-versed in providing critical support, information, and intelligence to other Government Departments and agencies and to those of our allies and partners that they need to counter our adversaries' malign efforts. SOF strategic competition-related operations and activities complicate adversary decisionmaking, reduce their freedom of maneuver, isolate them, and increase the cost relative to the benefits associated with the continuation of malign activities. Through building the resilience and capabilities of our allies and partners across the globe, SOF help to reduce the impact of adversary malign actions and build awareness, access, and influence, which limit adversary options and again increase the adversary cost / risk.

54. Senator ERNST. General Milley, your personal opinion, would partnering with surrogate forces that are responding to hostilities help SOF compete against great powers?

General MILLEY. The National Defense Strategy directs the Joint Force to impose costs upon our adversaries' malign strategies. The Joint Force should not rule out / eliminate any viable options, including the use of partnered or surrogate forces where our interests align and are mutually beneficial. Our support of surrogate forces must comply with U.S. Law and DOD policy. Our SOF have a long history of building and supporting partner forces to defend their nation's sovereignty and combat internal threats. Their use achieves our objectives, confounds our adversaries' efforts, preserves U.S. resources, and reduces the risk to mission and forces, use of surrogate forces is a legitimate choice and a clear combat multiplier. Failing to consider the capabilities of surrogate forces surrenders maneuver space to our adversaries. Employing surrogate forces, particularly when their activities support a comprehensive, whole-of-government approach, complicates our adversaries' decisionmaking, increases cost / risk for our adversaries, and limits their freedom of maneuver.

PREVENTING THREATS TO N]ORTH ATLANTIC TREATY ORGANIZATION (NATO)

55. Senator ERNST. General Milley, how extensive are Russian manpower and equipment losses?

General MILLEY. Precise casualty information is hard to obtain, but believe that the number of Russians casualties (including those killed and wounded) in Ukraine, perhaps 200,000—250,000. Russian forces have also suffered high losses in their equipment.

56. Senator ERNST. General Milley, by how long has this delayed Russia's ability to reconstitute a threat to NATO's eastern flank?

General MILLEY. Russia has already had to mobilize 200–300 thousand poorly trained reservists in order to sustain their current battle losses.

The losses have directly impacted their ability to threaten NATO's eastern flank, and we can provide additional information on our estimates of Russian combat power at higher levels of classification.

Of note, the United States and NATO have contributed significant resources to deterring Russia from attacking NATO's eastern flank. There are now eight NATO Battle Groups in the alliance's frontline states. There are now more than 100,000 United States Forces in Europe. Air policing over the Baltic Sea has stepped up, and President Joe Biden has repeatedly said the United States will defend every inch of NATO territory.

57. Senator ERNST. General Milley, by your best military advice, has United States support reduced the risk of deterrence failure in Europe?

General MILLEY. Ukraine's military operations, critically enabled by the United States and our allies, have significantly reduced Russia's military capabilities in key areas. However, the key factor that has improved the prospects for deterrence is how this Russian aggression has galvanized the resolve of NATO nations to collectively defend our Homelands. It has even resulted in NATO enlargement—Finland has joined, and Sweden is on a path to join NATO. We are also demonstrating our enormous capacity to rapidly reinforce NATO's eastern flank with United States Forces. We will continue to demonstrate this capacity through regular exercises that showcase United States and allied agility across the depth and breadth of the Balkans, Baltic, and Central Europe.

58. Senator ERNST. General Milley, has degradation of Russia's military likely decreased our operational requirements in Europe?

General MILLEY. Ukraine's military operations, critically enabled by the U.S. and our allies, have significantly reduced Russia's military capabilities in key areas. However, Russia's leaders have demonstrated a commitment to reckless aggression beyond what anyone had previously understood. Until that behavior changes, the United States and our allies must continue to invest in our collective defense, conventional and strategic, globally and across all military domains.

MISMATCH BETWEEN STRATEGY AND RESOURCES

59. Senator ERNST. Secretary Austin, what hard choices has the Department made to free-up resources for readiness and modernization?

Secretary AUSTIN. The Department is focused on having the right mix of capabilities matched to our strategy to deter our adversaries, remain dominant on the battlefield, and prevail in conflict, if necessary. As we look to our most significant challenges, we must divest vulnerable platforms that can no longer be affordably modernized or maintained to provide credible combat power. Failing to do so will impact the readiness of the Joint Force and cause a $4 billion drag on our ability to invest in, and transition to, the capabilities we need to meet our strategy.

We need help from Congress to ensure that we resource the capabilities we need to meet our strategy. Two significant examples of platforms the Department should divest from are the A–10 and some of the early hulls of the Freedom Class Littoral Combat Ship, due to their single-mission focus or limited relevance for future challenges. These divestments will help us transition to a more advanced, capable, and ready force by providing savings that can be utilized to, for example, correct maintenance backlogs and invest in more survivable, lethal, and resilient capabilities.

60. Senator ERNST. Secretary Austin, do you commit to provide documentation of those reinvestments?

Secretary AUSTIN. Yes.

GROUND-BASED MISSILE CAPABILITIES IN WESTERN PACIFIC

61. Senator ERNST. General Milley, would fielding ground-launched, theater-range missile systems in the Indo-Pacific help offset China's advantage in these capabilities? Please explain.

General MILLEY. Yes, the ranges associated with such weapons systems force the adversary to account for threats to assets previously considered in sanctuary.

The presence of long-range weapons systems inside the theater complicates the adversary's targeting problem and forces the PRC to dedicate assets to look for and potentially engage additional targets. When combined with robust and capable air and maritime forces, these ground-based systems work to offset Chinese advantages and deliver competitive United States capabilities within the theater. They provide the Joint Force with the depth to execute fires from dispersed locations at different ranges.

62. Senator ERNST. General Milley, would U.S. ground-launched, theater-range missiles in the Western Pacific help availability of persistent, prompt, and survivable strike options?

General MILLEY. Yes, the Department has long advocated for stand-in, forward deployed forces in the Western Pacific to provide strike options should hostilities commence. The presence of such capabilities, especially when combined with other capabilities within the Joint Force and resilient command and control, will provide increased fires options to the theater commander.

63. Senator ERNST. General Milley, would U.S. ground-launched, theater-range missiles in the Western Pacific help deter of enemy attack or escalation?

General MILLEY. Yes, the art of deterrence is to convince our adversaries that the costs we can impose on them are not worth whatever strategic gain they seek and induce doubt that their objectives can be accomplished. Ground-launched, theater-range missiles in the Western Pacific are an important part of combat-credible forces that contribute to integrated deterrence by altering adversary perceptions of costs, benefits, and consequences of action.

64. Senator ERNST. General Milley, would U.S. ground-launched, theater-range missiles in the Western Pacific help impose of operational costs on enemy forces?

General MILLEY. Yes, diverse, multi-domain strike options force the adversary to apply resources toward different locations with a variety of characteristics. This dilutes the adversary's collection efforts that could have been focused on specific assets and locations if the multi-domain options did not exist. Any time we can complicate a targeting solution it imposes operational costs on our adversaries and degrades their surveillance-strike capabilities.

65. Senator ERNST. General Milley, would U.S. ground-launched, theater-range missiles in the Western Pacific help deliver responsive strikes against time-critical enemy targets?

General MILLEY. Yes, the characteristics of the ground-launched, theater-range weapons systems currently in development will help deliver responsive strikes on time-critical enemy targets with desired effects. We have campaign-level modeling and simulation analysis available at higher classification that supports this conclusion.

66. Senator ERNST. General Milley, would U.S. ground-launched, theater-range missiles in the Western Pacific help destroy high-value targets to enable other joint forces?

General MILLEY. Yes, the specifics are available at higher classification, but our analysis indicates these weapons systems are lethal, responsive, and enable Joint Force campaign objectives.

67. Senator ERNST. General Milley, would U.S. ground-launched missiles at various ranges and launch locations in the Western Pacific create dilemmas for enemy forces?

General MILLEY. The portfolio of weapons we are developing, including ground-launched missiles like the Long Range Hypersonic Weapon, Block V Tomahawk, and Naval Strike Missile, work toward imposing dilemmas on the adversary. When deployed to distributed locations and integrated with other Joint and Combined Force efforts these weapons systems create dilemmas for our adversaries.

NUCLEAR DETERRENCE

68. Senator ERNST. General Milley, given recent nuclear developments, should Congress receive an independent evaluation of the strategic nuclear force requirements of deterring Russia and China?

General MILLEY. I support the congressional Commission on the Strategic Posture of the United States.

We are fully committed to field and modernize the nuclear triad, Dual Capable Aircraft, the nuclear stockpile, and Nuclear Command, Control, and Communications infrastructure.

In light of increasing nuclear threats from Russia and China, I support assessing additional low-yield, non-ballistic nuclear capabilities to better deter, assure, and respond to a potential regional conflict.

We are also improving our internal processes to ensure we identify potential requirements early enough for them to have a deterrent effect against Russia and China.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

CHINA'S DEFENSE BUDGET

69. Senator SULLIVAN. Secretary Austin and General Milley, in your testimony you stated the PRC remains our number one long term geo-strategic threat and continues to develop significant nuclear, space, cyber, land, sea, and air capabilities. While I agree with your statement, this year's budget is far from sufficient in meet-

ing this threat. China currently has 340 war ships, while we have 297. In 2028, China will likely have at least 400 ships and our fleet will shrink to 291. Under this year's budget proposal, our army, the Nation's preeminent land force will shrink from 485,000 to 452,000 while the People's Liberation Army Ground Force (PLAGF) has an end strength of approximately 975,000. Our Air Force is set to buy the bare minimum of fighters to keep our capability healthy while every publicly released war-game has reiterated the absolute importance of our ability to sink ships for Taiwan to be successful in a cross-strait conflict. Finally, this year's budget fails to provide the Marine Corps with San Antonio-class amphibious warships, an absolutely necessary tool to get marines into the fight. While you're asking to institute an inflation-adjusted defense cut this year, China seeks to increase its military spending by over 7 percent. Does the Department understand our budget is not to counter the China of today, but of tomorrow—a China that continues to demonstrate a willingness to invest in its military, including in areas in which they are already ahead?

Secretary AUSTIN. The U.S. military remains the most capable fighting force in history, and I am confident in the Joint Force's ability to deter, and if required, defeat PRC aggression. The PRC's military expansion is why the Department is focused on the PRC as our pacing challenge and why our fiscal year 2024 budget request includes $9.1 billion for the Pacific Deterrence Initiative to maintain deterrence today, tomorrow, and in the future. This is the largest ever PDI investment, and a 40 percent increase above last year. We are also requesting significant resources to maintain dominance in all domains.

Additionally, we're focused on moving and sustaining forces further forward, west of the International Date Line, and making our force posture more capable and lethal. Alongside our allies and partners, we're improving our posture in the Philippines, Australia, and Japan. We are also focused on funding what is executable to maintain our strategic advantage, building a distributed and resilience security architecture in the Indo-Pacific region.

General MILLEY. The PLA's rapid expansion is one of the reasons the Department is focused on the PRC as the pacing challenge and why we are doing more than ever before to deter, defend, and, if necessary, defeat aggression from the PRC. The National Defense Strategy, with direct linkages to the threat-informed Joint Warfighting Concept (JWC), is fully integrated into our resourcing and requirements processes to build the force required for the future.

Along with the $9.1 billion request for the Pacific Deterrence Initiative that provides the right mix of capabilities to remain dominant against the pacing challenge, we are expanding and connecting our regional allies and partners. Partnerships with countries such as Australia, the Philippines, Japan, and the Republic of Korea are force multipliers for a potential conflict with China. President's Budget Fiscal Year 2024s request, coupled with our unparalleled network of allies and partners, ensures our continued ability to deter, and if required, defeat PRC aggression.

TAIWAN

70. Senator SULLIVAN. Secretary Austin and General Milley, I want to talk to you about Taiwan. I've been giving a series of speeches around town on the theme of "Why Taiwan Matters". I'm doing it because I fear that the biggest disparity between the United States and the Chinese Communist Party (CCP) is around will. I have no doubt that the CCP has the will to fight over Taiwan if it ever comes to it. Frankly, I sometimes worry that the United States does not. Not our servicemembers, of course. I know they will do their duty and do as commanded, and do it damn well. They are the best fighting force the world has ever seen. If we go to war with China over Taiwan, it's going to be a MAJOR war. I'm not sure the American people know why it matters that we defend Taiwan. So, like I said, I've been giving this series of speeches trying to build the will. But I'm just one United States Senator. What are you and the Administration doing to help Americans understand the importance of Taiwan and the sacrifice that it will take to defend it?

Secretary AUSTIN. An invasion of Taiwan by the PRC is neither imminent nor inevitable. The Administration will continue to make clear that cross-Strait peace and stability remains a fundamental U.S. national security interest in the Indo-Pacific region. Taiwan's position within the first island chain is critical to the free flow of commerce and continued advance of personal freedoms and democratic ideals throughout the region. This is why this Administration, like those before it, has affirmed policy commitments enumerated under the United States "One-China" policy, defined by the Taiwan Relations Act, the three joint communiques, and the six assurances.

Moreover, we affirm these policy commitments not only to the American people and our Taiwan partners, but with all allies and partners with shared interests in the Indo-Pacific region. So, the Department will continue to support a peaceful resolution to cross-Strait tensions, consistent with the goals and interests of the people on Taiwan. We will continue to make available to Taiwan defense articles and services necessary to enable it to maintain its self-defense consistent with the Taiwan Relations Act, and we will also work with industry to ensure the swift provision of defensive weaponry and sustainment to Taiwan.

General MILLEY. Taiwan is an important United States partner in the INDOPACIFIC region when it comes to economic trade and democratic values. The Joint Force remains determined to support Taiwan and its right to defend itself. That involves providing them the right tools and training they need for defense. Additionally, we remain determined to modernize our force as the most powerful on Earth to deter aggressive actions.

This budget is informed by our National Defense Strategy and makes the necessary investments to ensure we are equipped and ready for any threat—today and in the future. Every day the Armed Forces demonstrates to the American people that the U.S. military stands ready, and with the capability to help defend Taiwan if asked to do so. I also encourage our elected officials to help carry that message to the American people that we will not tolerate military action against Taiwan, and threatens their democratic way of life, and why it's in our national interest and the global interest to preserve the international rules-based order.

71. Senator SULLIVAN. Secretary Austin and General Milley, continuing on the theme of will, how do you access Taiwan's will to fight?

Secretary AUSTIN. We believe through smart investments and key reforms, Taiwan can send a clear signal that its society and armed forces are committed and prepared to defend Taiwan. We therefore appreciate that President Tsai has prioritized the development and acquisition of asymmetric capabilities best suited for its defense against People's Republic of China coercion and aggression. DOD is taking a proactive approach to supporting these efforts as we continue upholding our commitment under the Taiwan Relations Act to make available to Taiwan appropriate defense articles and services.

Taiwan must complement investments in these critical capabilities with equal focus on enhancing resilience, supporting whole-of-society defense, and building a strategy that includes defense-in-depth. In this regard, President Tsai's determination to reform Taiwan's reserve forces and integrate civilian and military agencies under the All-Out Defense Mobilization Agency is critical to enhancing Taiwan's overall preparedness—and in doing so will further strengthen deterrence. DOD will continue to work with relevant United States Departments and agencies to support Taiwan's efforts in this regard.

General MILLEY. In March 2022, over 70 percent of Taiwan's population stated they would be willing to fight if the PRC invaded Taiwan.

If the United States did not send troops to support Taiwan during a PRC invasion, 65 percent of Taiwan's population had confidence in the Nation's defense.

72. Senator SULLIVAN. Secretary Austin and General Milley, will they respond with the courage and determination of the Ukrainians if they are attacked?

Secretary AUSTIN. While I would caution against making direct comparisons between Taiwan and Ukraine, I agree that Ukraine's response to Russia's illegal and unprovoked invasion contains broad lessons for Taiwan. Taiwan's commitment to defense reforms, whole-of-society defense and resilience, and increased defense spending are strong signals that its armed forces and society are committed and prepared to defend Taiwan.

General MILLEY. Taiwan is learning lessons from the Russia-Ukraine conflict and taking measures to increase its resiliency.

In December 2022, President Tsai announced an extension of military conscription from 4 to 12 months beginning in 2024. The public is supportive of extending mandatory military service and reserve training as a result of the invasion of Ukraine. The Taiwanese have a more favorable view of military service and training.

Public opinion polling indicates over 70 percent of Taiwan's population would be willing to fight if the PRC invades Taiwan.

Following Russia's invasion of Ukraine, some of Taiwan's citizens are have joined grassroots civil defense organizations.

73. Senator SULLIVAN. Secretary Austin and General Milley, Taiwan spends on its defense, since 2020, (according to the Central Intelligence Agency (CIA)) more than 2 percent of its gross domestic product (GDP)—something we can't get most of our

NATO allies, the biggest of them, to do. And we're the only ones in the world that supply them. Yet, they're waiting for $19 billion in deliveries—things they've already bought. What are you doing to deal with this backlog?

Secretary AUSTIN. We remain focused on identifying the capabilities Taiwan needs and working to provide them as soon as possible. We are focused on tackling the issues we control—cutting red tape, decreasing the Foreign Military Sales (FMS) backlog, and providing innovative capabilities.

Last summer I tasked the Under Secretary of Defense for Policy and the Under Secretary of Defense for Acquisition and Sustainment to establish an FMS Tiger Team to identify efficiencies, clear systemic issues, and accelerate the responsiveness of the DOD FMS process to meet the capability requirements of our allies and partners. We must provide capabilities to our allies and partners as quickly as possible in support of their requirements, as well as our own National Defense Strategy.

Through a review of case studies and past efficiency efforts, as well as meetings with industry and others, the Tiger Team identified friction points in the DOD process and developed dozens of recommendations intended to address the critical and procedural challenges causing delays. The Tiger Team also identified systemic changes that seek to improve the overall efficacy and efficiency of the process, such as accelerating transition to data driven processes to enable monitoring and transparency and continuous process review to ensure implementation of the recommendations. To be clear, there is no one solution. Much like our own challenges, timelines for delivery of equipment are often dictated by production timelines of industry.

We are committed to working with Congress where appropriate to seek necessary authorities to reduce the backlog.

General MILLEY. Since 2000, Congress was notified of over $52 billion in FMS to Taiwan, and the United States delivered over $35 billion worth of defense-related items.

The difference between FMS notification and delivery is mostly the result of factors outside of DOD control including materiel lead times, supply chains, and production limitations within the defense industrial base, and existing laws.

I will support the Secretary's efforts to examine exportability challenges and identify options to accelerate delivery timelines for FMS cases whenever possible.

74. Senator SULLIVAN. Secretary Austin and General Milley, I want to talk to you about the so-called "porcupine strategy" for Taiwan. I know the administration subscribes to the necessity of this. I do, too. Now, to be clear, it doesn't account for all Taiwan needs to defend itself. They have a range of missions and contingencies to plan for, as do we. But they do need to focus on the most defensive weapons, things like harpoons, stingers, and javelins. There was an effort last Congress to help with that—by providing $10 billion in those sorts of arms for Taiwan. We passed that in the National Defense Authorization vAct (NDAA). The problem is the Biden Administration never prioritized it in its conversations with the appropriators. As a result, it went unfunded. Instead, we ended up with a small loan program that Taiwan has been clear it doesn't want and can't use. Will you make it a priority to get this done this year, either in a supplemental or as part of the fiscal year 2024 appropriations process?

Secretary AUSTIN. Thank you for providing us authorities under the Taiwan Enhanced Resilience Act. We remain focused on identifying the capabilities Taiwan needs and working to provide them as soon as possible. This is a shared challenge, and we will need the authorization backed by appropriate resources. We stand ready to work with Congress on this matter.

General MILLEY. China is the pacing challenge for the United States military and we support development of Taiwan's asymmetric defense capabilities against the PRC threat, consistent with the one China policy. Along with other elements of DOD, the Joint Force is engaged in efforts to increase Taiwan's capability and capacity to defend itself, including efforts to identify any further legislative authorities required and sharpening justification for FMF grants.

75. Senator SULLIVAN. General Milley, would acquiring $2 billion dollars in defense capabilities benefit Taiwan's ability to defend itself?

General MILLEY. Yes. Our efforts to support Taiwan focus on deterrence and self-defense, and they remain consistent with our longstanding policy. Ensuring Taiwan has the means to defend itself improves deterrence and contributes to peace and stability in the Strait. Acquiring $2 billion in defense capabilities would certainly aid our efforts.

AUTHORIZATION FOR USE OF MILITARY FORCE (AUMF)

76. Senator SULLIVAN. Secretary Austin and General Milley, in your testimony you stated we have acted decisively when Iran-backed militia groups have attacked United States forces in Iraq and Syria. As we all know, last week Iranian backed terrorists launched rockets and drones at our troops in Syria, killing a contractor and wounding five other servicemembers and we did, as you pointed out in your testimony, respond decisively. One of the key tools we frequently use in these decisive responses is the 2002 AUMF, which some of my colleagues are currently trying to repeal. This is the same authority we used to support taking out Qasem Soleimmani and Abu Mahdi al-Muhandis in 2020, which set back the terrorist Iranian Revolutionary Guard Quds force to this day. Currently, I have an amendment pending on the floor which would require the Office of the Director of National Intelligence (ODNI) to certify that repealing the 2002 AUMF would not degrade United States-led deference against Iranian aggression before it is implemented. In your personal opinions, does repealing the 2002 AUMF hurt our ability to respond to the aggression of Iranian-backed groups?

Secretary AUSTIN. The President has made clear he will not hesitate to protect and defend U.S. personnel. There is sufficient domestic legal authority under the President's Article II authority and the 2001 AUMF to take necessary and proportionate action to protect United States personnel from threats in Iraq and Syria, including threats from Iran and Iran-backed groups. The United States does not conduct ongoing military activities that rely primarily on the 2002 AUMF as a domestic legal basis. Repeal of the 2002 AUMF would have no impact on current U.S. military operations and would support this Administration's commitment to a strong and comprehensive relationship with our Iraqi partners.

General MILLEY. No. Repealing the 2002 AUMF would have no significant impacts or inhibit the United States military's ability to respond to aggression from Iranian-Aligned Militia Groups, provided the 2001 AUMF remains intact. The 2001 AUMF, along with other authorities, allow the Joint Force enough flexibility to respond to aggression when necessary. Any effort to repeal the AUMF should take into account both current and future threats to our national security threats in the region and maintain clear authority for appropriate military action.

RECRUITING IN SCHOOLS

77. Senator SULLIVAN. Secretary Austin and General Milley, this year's budget calls for an additional 12,355 servicemembers. Last week this Committee had a hearing on the Department of Defense's (DOD) recruiting challenges, where witnesses testified to a lack of interest among young people, low test scores, and medical conditions. In your testimony you stated your desire for DOD to seek partnerships with our Nation's best universities to find our generation's next leaders. How detrimental are high schools not allowing recruiters onto their campuses to both current and future recruiting efforts?

Secretary AUSTIN. The Department is working every day to recruit and retain America's best talent to leverage the strengths of all our people. Since the inception of the All-Volunteer Force, military recruiters have sought broad access to high schools campuses, because the schools offer one of the best settings for engaging with prospective recruits. School access allows recruiters to share our message about the opportunities and benefits available in today's military. Limited access undoubtedly makes recruiting efforts more difficult. The Department is working closely with the military services to develop new and creative ways to engage young Americans across all corners of the country, including by increasing access to high schools.

General MILLEY. Federal law (Title 10 (U.S.C., Sec. 503c) encourages recruiter access to high schools and pertinent student directory information for the purposes of recruiting. By law, high schools must provide military recruiters access to high school students' names, addresses, and telephone listings and the same access to high school students as is provided to colleges, or to prospective employers of those students.

The Department is identifying several lines of effort to mitigate the challenges of the recruiting environment and address barriers to accessing a broader cross-section of the population. Focusing on our recruiter's access to high schools is one of these efforts.

The isolation and decreased personal interactions as a result of the pandemic, negatively impacted and stunted the relationship growth between our military personnel and communities. The decreased contact time recruiters had with potential applicants and their influencers in the community exacerbated the already existing challenges we face with a youth population that is disconnected and disinterested

in service, declining veteran population and decreased youth interaction with influences in homes and local communities.

Personal engagement between recruiters, schools and communities is an important aspect of delivering information, dispelling myths of military service and communicating the wide range of opportunities available across the Services and DOD. This is especially key in this era where youth are presented with a wide range of opportunities and education benefits in the civilian sector upon graduation.

ARCTIC AND ALASKA STRATEGY

78. Senator SULLIVAN. Secretary Austin and General Milley, in your testimony you stated climate change is creating new potential points for friction in places such as the Arctic. Last week, during this Committee's hearing with the United States Northern Command (NORTHCOM) General VanHerck who, by the way, alongside the servicemembers in my State, conducted nothing short of varsity level operations against the Chinese Spy Balloon and several unidentified aerial objects, stated that "Alaska might be the most strategic location on the planet." He also testified that DOD currently does not have the infrastructure, the communications, and the ability to respond and be persistent in the Arctic and Russia and China have developed capabilities to hold our Homeland at risk. With Alaska as the gateway for Russian and Chinese threats to major cities like Chicago, New York, and Miami, why does NORTHCOM not have assigned forces to do the aerial intercept mission in Alaska?

Secretary AUSTIN. Forces in Alaska that are assigned to USINDOPACOM routinely are allocated to support USNORTHCOM and NORAD responsibilities including to provide aerial defense for North America. DOD supports homeland defense requirements in Alaska through coordination between the Air Force, USNORTHCOM, NORAD, and USINDOPACOM, to include forces permanently stationed in Alaska and a layered defense network within the Alaska Air Defense Identification Zone. This approach ensures DOD is able to support homeland defense requirements and Indo-Pacific campaigning and warfighting.

General MILLEY. Forces are allocated to NORAD and positioned in Alaska under NORAD command and control to conduct the aerial intercept missions in accordance with the NORAD contingency plan and a Secretary of Defense approved execution order.

The United States and Canada are pursuing infrastructure and communications capability improvements that enhance our homeland defense from the arctic approaches. Specifically, the Sixth Generation Over the Horizon Radars, which Congress provided appropriation for, will increase our ability to execute NORAD's aerospace warning and control mission.

79. Senator SULLIVAN. Secretary Austin and General Milley, who replaces the Indo-Pacific Command (INDOPACOM)-assigned F–22s and F–35s if those aircraft deploy to combat? Have the replacement units operated in Alaska year-round?

Secretary AUSTIN. DOD continuously adjusts our global posture based on operational requirements, risk, readiness and modernization considerations, and tradeoffs across priorities. DOD deploys fighter aircraft to support a range of rotational deployments, and if necessary, combat operations. When executing these deployments, DOD considers the effect on other missions conducted at the locations that deploying aircraft depart from.

General MILLEY. The F–22 and F–35 fighter squadrons based in Alaska and assigned to United States Indo-Pacific Command (USINDOPACOM) deploy in support of USINDOPACOM, and global requirements. Simultaneously these squadrons maintain ready aircraft in support of Aerospace Control Alert Level 1 (ACA 1), which is the steady-State level of readiness, while also maintaining the capability to increase ready aircraft in conjunction with increased ACA levels, all in accordance with Operation NOBLE EAGLE (ONE). By design, when Air Force fighter squadrons deploy, they only deploy with a portion of their total aircraft. Even in the event of the deployment of all four Alaska based fighter squadrons, their remaining aircraft would be capable of maintaining the ONE mission, and not require a replacement.

Additional backfill of Alaska based fighter aircraft would be sourced by Continental United States (CONUS) based fighter squadrons through the identification of pilots that have completed arctic survival training (through previous assignment to Alaska, or rapid training) from multiple CONUS alert aircraft locations, and the augmentation of their air crew flight equipment (survival gear).

80. Senator SULLIVAN. Secretary Austin and General Milley, since 2017, the Army has fielded three theater-specific multi-domain task forces capable of employing

long-range precision effects to include intelligence collection and precision strikes. Currently, two of the Army's multi-domain task forces are concentrated on the Pacific Command Area of Responsibility (AOR) and the third is focused on European Command / Africa Command Currently the Army is looking to field a fourth and possibly a fifth multi-domain task force. DOD's Arctic strategy states "with increasing levels of adversary activities in the region, it is essential for the U.S. Army to employ a calibrated force posture with units that are manned, trained, and equipped to maintain a credible deterrence and the first line of defense of the Homeland." The study additionally rightfully points out the Arctic's place as a center of strategic competition. With the importance of the Arctic as laid out in the Army's strategy on the region and the branch's interest in creating two more theater-specific multi-domain task forces, can you speak to the benefits of having Alaska as the location for the next multi-domain task force?

Secretary AUSTIN. DOD is using the Army's Multi-Domain Task Forces (MDTFs) primarily to support priority warfighting objectives. DOD has activated MDTF headquarters at Joint Base Lewis-McChord, Washington, to support warfighting requirements in the Indo-Pacific region and in Wiesbaden, Germany, to support warfighting requirements in Europe. DOD is in the process of activating a third MDTF headquarters in Hawaii over the course of fiscal year 2023, which will further support DOD's focus on the PRC as the Department's pacing challenge. DOD assesses that this laydown of MDTF capabilities is appropriate to support our requirements. DOD has the ability to deploy elements from the MDTF at Joint Base Lewis-McChord in the event that any requirements emerge in Alaska or the Arctic that call for MDTF capabilities.

General MILLEY. To meet evolving threats, the Army continues to transform by developing capabilities to remain the dominant land force in the world. A key effort in this endeavor is the modernization of the Army's force structure and includes the establishment of Multi-Domain Task Forces (MDTFs).

The Army's MDTFs are designed to be scalable from operational to strategic level, which can be tailored to the requirements and the needs of Joint Force Commanders. The MDTF design will continue to evolve and change based on feedback from experimentation and required capabilities for the Army of 2030. During this analysis, the Army continues to explore options to station the fourth and fifth MDTFs for activation in fiscal years 2027 and 2028.

The Army and the Joint Force must consider how to mobilize, project, and sustain combat power to provide Combatant Commanders (CCDRs) with required forces and equipment. From inception, each MDTF will be assigned or aligned to a Combatant Command, then built, trained, and exercised within the context of the Combatant Commander's requirements.

Alaska is an ideal location for the development of new capabilities applicable to cold weather environments. The determination for the basing of the fourth and fifth MDTFs is currently ongoing. However, all Arctic-capable force structure decisions will be aligned with the National Strategy for the Arctic Region and other relevant posture guidance. Thank you for your strong and continued interest in the modernization and sustainment of our forces.

QUESTIONS SUBMITTED BY SENATOR TED BUDD

SUPPORT TO UKRAINE

81. Senator BUDD. Secretary Austin, as you know, the Ukrainian Armed Forces have been engaged in significant combat operations against the Russian Army in and around the cities of Bakhmut and Soledar. Much of that combat has been urban combat and some of it has been subterranean combat in the salt mines that are near those cities. The casualties for both sides have been significant. The Ukrainians have submitted a Letter of Request to you asking the United States to supply unmanned ground systems and associated systems. These systems would allow the Ukrainians to perform a number of dangerous missions remotely in the contemporary operating environment and thus avoid some of the casualties that they have been sustaining. The Letter of Request was from Major General Kyrylo Budanov, No. 222/9A/1220, and was submitted 19 November 2022. What is the status of this request and when can we expect a decision?

Secretary AUSTIN. The security assistance we provide to Ukraine is shaped by the Department's frequent interactions with Ukrainian counterparts in the Ministry of Defense and Ukrainian Armed Forces. The Ukrainian Main Intelligence Directorate submitted the Letter of Request you referenced without formal endorsement from senior officials in the Ukrainian General Staff or Ministry of Defense who are au-

thorized by the Government of Ukraine to make formal, prioritized requests. However, I have asked my staff to followup, as we are continually looking for new ideas on how best to support Ukraine.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MARCH 30, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

ARMY POSTURE

The Committee met, pursuant to notice, at 9:33 a.m. in room SD-G50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, Kaine, King, Warren, Peters, Manchin, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Let me call the hearing to order.

Before we start, I would like to acknowledge the UH60 Blackhawk training accident that occurred last night at Fort Campbell. Our thoughts are with the Army family today and I know this hits General McConville in a particularly difficult way as an aviator and as a former commander of the 101st Airborne Division. You know and you feel it personally.

It also demonstrates the enduring risks our men and women who volunteer to serve our Nation face every day, not just in combat zones but in rigorous training. So all of our thoughts and prayers are with these families and with the Army today. Thank you.

The Committee meets today to receive testimony on the President's Budget Request for the Army for fiscal year 2024. Our witnesses today are Secretary to the Army Christine Wormuth and Chief of Staff of the Army General James McConville.

Thank you both for your service and please convey this Committee's appreciation to the men and women serving under your command.

General McConville, as this will be your last posture hearing before your retirement, on behalf of the Committee I would like to offer you our sincere gratitude and congratulations. The Nation is safer and the United States Army is on a path of generational transformation because of your leadership.

We thank you for your many decades of selfless service and we thank your family for their continued support, and most particularly for their continued service. I believe that every one of your sons is in the United States Army and that your son-in-law is in the United States Army. Am I correct?

General MCCONVILLE. And my daughter, Senator——

Chairman REED. I am sorry. You must be Irish. How many children do you have?

[Laughter.]

Chairman REED. The Army is faced with historic challenges, though, and even as the service is undertaking its most thorough modernization effort in 40 years while in the midst of the most difficult recruiting environment in half a century, the Army is being called upon to increase its forward operating presence.

The Army's strength has always been drawn from its soldiers and its leaders and its tenacity to get the job done, and that characteristic grit is certainly needed today.

In its fiscal year 2024 budget the Department of Defense (DOD) has requested $185 billion to the Army, marking the fourth straight year of a flat budget for the service. Even as every other service and element of the Department has benefited from significant increases, the Army has seen its funding essentially plateau.

Understandably, the Department is focused on the pacing threat in the Indo-Pacific where the nature of competition relies heavily on our Nation's sea and air strength.

However, I am concerned that inadequate investment in the United States' primary land component may create vulnerabilities. Combat credible ground forces are fundamental for deterrence, as we are witnessing every day in Europe.

Furthermore, the Army has a critical role to play in the Indo-Pacific including providing long-range fires and ground forces, training and experimentation with our partners and allies, and enabling logistics and prepositioned stocks.

We risk the Army's combat credibility if we do not provide it with the resources it needs to continue to field modernization and to continue to be a force to be reckoned with.

Even as we focus sea and air resources to the Indo-Pacific, the Army will be relied upon to maintain a reliable presence around the world. With that in mind, I am interested in hearing about the Army's view of its mission globally as well as how the service is adjusting its operating concepts and force posture to support the National Defense Strategy (NDS) to include the Indo-Pacific.

To remain competitive with China and Russia we must continue to invest in cutting-edge technologies that will define future battlefields across all domains.

The Army specifically has been pursuing modernization in key areas like long-range fires, air defense, vertical lift, and deep sensing, among others. These are ambitious and farsighted objectives.

I am particularly encouraged by the Army's announcement yesterday of the creation of a new cross functional team focused on contested logistics. This team, under the direction of Army Futures Command, will address the need for more resilient and agile logistics in dangerous environments like the Indo-Pacific.

Secretary Wormuth, General McConville, I would ask you update the Committee on the Army's modernization efforts and what resources are needed to effectively continue them.

As I mentioned, the Army's most valuable asset has always been its people. I am pleased to see this budget request placed as a priority on taking care of our soldiers and Army civilians by providing an across the board pay raise of 5.2 percent and investing in barracks improvements.

At the same time, the Army is struggling to recruit new soldiers. Last year, the service fell far short of its recruiting goals and the same appears likely this year.

There are a number of factors contributing to this challenging recruiting environment, including low national unemployment rates, lingering problems from COVID–19, and historically low numbers of Americans eligible for or interested in military service.

I understand the Army is conducting an overhaul of its recruiting and retention practices including the launch of a major new marketing campaign and an expansion of the Future Soldier Preparatory Course.

I would ask for an update on how you plan to recruit a broader pool of potential recruits and grow back end strength in the coming years.

Finally, the Army must continue to improve its readiness in the context of long-term strategic competition. The Army is focused on large training exercises including Defender Europe and Pacific Pathways, and its leadership in the Project Convergence series demonstrate a commitment to regional preparedness.

These large-scale events not only test system capabilities, unit skills, and logistics resilience, they also facilitate experimentation and training with our allies, reflecting how we would fight in future operations.

We are seeing the importance of efforts like this right now in Ukraine. I would ask for an update on how the Army is designing large-scale exercises to support its focus on our pacing threats, China and Russia.

Again, I thank the witnesses for their participation today. I look forward to the testimoneys. Now let me recognize the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman, and I want to thank our witnesses for being here. I also join the Chairman in offering my condolences to the families of those killed at last night's training accident Fort Campbell.

On this Committee we take the safety of our servicemembers seriously and will seek a clearer understanding of exactly what happened. I will also say that when it comes to the Army, the distinguished Chairman of this Committee knows whereof he speaks and I am fortunate to have him as a teammate.

I want to also thank General McConville for his service to the United States. Since earning his commission from West Point in 1981 he has faithfully served his country as an Army aviator and as a general officer.

I also want to recognize General McConville's family, as the Chairman has done, and I do not know if we have recognized the favorite family member, which I understand is his youngest—his grandson, Patton.

No United States soldiers are fighting against Russia in its brutal invasion of Ukraine. This is Ukraine's fight and it is fighting well and valiantly. Even though no United States troops are directly engaged in the fight, the United States Army is providing critical on-the-ground support for Ukraine. Thousands of United States soldiers are deployed to provide logistics to supply Ukraine's military. Thousands more are training Ukrainian military personnel, and the result is a significantly degraded Russian military, as Secretary Austin testified earlier, and that is a positive development.

The lessons of Ukraine should be an example of our efforts in the Pacific. The Army is and will continue to be on the leading edge of efforts to rebalance our Western Pacific forces.

United States Army Pacific, through Pacific Pathways and other engagements, has established significant relationships with allies and partners that promise to enable access and maneuvering capabilities across the theater.

Further, the Army has successfully and rapidly pushed the envelope to rebuild our arsenal of democracy through significant capacity expansion, investments, and proposed multiyear contracts, though more work remains.

The Army also has an important role to play in contested logistics and in providing more options for sensors and shooters to the joint force. I am heartened by the speed with which the Army has sought to reshape itself to provide deterrent value against the Chinese People's Liberation Army, but we should still do more to accelerate this effort.

In particular, we should capitalize on the progress made on the Precision Strike Missile (PrSM) and the Mid-Range Capability (MRC) weapon system. For next-generation combat vehicles platforms like the Optionally Manned Fighting Vehicle (OMFV) and the Armored Multi-purpose Vehicle (AMPV) may soon replace or reinforce their aging counterparts.

I hope to hear more about these advancements and those in network, soldier lethality, future vertical lift (FVL), and air and mission missile defense. None of these achievements or capabilities would work without the dedicated soldiers of the United States Army and I join the Chairman in noting that we are in the front edge of a recruiting crisis.

I would like an update on this year's recruiting goals and how the Army has changed its strategy to meet its recruitment and retention objectives.

Along these lines, let me reiterate a position that I have had for several years now during the markup of the National Defense Authorization Act (NDAA). I am strongly in favor of expanding the Junior ROTC [Reserve Officer Training Corp] and I do believe this is a valuable program not only for potential military members but principally for citizenship and public service in our young people.

Then, sadly, I must mention the Biden administration's disservice to the Army in the fiscal year 2024 budget submission. In

that regard, I associate myself with the remarks of the distinguished Chairman of this Committee.

When accounting for inflation, this year's budget is about a 2 percent cut compared to last year. The impact of that cut is even more severe at a time when personnel expenses are rapidly increasing.

Meanwhile, General McConville submitted a list of almost $2 billion worth of unfunded priorities the Army needs, including support for partnership-building exercises in the Indo-Pacific, and I do appreciate those submissions because it informs this Committee.

Further, the budget request fails to use multiyear procurement authority for critical missiles like Patriot Advanced Capability–3 (PAC–3) and Guided Multiple Launch Rocket System (GMLRS). I am confident my colleagues on a bipartisan basis, again, will join me to correct this inadequate budget and ensure the Army has the right resources to confront the Nation's current and future challenges.

Thank you, Mr. Chairman. I think we share very many views along this and we look forward to hearing the testimony directly from these distinguished witnesses.

Chairman REED. Thank you, Senator Wicker, very much.

Secretary Wormuth, please?

STATEMENT OF THE HONORABLE CHRISTINE E. WORMUTH, SECRETARY OF THE ARMY

Ms. WORMUTH. Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee, thank you for your ongoing support as we continue to build the Army of 2030, and thank you for your comments and thoughts and prayers for the families of our soldiers who were killed in the crash. Our hearts go out to them. It is a heavy day for the Army, I would say, in that regard.

We are pleased to appear before you today. I am, as you noted, joined by General McConville and want to thank him for his years of service and leadership of our Army. I am grateful to work with him every day. We have accomplished a lot this year but we have a lot of work ahead of us.

We remain focused on our three key priorities—people, modernization, and readiness. The fiscal year 2024 budget allows us to support the National Defense Strategy, to provide ready forces to the combatant commanders, and to take care of our people.

By investing over $39 billion in procurement and RDT&E [Research and Development Test and Evaluation], we are maintaining our momentum on our modernization programs and we are, largely, on track to bring 24 systems into the hands of soldiers and across the finish line in fiscal year 2023.

This is a big year for long-range precision fires. Prototypes of the precision strike missile, the mid-range capability and the long-range hypersonic weapon will be in the hands of soldiers this fiscal year.

It is also a big year for next-generation combat vehicles. Mobile protected firepower is in production and Armoured Multi Purpose Vehicle (AMPV) is also being fielded, and it is a big year for our integrated air and missile defenses and the future vertical lift program as well.

As we shift from 2 decades of counterinsurgency and counterterrorism operations to large-scale combat operations we are also transforming our force structure. We are going to need to adapt our force structure to make room for things like the multi-domain task forces as well as other new units like the indirect fire protection capability and our M-SHORAD battalions.

We are a ready Army and we continue to emphasize readiness in everything we do. We are funding 22 Combat Training Center rotations this year.

We have a robust exercise program and we are implementing our new readiness model, which lets us balance modernization, training, and ongoing missions. We are also investing in Army prepositioned stocks, which have been key in everything that has been going on in Europe and will serve us well in other theaters as well.

To assist Ukraine in fighting Russia the Army has provided over $20 billion of lethal assistance including a wide range of munitions, radars, combat vehicles, and other things, and one of the most important lessons we have learned from Ukraine is the need for a more robust Defense Industrial Base. In our budget this year we have $1.5 billion to invest in our arsenals, ammo plants, and depots.

We are also working very closely with our partners in industry to increase munitions production so that we can continue to help the Ukrainians but also, very importantly, to replenish our own stocks, and even as our soldiers provide lethal assistance and train Ukrainian soldiers we are not taking our eye off the pacing challenge of China.

United States Indo Pacific Command (INDOPACOM) may be a theater named after two oceans but the Army has an important role to play there. The best way to avoid fighting a war is to show that you can win any war you might have to fight.

The Army is contributing to strengthening deterrence in INDOPACOM every day as we campaign in the region through our exercises and partnerships, and if deterrence fails the Army will be a key player on the joint force team in the event of a conflict.

As important as it is to build new weapon systems and maintain our readiness, people are the strength of our Army. This budget increases soldier and Department of Army civilian pay by 5.2 percent and funds important quality of life improvements like family housing, barracks, childcare initiatives, and other important programs.

We also, of course, want to build cohesive teams of soldiers that are trained, disciplined, and fit. So the Army is committed to building positive command climates across the force so our soldiers can be everything they can be.

Since appearing before you last year, we have taken steps to build out a prevention workforce that will help us in our efforts to reduce harmful behaviors across the Army, which in turn will help us with recruiting and retention.

We are also continuing to strive to prevent suicide in our ranks. Suicide is a national challenge, but we have to do everything we can to reduce suicide in the Army. So we are pursuing a range of initiatives to help our soldiers be more resilient.

One of the most important things we can do is to make sure that we have engaged leaders at every level who know their soldiers and make sure that their soldiers know their leaders and are connected to their buddies and families.

Our Army is the greatest army in the world, but if we are going to keep it that way we must solve our recruiting challenge. The difficult recruiting landscape we face did not appear in 1 year and it is going to take us more than a year to solve it.

But we are laser focused on this challenge and we are not going to lower our standards to solve the problem. The whole Army leadership is adapting and changing how we are recruiting.

We are generating positive momentum from initiatives like our Future Soldier Prepatory Course, our Soldier Referral Program, and our new advertising campaign "Be all you can be."

Our efforts are geared toward doing one thing, reintroducing the Army to the American public and inspiring a renewed call to service. We very much need your help to be successful in this effort.

I am proud of all that our soldiers do to protect our country every day, and I look forward to your questions.

Chairman REED. Thank you, Madam Secretary.

General McConville, please?

STATEMENT OF GENERAL JAMES C. MCCONVILLE, USA, CHIEF OF STAFF OF THE ARMY

General MCCONVILLE. Thank you, Secretary, for your leadership.

Chairman Reed, Ranking Member Wicker, distinguished Members of the Subcommittee, thank you for the opportunity to be here today.

Before I start, I would like to express my sincere condolences to the families of the crews, the MEDEVAC helicopters from 101st, who are being informed today of their loss. They served our country proudly and I'm very, very proud to serve with them, and they remain in our thoughts and prayers as we go out throughout the day.

The United States exists for one purpose and that is to protect the Nation by being ready to fight and win our Nation's wars as a member of the joint force, and we have hundreds of thousands of soldiers training every single day around the world to make that happen, just like those MEDEVAC pilots.

To do this, the Army has three clear priorities—people, readiness, and modernization, or, in other words, future readiness. We have remained aggressively committed to these priorities while answering the Nation's call during every crisis and every challenge.

This year, the Army continues to undergo its greatest transformation in almost 50 years and we are delivering on modernization because we have been consistent and we have been persistent on our modernization priorities.

Last year, we officially updated our capstone warfighting doctrine to Multi-Domain Operations (MDO), which incorporates emerging lessons from Ukraine. We continue to stand up new organizations to support our new doctrine. Last June we reactivated the historic 11th Airborne Division in Alaska.

In September, we stood up the third of the five Multi-Domain Task Forces (MDTFs). As the Secretary noted, we are on track for 24 signature weapon systems in 2023.

But at the end of the day, we must get the right people in the right place in order for any of these initiatives to be successful. That is why people remain the Army's number-one priority.

We want every young person, every parent, to know that service in the Army is a pathway to success both in and out of uniform. Whether you serve for 4 years or 40 years, the Army offers endless possibilities.

We are not a profession of arms but a profession of professions. You can be whatever you want to be in United States Army. In fact, you can be all you can be.

I am often asked how people can help us and my answer is inspire young men and women to serve, because when we get the call we go with the Army we have. The Army we have is the world's greatest fighting force because we serve with the world's greatest soldiers.

With your continued support we are going to keep it that way. I look forward to your questions.

[The joint prepared statement of The Honorable Christine E. Wormuth and General James C. McConville follows:]

JOINT PREPARED STATEMENT BY THE HONORABLE CHRISTINE E. WORMUTH AND GENERAL JAMES C. MCCONVILLE

ENDURING ARMY PRIORITIES

For nearly 248 years, the United States Army has dedicated itself to fighting and winning the Nation's wars. As old threats evolve and new ones emerge, the Army is making decisions and prioritizing investments that not only contribute to current readiness but will also pay dividends on the battlefields of 2030 and beyond. That is why we are especially grateful to Congress for providing the funding necessary to produce highly trained and lethal forces ready to meet an array of challenges at home and abroad. Our ability to maintain continuity through crisis is a testament to our solemn commitment to the Army's three enduring priorities: people, readiness, and modernization. The Army's Budget Request for fiscal year 2024 of $185.5 billion supports these priorities and will enable us to deliver the Army of 2030 in support of the National Defense Strategy.

READY TO FIGHT AND WIN

America's Army exists to protect the Nation by fighting and winning our wars as a member of the Joint Force. There is nothing more reassuring, and no greater deterrent, than American soldiers on the ground, standing shoulder-to-shoulder with our Allies and partners.

Linchpin of the Joint Force in the Indo-Pacific. From Washington and Alaska, to Hawai.i and Guam, to Japan and South Korea, there are currently 71,000 soldiers serving in the Indo-Pacific theater. The Indo-Pacific is not just an air and maritime theater, but a joint theater with joint problems that require joint solutions. The Army is the linchpin Service, enabling and sustaining our joint and Allied partners. Our fundamental goal is to deter conflict in the region. Thus, the best way to avoid fighting a war is to make it very clear that the Joint Force, in concert with our Allies and partners, can and will win such a war. To that strategic end, the Army contributes to deterrence by campaigning, which plays three important functions in the Indo-Pacific: complicating Chinese decisionmaking; enhancing U.S. access to the region; and placing combat-credible and interoperable land forces forward to create interior lines for the Joint Force.

This year is going to be one of historic modernization for our force posture in the Indo-Pacific. We are working closely with our regional Allies and partners to secure greater operational access and basing arrangements in strategic locations to enable adversary-focused training and exercises. In terms of logistics, the 8th Theater Sustainment Command in Hawai.i will oversee the delivery of supplies, fuel, munitions, and activity sets for U.S. Army Pacific's (USARPAC) joint and multinational training and exercises. Strengthening our ability to operate across the theater requires not only logistics at scale, but also the resiliency to operate in contested environments.

It has been a consequential year for the Army in the Indo-Pacific. USARPAC completed its inaugural iteration of Operation Pathways, representing the Theater Army's new posture paradigm to build and thicken Joint Force interior lines. This gives USARPAC the operational endurance to see, sense, and understand regional threats; sustain, protect, and command and control (C2) large-scale operations; and conduct maneuver and fires. USARPAC demonstrated those capabilities by offloading APS afloat in support of exercise Salaknib in the Philippines. USARPAC, alongside our Indonesian partners, expanded exercise Super Garuda Shield from a modest bilateral venture to a major regional undertaking with 14 partner nations and 4,000 combined forces. Next, we established the Joint Pacific Multinational Readiness Center, bringing the first combat training center to the Indo-Pacific with inaugural rotations at our Hawai.i and Alaska campuses, along with an exportable capability we employed in Indonesia.

Capitalizing on that momentum, the 5th Security Forces Assistance Brigade (SFAB) persistently trained and advised 12 of our Allies and partners across the region. The Army also activated the 11th Airborne Division in Alaska—a unit with an historic Indo-Pacific lineage that provides our soldiers with a clear purpose, identity, and mission. As part of our Arctic Strategy, the 11th Airborne Division is being tailored as a rapidly deployable operational command headquarters. Finally, USARPAC initiated the Unified Pacific Wargame Series, offering key insights on Army capabilities, posture, and contested logistics for a protracted conflict in the Indo-Pacific. In October 2022, America's First Corps certified as a Joint Task Force as part of the Mission Command Training Program Warfighter Series, with participants from Washington, Hawai.i, Colorado, and Kansas. I Corps' experimentation with distributed C2 will enable commanders to present multiple dilemmas to a potential adversary. We also activated the third of five planned Multi-Domain Task Forces (MDTF), task-organized to provide anti-access, area-denial capabilities through long-range precision fires and effects. The 3d MDTF at Fort Shafter, Hawai.i joins the 1st MDTF at Joint Base Lewis McChord, Washington as the second MDTF supporting U.S. Indo-Pacific Command.

Tip of the Joint Spear in Europe. Since Russia's unjust and unprovoked invasion of Ukraine in February 2022, the U.S. Army's tactical readiness and strategic readiness have been on full display across continental Europe. The 43,000 American soldiers in Europe underscore our ongoing commitment to the region, further bolstered by President Biden's force posture announcement at the NATO Summit last June. In Germany, we are forward stationing an air defense artillery brigade headquarters, a short-range air defense battalion, a combat sustainment support battalion headquarters, and an engineer brigade headquarters. In Italy, we are forward stationing a short-range air defense battery. In Poland, the Army has forward-stationed the V Corps Headquarters Forward Command Post—the first permanent U.S. forces on NATO's eastern flank. We are maintaining a substantial rotational force in Poland, including an Armored Brigade Combat Team (ABCT), combat aviation brigade, and a division headquarters. In Romania, we have headquartered a rotational brigade combat team, supporting an additional maneuver force on the eastern flank. In the Baltics, we have enhanced our rotational deployments—which include armored, aviation, air defense, and special operations forces—to reinforce Baltic security, enhance interoperability, and demonstrate the flexibility and combat readiness of U.S. forces.

We have been able to demonstrate our steadfast support to NATO thanks to years of investments in setting the European theater, where we continue to invest in and modernize a robust set of Army Prepositioned Stocks (APS). Importantly, we are moving some of our APS into Poland this year to reinforce NATO's eastern flank. We are also leveraging NATO Common Funding to build a new equipment complex in Poland to house, maintain, and issue an ABCT equipment set. The XVIII Airborne Corps—America's Strategic Response Force—similarly highlighted the Army's investments in rapid power-projection capabilities. The XVIII Airborne Corps' 9-month deployment to Wiesbaden, Germany built upon years of cooperation with the Ukrainian military, providing the training and support required to aid the heroic defense of their homeland. These investments in strategic readiness would not have been possible without congressional foresight and support. This is especially true for the European Deterrence Initiative (EDI). Total EDI funding for the Army in fiscal year 2023 is $2.8 billion to support 9,800 rotational Army forces in Europe, and enhance our forward posture, training, and interoperability.

The United States remains committed to supporting Ukraine's near-term combat needs and its long-term defense requirements against future Russian aggression. The Department of Defense (DOD) has established Security Assistance Group—Ukraine (SAG-U), commanded by an Army three-star general under U.S. European Command, in Wiesbaden, Germany. SAG-U is purpose-built to execute the full

range of our security assistance activities in a more efficient and sustainable manner. SAG-U will reach full operational capability in Q3 fiscal year 2023. The lessons we observe in Ukraine underscore our Army's greatest strengths: combined arms maneuver at scale; the importance of empowered leadership through mission command; and the immeasurable value of a professionalized Non-Commissioned Officer Corps.

The Army continues to supply critical weapon systems, equipment, and munitions to Ukraine, including Stinger anti-aircraft systems, Javelin anti-armor systems, 155mm artillery rounds, and other items. We have provided billions of dollars of Army materiel to Ukraine through the Presidential Drawdown Authority. We are also working to execute billions in procurements for Ukraine through the Ukraine Security Assistance Initiative.

The Army will initiate multi-year procurement contracts for artillery rounds and artillery charges in fiscal year 2023. For fiscal year 2024, the Army will work with Congress to explore additional multi-year procurement contract opportunities for critical munitions. In addition to these potential multi-year contract efforts, the request includes additional funding for a range of munitions, including Javelin and Stinger missiles, and artillery, combat-vehicle, and small-arms ammunition.

We were able to fill critical gaps in Ukraine's defense thanks to our comprehensive modernization initiatives, but we must be able to replenish these stocks. Russia's war in Ukraine is further highlighting lessons from the pandemic that military readiness depends upon a robust and modern Organic and Defense Industrial Base. The Army is working closely with the Office of the Secretary of Defense (OSD) and our industry partners to rapidly increase production capacity and transform our processes from vulnerable supply chains to a more resilient supply fabric.

Readiness is our most effective form of deterrence. The best way to win without fighting is by demonstrating our ability to win decisively by fighting. Forward deployed combat capability, prepositioned stocks, and a resilient sustainment infrastructure will be key to future deterrence. One of the many ways we showcase our combat-credible forces in Europe is through DEFENDER-Europe, the Army's annual joint and multinational exercise series. Last year, concurrent with our support to Ukraine, and alongside our NATO Allies, DEFENDER-Europe 22 stretched across nine European countries, featuring 3,450 American troops and 5,200 multinational servicemembers from 11 Allied nations. DEFENDER-Europe 23 will include over 7,800 U.S. troops, training alongside 15,000 multinational forces from 26 Allied and partner nations. National Guard units from 10 U.S. states will also participate, marking the 30th anniversary of the National Guard State Partnership Program.

DELIVERING THE ARMY OF 2030

The Army continues to progress through our greatest transformation in almost half a century. Fifty years ago, Army senior leaders closely observed the 1973 Arab-Israeli War and incorporated its lessons into the emerging AirLand Battle doctrine, the creation of new Army organizations, and the development of the "Big 5" weapons systems. Today, we are not only supporting Ukraine but paying close attention to the characteristics of modern warfare as they unfold, and incorporating those lessons into new doctrine, organizations, training, and materiel. Last October, the Army officially adopted Multi-Domain Operations (MDO) as our official capstone doctrine, the most significant shift in warfighting doctrine since AirLand Battle. MDO acknowledges that the Army of 2030 will be contested in every domain—air, land, sea, space, and cyberspace. Our soldiers must be ready to fight and win in multiple domains simultaneously to get from fort to foxhole in a contested environment.

The Army has been consistent and persistent in pursuing our modernization initiatives as we work to deliver the Army of 2030 and design the Army of 2040. We remain aggressively committed to our six modernization portfolios—long-range precision fires, next generation combat vehicle, future vertical lift, the network, air and missile defense, and solider lethality—and are on track to deliver 24 new systems into the hands of soldiers by the end of fiscal year 2023. That includes eight fielded systems, six systems issued for testing, and ten systems undergoing soldier touchpoints. Our annual Army Futures Command-hosted experiment, Project Convergence, continues to evolve and expand from the Army-centric inaugural event in 2020 to last fall's combined, joint series of experiments with the entire Joint Force, the United Kingdom, and Australia.

To succeed on the future battlefield and continue to dominate the land domain, there are six operational imperatives the Army of 2030 must do. First, we need to see and sense more, farther, and more persistently at every echelon than our enemies. That is why we are modernizing our aerial intelligence, surveillance, and re-

connaissance capabilities, to include the Multi-Domain Sensing System, Terrestrial Layer System, and the Tactical Intelligence Targeting Access Node, or TITAN.

Second, we have to concentrate highly lethal, low signature combat forces rapidly from dispersed locations to overwhelm adversaries at a time and place of our choosing. To do this, we are investing in a faster, more survivable armored fist. Upgraded tanks and Bradleys will be joined by Armored Multi-Purpose Vehicles, or AMPVs, which are already in production. The Mobile Protective Firepower System, which was just awarded for production, will provide greater protection to infantry forces without sacrificing speed or mobility.

Third, we must win the fires fight by delivering precise, longer-range fires as part of the Joint Force to strike deep targets and massing enemy forces. Since 2016, the Army has invested significantly in fire support systems, and we have made long-range precision fires a top modernization priority. We are working tirelessly to ensure that we have multiple options to service targets at ranges from 40 miles (Extended Range Cannon Artillery) to over 1,700 miles (Long-Range Hypersonic Weapon).

Fourth, we need to protect our forces from air, missile, and drone attacks. We are continuing to field Maneuver Short-Range Air Defense, or M-SHORAD, to protect our maneuver forces against a wide range of air threats. The Army is also developing an enduring Indirect Fire Protection Capability, or IFPC, that will work together with the Army's Integrated Air and Missile Defense Battle Command System to provide an unparalleled ability to identify, track, and defeat aerial threats. Current events also highlight the proliferation and significance of enemy Unmanned Aircraft Systems (UAS). To address this threat, we are investing in counter-UAS division sets that place fixed, semi-fixed, mobile, and portable counter-UAS capabilities in the hands of our maneuver forces.

Fifth, we must rapidly and reliably communicate and share data not just with ourselves, but with our Sister Services, and Allies and partners. The Army has demonstrated how to rapidly combine targeting data from our joint teammates and pass that information to the correct Army fires element—reducing the targeting cycle to mere minutes. The Integrated Tactical Network architecture, in fielding now, enhances classified data transfer with both better network bandwidth efficiency and resilient relay links to ensure persistent connectivity for our warfighters.

Finally, we must sustain the fight across contested terrain for both short, sharp operations as well as for protracted conflict. This will require not only standard equipment, like field kitchens, fuelers, and trucks, but also the niche, often overlooked capabilities like Army watercraft and Joint Logistics Over-the-Shore, or JLOTS. Sustainment must be at the forefront of our planning, preparation, and training—not something that we can assume will always be readily available. Army logisticians are the best in the world, and they are up to the task.

PEOPLE ARE OUR GREATEST STRENGTH AND FIRST PRIORITY

Recruiting Initiatives. We are experiencing the most challenging recruiting landscape in a generation. There is no one-size-fits-all solution. Nevertheless, we are committed to tackling these problems head on by recruiting a force that looks like the Nation it serves. All our recruiting initiatives will be informed by first principles: 1) we will not sacrifice quality for quantity; 2) we will not lower our standards; and 3) we will invest in America's young people so they can meet our standards. The Regular Army Accessions Mission for fiscal year 2023 is 65,500. While we are singularly focused on meeting this mission, we need help from community leaders, parents, educators, coaches, and influencers to inspire young people to serve.

The Army is implementing several important changes to improve organizational understanding, recruiter management, regional awareness, marketing, and applicant eligibility. First, we established the Army Recruiting Task Force, under the direction of a two-star general, to examine the current State of the Army's recruiting enterprise and to make recommendations to Army senior leaders for action. Second, we are overhauling how the Army recruits by selecting recruiters differently, improving recruiter training, increasing recruiter resources, and creating new incentives for high-performing recruiters. For instance, the Army recently launched a "Recruiting Scholars" program to identify, incentivize, and send top-notch captains to graduate school after completing a recruiting-company command. There are 21 talented captains in the first cohort.

Next, the Army designated 15 major cities as priority markets for fiscal year 2023. With help from community partners, including Veterans Service Organizations, Military Support Organizations, and our Soldiers for Life, we are saturating these markets with activities and initiatives to maximize awareness regarding the benefits of Army service. Fourth, we established the Future Soldier Preparatory Course

(FSPC) pilot program in July 2022 at Fort Jackson, South Carolina to support the accession of recruits who are inclined to serve but might need help improving their test scores or physical fitness. As of March 22, 2023, 4,219 FSPC recruits have graduated and moved on to Basic Combat Training (BCT). This represents a 98 percent success rate. FSPC recruits improved their Armed Forces Qualification Test score by an average of 18.5 points. Similarly, 97.6 percent of FSPC recruits achieved the Army's accessions body composition standards. Most importantly, FSPC graduates are performing very well in BCT with just a 4.8 percent attrition rate, as compared to the average BCT attrition rate of 6.1 percent in 2022.

Be All You Can Be. On March 8, 2023, the Army officially reintroduced "Be All You Can Be" as our marketing slogan. "Be All You Can Be" featured prominently in Army advertisements and marketing materials from 1981 to 2001. After a two-decade hiatus, we are excited to introduce "Be All You Can Be" to a new generation of young people. The Army Enterprise Marketing Office hosted numerous in-person focus groups and tested "Be All You Can Be" against 18 other taglines, eventually surveying 20,000 people across five target audiences: prospects, soldiers, veterans, influencers, and engaged citizens. Our extensive market research revealed that the "Be All You Can Be" slogan, once popular with Generation X, resonates with Generation Z by signaling a sense of purpose, passion, possibility, community, and connection unique to the Army. With support from Congress, the Army will spend $116.7 million in fiscal year 2023 to launch this rebranding campaign across multiple media platforms. Additionally, we believe that the "Be All You Can Be" narrative will help veterans and retirees tell their Army stories and inspire a new generation of young people toward military service.

Quality of Life. Recruiting and retaining the next generation of the All-Volunteer Force requires sustained investment and quality-of-life improvements in Army housing, barracks, child care, spouse employment, health care, and the exceptional family member program.

High-quality housing and barracks are key to ensuring overall health and wellness, thereby contributing to readiness and critical for retaining Army soldiers and their families. First, the Army supports DOD's continuous assessment of Basic Allowance for Housing (BAH) rates, ensuring military paychecks keep pace with market conditions across the country. Average BAH rates have increased 12.1 percent since 2022. Personnel in 291 of 300 military housing areas received a BAH rate increase. Second, privatized housing companies began a 6-year, $3-billion investment plan in 2020 to improve the Army's housing inventory, to include new builds and major or medium renovations through 2026. The Army has programmed $1.6 billion for fiscal years 2024 to 2028 to improve the government-owned Army Family Housing inventory. Third, the Army historically invests an average of $1 billion per year in barracks for construction, restoration, and modernization across all three Army components. In fiscal year 2024, the Army is requesting support for permanent-party barracks in Fort Wainwright, Alaska; Joint Base Lewis McChord, Washington; Fort Bragg, North Carolina; and Natick Soldier Systems Center, Massachusetts. Importantly, Army senior leaders remain vigilant in their housing and barracks oversight responsibilities.

With congressional support, the Army has expanded on-and off-post child-care options by increasing staff compensation and benefits, investing in facilities, growing family child care, and extending care hours. Entry level salaries are now $17.39 per hour. We are offering recruiting and retention bonuses for child-care staff and providing them with a 50 percent child-care discount for the first child and a 15 percent multiple-child discount for additional children. In terms of off-post care options, we continue to provide Army Fee Assistance to approximately 10,000 children of the Active and Reserve component per month, all while exploring new initiatives and partnerships. We also increased the provider rate cap to $1,700 per month, thereby reducing out-of-pocket expenses for hard-working Army families. Since fiscal year 2021, Congress has funded seven new Child Development Centers (CDCs) in Alaska, Hawai.i (2), Georgia, Kansas, Kentucky, and Louisiana. The Army is planning to fund more CDCs in the out years.

Army spouses—over 431,000 across all three components—play an important role in soldier and family readiness and soldier retention. Leveraging both Army and DOD programs, and partnerships with other Federal and non-governmental organizations, we remain committed to improving spouse employment and career opportunities. When spouses are satisfied with their careers, employment options, access to services, and overall quality-of-life, they are far more likely to support their soldier's continued service.

There are 46,000 Active component soldiers—9 percent of the force—with family members enrolled in the Exceptional Family Member Program (EFMP), totaling 55,000 family members. We are committed to reforming the EFMP and to providing

comprehensive and all-inclusive support to Army families with a family member with a qualifying condition. In August 2022, we launched the Enterprise EFMP system to improve enrollment, transparency, assignment coordination, and access to support. We have also created a centralized EFMP office within the Headquarters, Department of the Army to coordinate healthcare services, reassignment processes, and education support services. Taken together, these initiatives will help reduce the bureaucratic burden on Army families. Moreover, the Army continues its close partnership with the Defense Health Agency to ensure access to high-quality healthcare for our soldiers and their families.

Reducing Harmful Behaviors. People are the Army's number one priority. We take care of our people by building cohesive teams that are highly trained, disciplined, and fit, that are ready to fight and win, and where each person is treated with dignity and respect. Leaders across the Total Army are steadfastly committed to reducing the harmful behaviors that break trust with our soldiers and the American people—including sexual assault and harassment, acts of extremism, and racism, among others. To reduce harmful behaviors, we are shifting the paradigm from focusing on intervention and response to prioritizing integrated prevention activities. Integrated prevention activities address the conditions that lead to harm by reducing risk factors and increasing protective measures to preclude harmful behaviors. To that end, we are aggressively implementing the fiscal year 2022 Independent Review Commission's recommendations to counter sexual assault and sexual harassment within our formations, to include realigning Sexual Assault Response Coordinators (SARCs) and Victim Advocates from the operational chain of command to the Lead SARC at each installation. This independent reporting structure will enable Sexual Harassment/Assault Response and Prevention, or SHARP, professionals to advocate for victims more effectively.

The Army is committed to working with Congress and the OSD to effectively implement the military justice reforms directed by the fiscal year 2022 and fiscal year 2023 National Defense Authorization Acts. In July 2022, the Army issued a General Order establishing the Office of the Special Trial Counsel (OSTC) as a field operating agency. The Senate confirmed our nominee for Lead Special Trial Counsel in November 2022 and set his subsequent promotion to brigadier general in January 2023. The Army expects the OSTC to reach full operational capability by December 27, 2023, as required by law.

Every single suicide is one tragedy too many. Exposure to harmful behaviors, such as sexual assault, harassment, or other acts of violence, may increase the risk of suicide. The Army is committed to supporting those exposed to harmful behaviors and doing everything we can to address this critical issue. Fortunately, we saw significant decreases in suicide across all Army components in 2022. The Army is leveraging a new public health approach to prevent and respond to suicide at the individual and community levels. We will publish a comprehensive suicide prevention regulation to define this new approach for the force by the end of Q3 fiscal year 2023. Army leaders continue to employ the Health Readiness and Suicide Risk Reduction Tool across our formations. Last year, we introduced the "Stories of Hope" podcast to raise awareness, reduce stigmas, and increase help-seeking behaviors.

50 YEARS OF THE ALL-VOLUNTEER FORCE

As we commemorate 50 years of the All-Volunteer Force, it has never been more important to recruit and retain the talented individuals who make our Army the world's greatest fighting force. We win through our people—our Active Duty, Guard, and Reserve soldiers; our families; Army civilians; and our veterans and retired Soldiers for Life. We need every American to know that the U.S. Army is an organization of endless possibilities that provides a pathway to success both in and out of uniform. Our message is clear: if you want to serve something greater than yourself, if you want to belong to the world's greatest team, if you want to BE ALL YOU CAN BE, then join us. With the limitless talent our Nation has to offer and continued support from Congress, we will remain ready to fight and win, against any adversary, anywhere in the world.

Chairman REED. Thank you very much, General McConville.

Secretary Wormuth, our munitions situation has come into very, very sort of focused and graphic dimensions with the Ukrainian fight. Not only do we have to continue to supply the Ukrainians, we also have to replenish our supplies.

So what obstacles are in your way to do that and what should we do as a Congress to assist you?

Ms. WORMUTH. I think, Senator, the biggest obstacle—there are perhaps two obstacles but let me first say I think we are buying at the absolute edge of defense industrial capacity right now and we are really working to expand that capacity in real time, and that is why you see us investing $1.5 billion in our own organic industrial base so the ammo plants, for example, at Scranton that build 155mm shell casings we are investing in that plant to increase its production capacity, and we have done a lot with industry, as I said.

The multi-year procurement authorities that we have been given are very, very helpful and that is one thing that I think is helping us quite a bit.

The biggest obstacles, really, are twofold, I would say. One, some of the machining tools that are needed to open up new production lines are just very large, complex machines themselves and take time to fabricate and time to install, and there is just a limit to what we can do to compress that timeframe.

Then the other issue is, of course, some of the fragility in the supply chain that we have seen throughout the pandemic and we are, again, working very closely with our defense industry partners to try to help them strengthen those supply chains wherever we can.

Chairman REED. Thank you very much, Madam Secretary.

General McConville, we are at an unfortunate impasse in efficiently nominating and confirming general officers and flag officers. Can you tell us what the real-world effect of this is, unit readiness but also, I think, morale and the personal decisions of families about whether they are going to stay in the service or depart?

General MCCONVILLE. Senator, right now at the Senate we have three three-star generals. One is the space missile commander and the G–4 and also our Assistant Secretary of the Army Acquisition, Logistics and Technology (ASALT) and there is also 37 other one-star generals.

The impact is probably most felt in some ways on the families and the kids. Even though it looks like it is only 40 generals, there are probably four or five other transitions that have to happen so as someone moves up, someone moves, and works their way through.

So what it really does it affects the families and some of the kids. They are trying to figure out where they are going to go to school, when they are going to move, and all those things kind of come in to the readiness of the force.

As you know, we have some major transitions coming up this summer, and we talked about—I am going to retire by law and that is going to be in August and so there will be a replacement that will go through the process.

But with every—at this level there are probably eight moves we made. There will be a promotion to the chief, whoever that person becomes. All those jobs are going to have to change.

All those officers have families and kids that are going to be affected, and anything we can do to help smooth those transitions will put us in a much better position for readiness.

Chairman REED. I think there is another aspect here, too, is that we have some extraordinary talented—in fact, I would say they are

all extraordinarily talented—the senior officers and even captains and majors who could walk out the door tomorrow and command million-dollar salaries as crypto specialists, et cetera.

Is that a dynamic, too, that is being affected?

General MCCONVILLE. Well, I hope not. Most officers do not do it for the pay. If you take a look at the one-star pay, it is $180,000. People go, that is a lot of money. But most of these folks are sitting with 30 years in so actually it is a net of about 45. They make—they do these jobs for $45,000 a year and generals do it for nothing because we are at 40 percent in those type things.

But people do not do it for the money. I think they do it for the respect, and so I think that is very, very important that we actually take a look at what they do. These general officers and these leaders that are coming up in the Army are the best I have ever seen.

I have been doing this for a long time. I have seen a lot of generals. They are all combat proven. Their families have been through 20 years of continuous combat. They are the best I have ever seen and I would ask that we do all we can to get them confirmed.

Chairman REED. Well, thank you very much. My time is rapidly diminishing and just let me commend Madam Secretary, you and General McConville for, again, looking at this contested logistics cross-functional team.

Napoleon, I think, said an army moves on its stomach, and in the Pacific, particularly, we might be able to produce the ammunition, but if we cannot get it to the front lines, we will not prevail.

With that, and I will try to be—I will stop now and, again, thank you.

Senator Wicker, please?

Senator WICKER. It is hard to stop, is it not, Mr. Chairman?

Let us talk about unfunded priorities, General McConville and Madam Secretary.

The Army budget request includes investments to support prototyping for the long-range hypersonic missile flight test, the mid-range capability missile, initial fielding of the precision strike missile, both the mid-range capability (MRC) and PrSM, our own INDOPACOM commanders' unfunded priorities list.

So I want to ask you to talk about that. And also the commander's unfunded priorities list includes $377 million for Army campaigning. Tell us, and we will, first, General McConville, do you agree that expanding the Pacific Pathways program gives us more deterrence in the Indo-Pacific and would you discuss, please, specifically those unfunded priorities?

General MCCONVILLE. Yes. I think it is very important that we continue campaigning in the Indo-Pacific. That is how we build strong allies and partners and relationships, and those are very important in any future conflict.

Senator WICKER. Okay, do you have any idea why they were not funded? Did this come down from Office of Management and Budget (OMB)?

Secretary Wormuth, would you comment on that?

Ms. WORMUTH. Senator Wicker, we have funding in our base budget for Operation Pacific Pathways. I do not have the number

off the top of my head but it is, I think, over $100 million for Pacific Pathways.

I think the unfunded list that you are referring to is the INDOPACOM commanders' unfunded priority list.

Senator WICKER. Indeed, yes, that is my question.

Ms. WORMUTH. I have no doubt that Admiral Aquilino would like to see more invested in both exercises and weapon systems. He is very focused on his theater.

We in the Army have to balance across all of our requirements across the European theater or across the INDOPACOM theater. We have got to be able to invest sufficiently in our modernization systems and take care of our people.

We have invested in Pacific Pathways. We are investing in modernization of the precision strike missile, the mid-range capability.

I just suspect that Admiral Aquilino would like to see us do more but again——

Senator WICKER. Well, would you like to see us do more? If we found the extra money that would be advantageous for national security in the Indo-Pacific, would it not?

Ms. WORMUTH. Certainly, if Congress were to give the Army more money I think we would look at investments in the INDOPACOM region, yes.

Senator WICKER. Okay. Now, let us talk about recruiting, and I think, General McConville, you mentioned inspiring young people and, of course, you have inspired the next generation of McConvilles to do this.

Secretary Wormuth, you are married, I believe, to a retired naval officer.

It occurs to me that with base closures and the shrinking military presence around the country that there are fewer and fewer young Americans who actually grow up knowing members of the military and seeing them go off to work and having them as members of their families.

Yes or no, General McConville, this is part of the problem, is it not?

General MCCONVILLE. I believe so. Eighty-three percent of the young men and women that come into the military come from a military family and that population with 1 percent serving is getting much smaller.

Senator WICKER. Right. I have been a strong advocate for expanding high school JROTC since I became aware of a RAND Corporation study which basically sang the praises of JROTC as a subset of high achievers within a school.

You could even have a poorly performing school but the subset of students there who are participating in JROTC stay in school longer, they graduate with higher grades, and they achieve better in life.

I have never found a superintendent or principal who, when asked about JROTC, did not say they would like to have JROTC in their school or they are delighted that they have them.

General McConville, if we went beyond what the DOD is asking in expanded JROTC in the high schools how helpful would that be?

General MCCONVILLE. What I know, Senator, is that 44 percent of the young men and women that come into the military come

from a high school that has JROTC and 10 percent of the high schools have JROTC, not necessarily in that, and I think what is really important is the structure and the exposure that they get.

But more importantly is the instructors. We have got to make sure whoever the instructors are are of the quality they are going to help inspire young men and women to serve.

Senator WICKER. Indeed, these are probably retired senior officers or retired senior enlisted persons who are very inspiring.

General MCCONVILLE. Many are, but it only takes one to not live up to that standard that can hurt the program. So I think it is extremely important we have strong vetting in place and make sure we have the right people leading these programs.

Senator WICKER. And I agree with you there. Thank you very much.

Chairman REED. Thank you very much, Senator Wicker.

Senator Gillibrand, please?

Senator GILLIBRAND. Thank you, Mr. Chairman.

Secretary Wormuth, in October you ordered inspections into toxic mold on military installations and found that over 2,000 Army facilities have mold problems.

I understand that the proposed budget for new barrack buildings would only pay for five new barracks buildings. How much does the Army need to remediate these mold issues or rebuild impacted facilities?

Ms. WORMUTH. Thank you, Senator.

Yes, we found mold. We inspected 68,000 buildings and found mold in about 2,100, and we are investing $3.5 million to remediate the mold in those 2,100 building and we are going to continue to keep a very close eye on mold in the barracks.

We are spending about a billion dollars a year across all three components—Active, Guard and Reserve—on barracks, both renovations and building new barracks, and we are going to continue to do that through 2030.

The challenge we have, Senator, is just we have such an enormous inventory of barracks that we are not able to rebuild all of them in 1 to 2 years as we might like and still be able to, again, invest in new weapon systems and invest in other initiatives that we need to do. So we are trying to strike a balance.

Senator GILLIBRAND. Are you doing any medical monitoring of the servicemembers who have been exposed to toxic mold?

Ms. WORMUTH. I think we probably need to do more there to make sure that we are tracking that. I know that there has been a DOD IG [Inspector General] report recently that touches on that.

Senator GILLIBRAND. I would like you to submit an analysis about what you intend to do to make sure the servicemembers who have been exposed are healthy.

Ms. WORMUTH. Okay. Thank you.

[The information referred to follows:]

Ms. WORMUTH. Mold in housing, barracks, and other Army facilities can adversely affect the morale and health of soldiers and families, resulting in reduced readiness. To prevent this, U.S. Army Installation Management Command (IMCOM) is ensuring all mold-related work orders in Army facilities are addressed by a certified inspector within 24 hours. IMCOM also ensuring privatized housing companies similarly respond to work orders pertaining to mold.

The Army developed recommendations for remediating indoor mold based on the industry standard for mold remediation.

Trained IMCOM housing inspectors evaluate housing and barracks for health risks. These inspectors focus on areas where mold is suspected or indicated. All relevant data is documented in the DOD enterprise Military Housing (eMH) data base, including inspections and environmental health assessment, data and recommendations; maintenance and repair actions; tenant concerns; work order status; and information regarding potential environmental health exposures, the tenant potentially affected, and the status of the identified risk.

Soldiers and family members are advised to consult their health care provider if they have health concerns about mold. Healthcare providers are prepared to fully evaluate patients presenting with symptoms of asthma, hypersensitivity pneumonitis, rhinitis, or rhinosinusitis, to include ordering any appropriate diagnostic tests. If an evaluation reveals that patient symptoms could be associated with damp housing conditions, healthcare providers will conduct a two-part interview to assist in determining whether a building assessment is justified (e.g., focus on moisture or fungal growth issues.)

This integrated clinical and environmental approach helps determine if patient symptoms could be associated with damp housing conditions. Such a determination can trigger a home assessment and potential International Classification of Diseases (ICD–10) coding in the patient's electronic health record as contact and/or suspected exposure to mold.

Senator GILLIBRAND. Thank you.

General McConville, I was deeply concerned to hear of Private Ana Basaldua Ruiz's death on Fort Hood earlier this month. Yet another young woman who was allegedly sexually harassed is now deceased.

Can you discuss how the Army is progressing in building a prevention workforce and implementing the Independent Review Commission's recommendations to decrease the incidence of sexual harassment and how are you protecting your young servicemembers from these crimes?

General MCCONVILLE. Yes, Senator. Just like I said, parents send their sons and daughters to us. I have sent our sons and daughters to the Army and we have a sacred obligation to take care of them. Commanders will be held responsible.

But it really comes down to from the bottom up, building cohesive teams where everyone takes care of each other, everyone treats everyone with dignity and respect. When that does not happen, we are going to investigate. We are going to hold those accountable that did it.

But the Army's trying to really get after that. There is a lot of prevention for us getting—how do you get ahead of these type things, how do you make sure it comes back to readiness. Everyone has to be a valued member of the team. Everyone has to be treated with dignity and respect, and that is what our commanders are doing.

Senator GILLIBRAND. So with regard to Fort Hood, the previous report said that the climate was so toxic that it was permissive for sexual assault and sexual harassment. What are you doing to address the climate at Fort Hood?

General MCCONVILLE. Well, we have. We changed out—from that report we actually took out 14 leaders, which has never been done in, really—at least I know in the history of the Army.

But the leadership that is in place at Fort Hood I have tremendous confidence in. They are after this. They are on top of it. They are doing everything they can to get the investigation and get the information and they are working very closely with the family.

Senator GILLIBRAND. Thank you.

Secretary Wormuth, will you talk about the development of Multi-Domain Operations and how you have shifted personnel to ensure that Multi-Domain Task Forces are fully resourced? How has staffing for these roles been impacted by the Army failing to hit its recruitment goals by thousands of soldiers?

Ms. WORMUTH. Thank you, Senator.

As you know, we now have three Multi-Domain Task Forces and we will eventually build a fourth and fifth Multi-Domain Task Force. They vary a little bit in size. They are tailor made to the theaters that they support and work in, and right now they are fully manned.

I would expect that we will continue to make sure that they are fully manned even as we work through how we are going to deal with the Army getting slightly smaller and dealing with recruiting challenges.

But they are very, very important because they bring capabilities that are kinetic through the long-range fires battalions but also very important nonkinetic work. They work on intelligence and developing targeting. They have cyber capabilities, electronic warfare capabilities, and they are going to be very, very important in both Europe and Indo-Pacific.

Senator GILLIBRAND. Thank you. Can you discuss in this setting how Project Linchpin is integrating artificial intelligence (AI) into Army systems? I understand that the project aims to improve navigation systems, anticipate maintenance needs, help with targeting, and aid intelligence analysis.

Will you address how this project will or will not keep a human in the loop on intelligence and targeting analyses?

Ms. WORMUTH. That is an important project and we are very much trying to integrate and bring more artificial intelligence capabilities into our Army in various ways. That is very much going to be a wave of the future, I think, clearly.

Army Futures Command is going to be looking as we think—start thinking about the Army of 2040 how can we bring even more AI capabilities.

So we are using AI right now with some of the work that we are doing with the experimentation we are doing with the 18th Airborne Corps. We also have an AI Integration Center at Carnegie Mellon University that we are working with very closely and many of the fellows coming out of that program are going into different parts of the Army to help us do more with AI capabilities.

Chairman REED. Thank you, Senator Gillibrand.

Senator Fischer, please?

Senator FISCHER. Thank you, Mr. Chairman.

Senator Wicker briefly touched on the—really, the need and the value that we receive as Members of Congress from the unfunded priority list that you provide and I would say that the majority Members of Congress view that as a useful tool so that the Committee can use that and you can convey what is needed to meet the challenges that you face.

So I do thank you, General, for the visibility that you have provided on the importance of your needs so that it will allow us to

make more responsible, I think, resourcing decisions on those needs.

If I could, I would like to ask both of you—the Army has spent the last 20 years primarily conducting counterterrorism and counterinsurgency operations in the Middle East. Can you provide an update on how you plan to rebalance your forces, restructure training and exercises, or develop unique capabilities in order to meet the increased demand that we are going to see in the INDOPACOM area? I would especially like to know what you learned from the Project Convergence exercises.

Ms. WORMUTH. Certainly, Senator Fischer.

We are doing a lot to shift from counter-insurgency (COIN) and counter terrorism (CT) to large-scale combat operations through exercises like Defender Europe and Pacific Pathways in the Pacific.

We have come out with a new field manual, 3-O, which is our vision and doctrine for multi-domain operations, and I would say when we look at the Indo-Pacific we are really going to be focused on establishing and setting up and securing staging bases for air and maritime forces, contested logistics.

The Army will play a huge role in terms of making sure that the joint force has the supplies that it needs, and many of the new air and missile defense systems that we are developing are directly designed to deal with the anti-access area denial threats that China poses, for example.

So our entire modernization program is focused on developing the kinds of capabilities that we need for large-scale combat.

Senator FISCHER. General, with Project Convergence what did you learn?

General MCCONVILLE. Yes, I think Project Convergence is really the future. It is the ability to take deep sensing, different types of sensors, and quickly move information to an integrated battle command system, take advantage of artificial intelligence, and then move that data to an effective lethal means.

A good example of that is countering unmanned aerial systems (UAS). So we are going to have a whole bunch coming at us and you do not necessarily want to be shooting Patriot missiles at $100,000 UASs and so if you think about the future battlefield there will be multiple threats.

We will have multiple sensors to pick up those threats. We will bring them quickly into an integrated battle command system, take advantage of the technology, and then get them to the right weapon systems that can deal with that problem.

We are seeing this nascent right now in Ukraine. They are doing a very good job taking advantage of the sensor they have with the fires they have and that is a lot to do with how effective they have been.

Senator FISCHER. When you look at the change in the battlefield, and we talked about this a little bit earlier this week, can you provide the Committee an update on the development of the Army's long-range hypersonic weapon?

General MCCONVILLE. Yes. Right now we have a battery that is already fielded. The systems are ready to go. We are doing testing. We have a couple more tests to do on the weapon systems and we

had to test that we are working through like every test to get it to the final configuration.

But at least the schedule we have right now we anticipate having a hypersonics capability by the end of this year, which has been pretty remarkable.

Senator FISCHER. Yes. Thank you.

Madam Secretary, we spoke earlier this week about the Future Soldier prep course. Can you highlight to the Committee some of the successes of the program?

Ms. WORMUTH. Certainly. This program has been very successful. We have it at Fort Jackson, South Carolina, and also Fort Benning, Georgia. We have had about 8,000 young Americans go through the program. There is two components. It is sort of like a mini boot camp.

There is an academic component, which is designed at helping young people who have not quite scored high enough on the Armed Services Vocational Aptitude Battery (ASVAB) raise their scores, and then we have a physical fitness component because in some cases we have got young kids who want to serve but they are not quite within our body fat composition requirements.

It has been very successful, both pathways, if you will. About 97 percent of the folks who go into it have graduated and have gone on to basic training, and many of them are performing very well at basic training as well.

Senator FISCHER. So that is a way to get closer to the goals that you have for the recruitment——

Ms. WORMUTH. Yes, absolutely, and to do so in a way that does not lower our standards, which both the chief and I feel is very important.

Senator FISCHER. Exactly. Thank you very much.

Chairman REED. Thank you, Senator Fischer.

Let me remind my colleagues that when we conclude this open session we will recess and start a closed session in SVC–217.

Senator Hirono, please?

Senator HIRONO. Thank you, Mr. Chairman.

Thank you both for being here and, General McConville, thank you very much for your service and best wishes on your retirement.

Secretary Wormuth, we have talked a number of times about the State of the military's infrastructure in Hawaii, and I know you have visited Hawaii several times to see the failures for yourself.

I appreciate your attention in this area but as you know there are still rolling blackouts at Schofield Barracks, issues with the water systems at Tripler, and UXO removal concerns on the Big Island.

A majority of the Army's facilities in Hawaii are failed or failing with an estimated cost of repair of almost $5 billion. Fixing this will not happen in 1 year but we must start taking these projects off the unfunded lists and make real progress.

Madam Secretary, how are we going to chip away to the $5 billion in fixing that we have to do? Do we not need to get more of these projects off the unfunded list?

Ms. WORMUTH. Thank you, Senator Hirono.

We do have considerable infrastructure challenges in Hawaii, as you note, and I would say both above ground in terms of buildings

and barracks—I saw some barracks that were not in good shape at Schofield Barracks—as well as our underground infrastructure in Hawaii.

The chief and I right now as we look to the next budget—we are building the next 5-year budget—are looking at how we can invest more in infrastructure. We actually sent out a team from Army Materiel Command and from our installations' energy and environment team to assess the infrastructure.

They came back with, frankly, a multibillion-dollar bill and so what we are trying to do is look at how we can find more resources to put toward that problem and we also want to do it in a way, frankly, that is mindful of the limited construction capacity that is on Hawaii.

It is going to be complex to sort of figure out how many projects we can do a year and how do we phase that in in such a way that we do not overtax the capacity on islands.

Senator HIRONO. It makes a huge difference to the community when the military writ large—because the community is not necessarily making distinctions that Red Hill, oh, that is a Navy issue and Pohakuloa is an Army issue. It is all combined, and every time we can make real progress in dealing with the infrastructure needs I think it would be—it really helps the community to understand that the military is there as part of our community and they are making progress or they are doing good things. We need to think of it in that way and I know you recognize that.

Senator Wicker has asked these questions, General McConville. The National Defense Strategy makes clear that the priority theater is the Indo-Pacific. So efforts like the Army's Operation Pathways, the newly constituted multi-domain task force in Hawaii, and the INDOPACOM aligned fifth security force assistant brigade are crucial to the Army's success in this area.

Yet, despite Admiral Aquilino identifying the need for our $473 million investment in Pacific Pathways what is being requested is only $123 million and—because Pacific Pathways, though, that mainly pays for exercises with allies. Is that not right, General?

General MCCONVILLE. That is correct.

Senator HIRONO. So I assume that when there is such a big gap between what Admiral Aquilino wants and what he is getting that it just means that we are doing far fewer exercises in the Indo-Pacific AOR [area of responsibilities], and I do not know what the numbers are. But at some—is that a good way to think about it, that we are funding far fewer exercises than what Admiral Aquilino thinks is necessary?

General MCCONVILLE. Well, as the Secretary said, we are trying to balance the exercises with the barracks with the training and in the modernization, and we have requested additional funding if it is available to support that campaigning and I stand by the notion the more campaigning, the more resources we have, I think the stronger our allies and partners will be and the stronger our presence will be.

Senator HIRONO. I tend to agree with that and, yet, the military has over an $800 billion budget and one would think that some of these priorities can be better met.

You were asked about the sexual harassment of—both of you—and it continues to be a scourge in spite of the efforts of this Committee, particularly with Senator Gillibrand's leadership.

So, General McConville, you noted that it starts at the top and it goes all the way down. I think both of you agree. I am glad that you took swift action with regard to the culture at Fort Hood.

But with the most recent tragic suicide, I realize the investigation is still going on but I think that how we deal with sexual assault and harassment really impacts our ability to recruit women to the military. Would you agree with that, Madam Secretary and General?

General MCCONVILLE. I think it affects readiness. I think——

Senator HIRONO. Yes.

General MCCONVILLE.—one of the secret sauces of good units is cohesive teams and if you have sexual harassment, you have sexual assault, you have any type of racism, any of those type things hurt the cohesion of a unit and we do not want that in our Army.

Senator HIRONO. We can do a lot more, I know that. So thank you very much.

Chairman REED. Thank you, Senator Hirono.

Senator Cotton, please?

Senator COTTON. On behalf of all our Arkansans I also want to express my condolences for the soldiers whose lives were lost in the crash of two Blackhawk helicopters near Fort Campbell overnight.

It is terrible tragedy for all their families and the 101st community, and if you have served time there as I know General McConville has served more than a day or two at Fort Campbell, it is especially hard hitting.

General McConville, I want to add my thanks and congratulations to you for a highly distinguished and decorated career of service to the Army. I know you are not retiring yet and you will run through the tape later this year.

But we are very grateful for what you have done for our country and we are glad that in the middle of a recruiting crisis we are getting a four for one McConville trade. We may be losing you but we have got three children and one in-law. So thank you and your family for your service.

Secretary Wormuth, I want to talk about the Army Combat Fitness Test and this ongoing years-long saga of that. Last year the Army unveiled gender-based standards after many years of promising gender-neutral standards.

As a result, this Committee directed the Army within 180 days of the enactment of last year's NDAA to promulgate new gender-neutral standards for combat arms, Military Occupation Specialties (MOSs). What is the status of those new standards?

Ms. WORMUTH. Thank you, Senator. We are looking forward to coming to brief you in June about where we are on that NDAA requirement, and I know you and the chief had a discussion about this.

The language in the bill, as you know, talks about gender-neutral standards for combat, military occupational specialties, and we will be able to lay out for you how we have approached that to date.

We also, as you know, are coming up on the deadline for the Active Duty component to finish taking the test for record, the Army

Combat Fitness Test. The Guard and Reserve folks have until October to take that test for record.

But we can also give you an update on the data that we are seeing from that and what we can take away from that and what we can learn in terms of how we might adapt the ACFT, going forward.

Senator COTTON. So the law calling the Army to establish the standards by June, not to brief Congress by June, are you going to—are you prepared to meet that requirement to establish the standards?

Ms. WORMUTH. We actually have standards in a Department of the Army Pamphlet (DA PAM) that lay out requirements for all of the combat MOSs that are gender neutral and we can brief you on those.

Senator COTTON. Can you tell us what those combat MOSs are today or what branches, at least?

Ms. WORMUTH. I believe that we have them for all of the MOSs, Senator.

Senator COTTON. Okay. But it is your understanding—the expectation of this Committee is that we have a single standard for the combat arms branches and then for all the other noncombat arms branches there will be a male and a female standard?

Ms. WORMUTH. As I have read the law that you all put in last year, these are standards. They are physical gender-neutral standards for combat, military occupational specialties, yes.

Senator COTTON. Yes, because I mean—and I was not the only one. Senators Ernst, Gillibrand, and Duckworth expressed concerns about this as well as did most of the Committee.

I mean, when you are talking about things like the infantry there is irreducible physical demands. You have to be able to carry a 75- or 100-pound pack or carry a 250-pound wounded comrade, whether you are a man or a woman. Or if you are an artillery or armor you have to be able to handle shells that can weigh up to a hundred pounds.

The standard, we all think, should be somewhat different if you are, say, working on a computer. That work is very vital but it is not the same kind of physical demands that the combat arms are, and in the middle of a recruiting crisis I do not think we should be taking steps to dissuade anyone, young men or young women, who may not be up to the physical rigors of armor and artillery but are able to perform all those other roles. That is your understanding of what this Congress intended, right?

Ms. WORMUTH. Senator, the DA PAM spells out exactly those kinds of things. I think the issue has been is—there is our combat. There is the fitness test and then there are the standards for the MOSs and there is a distinction there.

Senator COTTON. Correct. I mean, this has been a long saga, as I said, and in retrospect, I mean, we had an Army that, let us see, toppled a Marxist government in Grenada, toppled a narco government in Panama, kicked Saddam Hussein out of Kuwait, toppled the Taliban, toppled Saddam Hussein, doing pushups, sit-ups, and a 2-mile run.

So I think those guys were pretty physically fit that did all those things. But we are where we are. We have moved to the combat fitness test. I do not think the issue are the events on it.

The issue is making sure that we have high standards that are suited for the demands of the battlefield and we just want to make sure that that is what we are going to get from the Army by the 180-day deadline.

Ms. WORMUTH. Yes.

Senator COTTON. Thank you.

Chairman REED. Thank you, Senator Cotton.

Senator Kaine, please?

Senator KAINE. Thank you, Mr. Chairman, and to our witnesses, thank you for your service to the country. I add my sentiment to those who have expressed just sorrow over the incident with the servicemen and women at Fort Campbell. I know that it is tough for the whole Army family and the Committee shares in that.

I just want to share with my Committee colleagues, I had the opportunity to do something 6 days ago. I was at the first of the nine base renamings. Two years ago in the NDAA this Committee in a bipartisan way decided that bases that had been named for Confederates should be renamed for American heroes who whom all could admire, and it was a—it is a pretty tough task.

The naming commission considered about 7,000 or 8,000 names and then reduced that to 2,000 and then to about 500, and eventually reduced it down to 87 names and from those names had to find nine. Talk about a commission I am glad I was not on.

But the first renaming was Fort Pickett, which had been built right before World War I and named in honor of General Pickett, the Confederate general. It was renamed Fort Barfoot.

Van Barfoot was a Choctaw from Mississippi who enlisted, came to train at Fort Pickett, and then was deployed overseas in World War II and fought courageously in Italy and won a medal of honor under the most unusual circumstances, demonstrated great heroism in killing a lot of Germans and capturing scores of Germans and then saving the lives of many Americans.

He then came back and continued to serve in the Army in Korea, served in the Army in Vietnam. When he retired from Active Duty he was connected deeply to the Virginia National Guard, which is headquartered now at Fort Barfoot. Was very involved in the Virginia War Memorial in Richmond that honors those who lost their lives in recent wars.

He last made news when he was about 90 years old because he hung an American flag that was too big, according to his homeowners association, and they had the foolishness to try to test a congressional Medal of Honor winner.

The ceremony was just amazing. It was led by tribal representatives from Virginia, Virginia's recently recognized tribes, and everyone in this community—Dinwiddie and Blackstone and Crewe and Lunenburg, Brunswick Counties—was so proud to be there and the naming commission did a remarkable job.

Just to see the family—Colonel Barfoot's daughter spoke, other family members were there, and to talk to the naming commission about the care that they used in approaching this and knowing

something about the other names that are forthcoming—the other base names—will be done in the months to come.

I just wanted to say job well done to the Army and to the naming commission and doing it and just to report back to my colleagues.

Everyone here around this dais supported that at the time in Committee, and I think if you go to one of these you will be really proud, as I was, to have played a little part in it and appreciate the Army approaching it the right way.

General McConville, I have a couple of questions for you. In watching the Russian invasion of Ukraine we realize how different a conflict is where you have contested logistics and contested airspace versus the war on terrorism where we often had dominance in airspace and there was not such a contest.

Can you share your thoughts—you have talked a little bit about this already this morning—on the contested logistics and how the Army will conduct logistics operations in contested environments and the plans that you are putting in place to do that?

General MCCONVILLE. Yes, Senator. I think, again, one of our biggest changes in our training and how we operate is we are able to operate fairly without any type of enemy contact from here all the way to Iraq, Afghanistan, and we know that is not going to be the case. It is not going to be the case in the Pacific if we have to fight in the Pacific. It is not going to be the case here.

So what we are doing is building those capabilities and some of it is just by prepositioned stocks. We cannot assume we are going to be able to just sail across the seas safely. So we want to position equipment and ammunition in the theater. We need to disperse it. We need to protect it.

There is that old saying about amateurs study tactics and professionals study logistics and what we see is those tanks and artillery pieces and aircraft become expensive paperweights if they do not have fuel, if they do not have parts, and they do not have ammunition.

All that is part of what this contested logistics is about, and you can think about here, I mean, with cyber capability right now. So we are going to be attacked by cyber. We are going to—they are going to use space.

We use space a whole bunch right now to move things, and even how we move by air or sea we are going to have to protect our systems and we are going to have to be aware of that and we are going to have to basically fight our way across.

That is where our allies and partners become so important, the fact we have developed these relations, we have access and presence, we can quickly move into the—whether it is ports or airfields, and then we have the equipment and we have forces in the right place that can facilitate all of this.

Senator KAINE. Just one fact for my colleagues as I conclude, and it will inspire a question for the record.

In World War II we used 1.67 gallons of fuel per soldier. In Iraq and Afghanistan that had gone up to 27.3 gallons of fuel per each member of our troops. The contested logistics with respect to deployment of fuel that we will need will be a real challenge and I will ask a question about that for the record.

I yield back, Mr. Chair.

Chairman REED. Thank you very much, Senator Kaine.

Senator Rounds, please?

Senator ROUNDS. Thank you, Mr. Chairman, and thank you to both of you for coming before our Committee today.

General McConville, thank you for your service and thank you to your family for their service to our country as well.

You make a very good point when we talk about the number of places that you have been but also the fact that we lost young soldiers who were training and that it is not just those that are facing an adversary but those that are training throughout the year throughout our country that also take risk on a daily basis, and our thoughts and prayers are with you, the entire team, and the family of these soldiers.

General McConville, as you know, there is an effort by some in Congress to require sharing of all or some of the 3.1 to 3.4 or .5 band of the electromagnetic spectrum, also known as the S-Band. Right now it is held by DOD and some of the private sector needs it for 5G development, which is also important.

But can you confirm that the Army has systems critical to our national security that reside on this portion of the spectrum?

General MCCONVILLE. Yes, I can, Senator, and from where I sit it is—I know there is a study that is being done. I think it is really important we do our independent study, take a look at what that means, and it happens to some of our bases with encroachment when people want to move close and we understand that that can happen.

But if we cannot do the training we need to do, same thing with these systems. I understand perspectives where you want to develop the communications capability.

But the only thing I would advise if asked is just take a hard look at—independent people looking at that and we know the risks to national security when we make that decision.

Senator ROUNDS. Thank you. I think part of the point that we try to make is is we are practicing at multiple bases across the entire United States. So we have that risk at multiple locations across the entire United States during our training sessions.

Let me just take a step forward here, Secretary Wormuth. Thank you for what you do and your looking ahead in terms of what the Army will be facing.

Part of what it is, and it was just mentioned a minute ago, and that is the—within the cyber domain and the challenge that we literally will not go to war without having a cyber presence.

How well do you believe that the fiscal year 2024 budget supports the growing cyber threat, and where is the Army taking risk in the cyber domain and where would additional funding be most helpful in buying down that cyber risk?

Ms. WORMUTH. Thank you, Senator. We are making a lot of investments related to cyber in this budget because it is such an important area, and ensuring that we have good cybersecurity is really critical, particularly for our modernization programs.

We have got to make sure that they are secure and not able to be stolen by our adversaries. We have over $400 million in this budget for implementation of our zero threat approach to cyberse-

curity. We are spending about a half billion dollars to continue moving to the cloud.

One of my objectives is for us to become a more data-centric Army and, certainly, having our data in the cloud is critical. We have got about $600 million in the budget for modernizing our cryptography and retiring some of our technical debt with our tactical radios.

So I do not think that we are taking a lot of risk in this budget in the cyber area because it is so important. My own view is if there is a place where we are taking risk, and I think this is a place where as an entire joint force we may be taking risk, it is in—I worry a lot about threats to the Homeland, particularly through the cyber domain and so much of the critical infrastructure in our country is outside in the private sector, that figuring out how we work more closely with State and local governments, with private companies, to make sure that we are secured outside the fence line that is where I think we have risk and that is, in my view, more about how do we work together better organizationally necessarily than about the amount of money you spend.

Senator ROUNDS. I agree with you. I also think that you have taken a major step forward, once again, in terms of coordinating with other sectors.

I know that you have entered in or are entering into an agreement with Dakota State University in South Dakota on some advanced cyber activity as well and we appreciate the opportunity to be a part of the solution.

General McConville, I have two thoughts. First of all, I am just going to ask this rather quickly. I understand that the Army is the executive agent for the theater, integrated air and missile defense, including the protection of fixed sites like airfields and supply depots.

The missile threat to fixed and semi-fixed sites seems one of the most challenging threats to the joint forces. What additional investments, if any, does the Army need to make in air and missile defenses?

General MCCONVILLE. Senator, I agree with you. It is a significant threat and we are making significant investments. We are going to build more Patriots. We are building indirect fire protection capability, nine of those units. We are building counter UAS batteries.

I think on the future battlefield we are going to protect it. But what we are also doing is taking advantage of an integrated battle command system and, again, this sensor, this convergence of having multiple—getting away from having one radar for one air defense system.

So you take advantage of all the sensors that are out there and you use an integrated battle command system and you get better sensors so we can see things coming in. Taking advantage of the technology when it comes to artificial intelligence and so we can deal with those systems early on.

But I think when the Secretary and I talk about it that is why air and missile defense is so important, especially in the Pacific, and we want to be able to do that.

Senator ROUNDS. Thank you.

Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Rounds.

Senator Peters, please?

Senator PETERS. Thank you, Mr. Chairman.

First, Madam Secretary and General McConville, I want to add my condolences to my colleagues' here for the horrible accident in Kentucky. I know that my heart goes out to their family, friends, and the entire Army community right now, who I know is all grieving.

Secretary Wormuth, in 2018, the Army requirements oversight councils were held for both the Abrams and the Stryker programs.

A modernization goal was set for the Abrams program at a rate of one full brigade per annum funding cycle, and similarly for the Stryker a modernization goal was set to upgrade one half a brigade each year.

Congress has continually and consistently supported these programs and maintained these desired modernization rates with significant congressional adds along the way to support what Army leadership describes as, quote, "enduring programs that the Army will depend on for decades."

So my question for you, ma'am, does the Army continue to support the Abrams and Stryker programs and at a modernization rate that is workable to support the industrial base that makes this equipment?

Ms. WORMUTH. Senator, we do very much support the Abrams and Stryker programs. Those vehicles—I think we have the best tanks in the world. I think if you asked the Poles and the Australians they would say the same, the Ukrainians as well.

The challenge that we have is that we are trying to both continue buying important enduring platforms like Abrams, like Stryker, while at the same time investing in developing new next-generation combat vehicles like Armored Multi-Purpose Vehicle (AMPV), like the optionally manned fighting vehicle, and with the budget that we have we are only able to buy the volumes that you see in the budget that we have presented.

I do think in terms of Abrams, for example, as I said, there are significant foreign military sales that have been made and I think that will be very helpful with sustaining the industrial base for those programs.

Senator PETERS. Very good.

General McConville, for decades the Latvian—we have had Latvian troops training with the Michigan National Guard up at Camp Grayling to learn skills necessary to counter potential Russian invasion in Latvia and, certainly, never has this training been more relevant than it is right now.

But in addition to Latvians, we routinely have other European allies as well as INDOPACOM partners trained at Camp Grayling to take advantage of the size and the capabilities that that installation offers.

Our National Guard installations, and I hope you agree, are a hidden gem. They offer capacity and unique training environments for not only U.S. forces but also our allies as well.

So my question for you, General, is how does the Army budget invest in the National Guard and in particular into its military in-

stallations, its ranges, its training areas, to help enable the Guard to conduct the multi-domain operations training that is so essential today?

General MCCONVILLE. Senator, first of all, let me highlight what a great job the National Guard is doing with Michigan and these partners, and if you take a look at Ukraine, you take a look at Latvia, these State partnerships have been going on for quite a while and, quite frankly, why these armies have the capabilities, that they have the capacity and the competence.

What we do in the National Guard is we talk to them very closely. We want to resource them within our means we can and we come to their priorities and we lay them out and you will see some of those even on our unfunded priority list that did not quite make it in the budget.

Really, like the Secretary said, to us it is all about balance. We have a fixed budget, as both sides have said. Some would argue that you cannot transform an Army without having 3 to 5 percent real growth.

We are trying to do that and we are trying to do the best we can with what we have and deliver the best Army we can do with the resources we get.

Senator PETERS. Thanks.

General, the National Defense Strategy places great emphasis on the ability of our forces to operate in contested environments and the need to overcome enemy disruption, and my question for you is how is the Army empowering commanders and local installations to replicate live electromagnetic effects during home station training scenarios focused on operating in these domains?

General MCCONVILLE. Yes, that is something we are trying to get to. I would say we are doing a better job at our National Training Centers as such because that is expensive and also the places you can actually do that we have to work our way through it when you start using those type systems.

But as you say, Senator, that is something that is really the big shift that we are seeing. We are going to be jammed in the battlefield. They know how important data is for us.

If you go to the National Training Center right now you have a very different experience than you did a couple years ago. You cannot expect to have—if you are emitting as a command post or you are trying to do things we are going to take all those things that you depend on away from you so when you are in actual combat it should be a lot easier.

Senator PETERS. Right. Right. Thank you, General.

General MCCONVILLE. Thank you.

Chairman REED. Thank you, Senator Peters.

Senator Ernst, please?

Senator ERNST. Thank you, Mr. Chair, and my condolences as well to the families and the fellow soldiers all within the 101st Screaming Eagles family. We are sincerely, sincerely upset about the loss of those soldiers and it hits home for so many of us.

But thank you for being here today, Secretary Wormuth and General McConville.

On Saturday I will have the great opportunity to attend a retirement of a dear friend of mine from the Iowa Army National Guard,

and it seems that many of us that have gray hair are seeing many of our friends and family members retire through the years and, General McConville, I wish the best to you and to your family as well.

We know as we are stepping out of the uniform and out of the boots and leaving the ranks behind that we need young soldiers to step up into those ranks and so I do want to address some of the recruiting challenges that we are seeing today.

On Tuesday, Chairman Milley had told us that the threats of America are at its highest since World War II and our Army is smaller now than it is required to be. By September Army end strength could fall to 445,000 soldiers and that is a 7 percent decline just over the past 2 years.

So today I want to focus on our high schools and how some of those high schools are truly failing our military and their students.

The law requires high schools that receive Federal funding allow access to our recruiters and as the Department of Education admits on its very own website only about 95 percent of the schools actually follow the law by allowing military recruiters access to their students.

Mr. Chair, if I could enter into the record—this is from the Department of Education's website.

Chairman REED. Without objection.

[The information referred to follows:]

What are the requirements of § 9528 of the ESEA, regarding access to student contact information by military recruiters or institutions of higher education?

Each LEA that receives funds under the ESEA must comply with a request by a military recruiter or an institution of higher education for secondary students' names, addresses, and telephone numbers, unless a parent has "opted out" of providing such information.

Section 9528 also requires LEAs that receive funds under the ESEA to provide military recruiters the same access to secondary school students as they generally provide to postsecondary institutions or prospective employers. For example, if the school has a policy of allowing postsecondary institutions or prospective employers to come on school property to provide information to students about educational or professional opportunities, it must afford the same access to military recruiters.

Audience:
K-12 School Officials

Topics:
Military Recruiter

FEATURED RESOURCES

A Parent Guide to the Family Educational Rights and Privacy Act (FERPA) (/resources/parent-guide-family-educational-rights-and-privacy-act-ferpa)

The Family Educational Rights and Privacy Act or FERPA provides certain rights for parents regarding their children's education records. This guide provides general information on a parent's rights under FERPA.

An Eligible Student Guide to the Family Educational Rights and Privacy Act (FERPA) (/resources/eligible-student-guide-family-educational-rights-and-privacy-act-ferpa)

The Family Educational Rights and Privacy Act or FERPA provides certain rights for parents regarding their children's education records. When a student reaches 18 years of age or attends an institution of postsecondary education at any age, the student becomes an "eligible student," and all rights under FERPA transfer from the parent to the student. This guide provides general information on an eligible student's rights under FERPA.

Protection of Pupil Rights Amendment (PPRA) General Guidance (/resources/protection-pupil-rights-amendment-ppra-general-guidance)

This guidance document reviews parents' rights under the PPRA and education officials' obligations in implementing the PPRA. The PPRA applies to the programs and activities of a State educational agency (SEA),

local educational agency (LEA), or other recipient of funds under any program funded by the U.S. Department of Education. (20 U.S.C. § 1232h, 34 CFR Part 98)

RESOURCES

Family Educational Rights and Privacy Act (FERPA) (/node/548/)
Security Best Practices (/node/40/)
Glossary (/glossary)
Letters of Importance (/node/478/)
Historic Findings Letters (/node/542/)

TRAINING

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Guidance Videos (/content/videos)
Recorded Webinars (/content/recorded-webinars)

BROWSE BY AUDIENCE

School Officials K-12 (/audience/school-officials-k-12)

Parents & Students (/audience/parents-and-students)

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OTHER

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Privacy Policy (https://www2.ed.gov/notices/privacy/index.html?src=ft)

(/)

Senator ERNST. Thank you.

It does raise a question. So 95 percent do allow some level of access. So what about the 5 percent of schools that deny access to military recruiters? It really is about following the law of the United States.

But it is not just about the law. It is about the opportunity that is extended to those students and it is about patriotism.

So, General McConville, I am going to ask you to put on a recruiter's badge for a moment—through your years of experience you know this very well—but how would you explain the benefits of service to the many students in the 1,100 schools who deny access? Who have not been able to meet a recruiter?

General MCCONVILLE. Yes. What I would say to those superintendents or those teachers or those counselors that do not want military recruiters you may be depriving your students of doing maybe the most important thing in their life and having an impact.

We use the—kind of the slogan or the motto of "be all you can be" but there are just so many stories of people that have rose to

the highest levels, have gotten an education, whether they did it in the military or gone further.

But I just think that everyone should have an opportunity to serve, not necessarily in the Army or the military but just in general. They will be much better citizens, they will do a much better job, they will get training, they will get education, they will get leadership and they will just be—and when they are older and gray like some of us and they look back on their lives they will say, "I served in the 101st Airborne Division."

Senator ERNST. Yes.

General MCCONVILLE. I was part of the Band of Brothers. There was a young woman from the 82d. We asked her why she joined the military, and she was at Kabul and did some incredible things and what she said to us—she goes, "I did not want to go through life without having an impact."

We just had another—an officer. He was an All-American at Duke, played basketball there. He went to—play professional basketball and he was talking at an event for us, and he served with the Rangers. He came back. He goes, "I worked on a Coach K. It was great team. I worked—played for two professional basketball teams. But the best team I ever was on was the Army.

Senator ERNST. Outstanding, and I know one of my staff members this morning mentioned this is how he came to serve was he met a recruiter at his school.

I think it is really important that we allow that access because, as you said, so many people that join they join because they have a family member. But there is a whole swath of young men and women that are incredible and really deserve the opportunity to serve.

They just have to be exposed. They only know what they know, and those recruiters can really take in discussions about benefits and patriotism and so we think that that is really, really important.

I do have some questions that I will submit for the record, Secretary Wormuth, for you as well in regards to recruiting. But we, certainly, want to make sure that we are correcting this by the high schools and I have legislation I am working on to do that.

But I thank you both very much. General McConville, thank you for your service.

Thank you, Secretary.

Chairman REED. Thank you, Senator Ernst.

Senator Kelly, please?

Senator KELLY. Thank you, Mr. Chairman, and I could not agree more with the senator from Iowa on this, the opportunity to serve, and as you mentioned, General, some of it—just somebody talking about it later, my dad served in the 82d Airborne, and I would hear it from him all the time and one of the reasons I took my path not in the Army but in the Navy.

Also, I want to share my condolences on yours and, Madam Secretary, for you, too, and the Army's loss. We often expect losses in combat. Training accidents are—especially mid-airs are just horrific, and so we are with you in sharing the grief over this.

General, you talked a little bit about training opportunities. I want to talk about a place specific to Arizona because for the last

several years we have been hearing from witnesses as we prepare for this pacing threat of China that we need to be doing everything we can to prepare for this fight that we, obviously, do not want to get in and the best way we can—in my opinion, that we can avoid staying out of a fight is to make sure that our adversaries understand that they are not going to win and that means being as prepared as possible.

Electronic warfare is something we have talked about a lot lately. It is a critical mission. I am really pleased to see that DOD has taken a fresh look at our capability here because it is going to be part and a big part of a potential future fight, especially if it is in the Western Pacific.

I have been looking at this issue closely and I know some of my colleagues on the Committee have as well. But we need expanded airspace. The stick is longer than it used to be. We need more space. The threat is more significant, and we need to be able to replicate the high-end threat and have areas where we can put emitters and have the dynamic opportunities to best equip their forces and train them.

DOD has had officials out to see the electronic proving ground at Fort Huachuca in Arizona and folks agree that this place has the capacity and it also has the expertise and they are willing to do more.

General, can you please talk to the Army's vision and strategy for ensuring that our military is prepared for the advanced electronic warfare threats that we will face in the future?

General MCCONVILLE. Yes, Senator, you make a great point about Fort Huachuca. There is a reason why we have the unmanned aerial system training out there.

There is a reason why we have electronic warfare capability at areas like that. It takes special places. Certainly, got to have the size. But it is also where you can do it. There is—I mean, we do a lot of stuff at the National Training Center. We do it out at Fort Huachuca.

But it is something that is going to be more important in the future. We got to train the way we are going to fight. We got to expose our commanders to that environment, and our intent is that our training centers are so rigorous that when they actually go into combat it is an easier day.

Senator KELLY. Yes. That is what you want, right. You want the training to be the most challenging thing.

General MCCONVILLE. That is right.

Senator KELLY. Not often the case. You know, Fort Huachuca also offers geography and a landscape that really does not exist anywhere else, this natural bowl where you can transmit on a lot of different frequencies at very high energy.

This is a real opportunity, too, and it has got a lot of potential to help the Air Force with their F–35s that every—not every but a lot of their training missions they need to be considering the high-end threats.

We can put emitters at Fort Huachuca. We also have opportunities to extend the size of the Barry Goldwater Range and may be connected to a Military Operations Area (MOA). The Jackal MOA, I think, that is north of Fort Huachuca.

In my remaining time I am going to have another question for the record on the Fort Huachuca range. But I have got about 30 seconds and I really do not want to go over.

Madam Secretary, I am going to submit another question for the record about your vision for human machine teaming and working together. That offers a lot of opportunities for us in future conflicts.

Thank you, and I will yield back my 8 seconds.

Chairman REED. Thank you, Senator Kelly. I appreciate that very much.

Senator Scott, please?

Senator SCOTT. Thank you, Chairman. Thank each of you for being here. Thank you for what you do.

General, can you talk about why should communist China or why should Russia, any of our enemies—why should they be concerned about the capacity that our Army and our military has and why should they—when they look at our recruiting we are not hitting our recruiting numbers.

Support of the military is not what it used to be. Should they be concerned? Should they be concerned whether if they want to invade Ukraine or China wants to go in Taiwan or North Korea wants to do something in South Korea? Should they be concerned or not?

General MCCONVILLE. I think when I look at our adversaries, should they be concerned about the United States Army, absolutely, yes, they should be. It is the most lethal and ready army in the world and I think when we—I have spent a lot of time traveling around the world so when I go to Latvia, Estonia, Poland, Romania, you name it, that is the respect that our soldiers have.

Every one of those countries wants us to be a partner with them and I think it is the same thing in the Pacific. I think it is only going to get better with resources as we transform the Army to make sure that we have the capabilities as part of the joint force that are going to make maybe an amphibious type of assault or an airborne assault or an air assault very difficult to do.

As far as for people side of the house do we have some challenges? Absolutely. But we are looking for everyone's help to work our way through these problems, to inspire young men and women to serve.

Senator SCOTT. What do you think about Taiwan's effort to put themselves in a position that communist China will not want to invade? Do you think they are doing all the right things?

Do you think they are—they have a big enough military and do you think they have made—are going to make it difficult for them?

General MCCONVILLE. What I would like to do, Senator, is take that to the—if we can take it to the next session.

But here is what I would say, generally. I think there are some good lessons learned when we deal with allies and partners from Ukraine, and what I would say is take a look at what are their capabilities, what are their capacity, what is their competence, and by capabilities what type of weapon system they have.

Do they have the right weapon systems to defend themselves? Do they have enough of those weapon systems? Are they competent in those weapon systems?

But, to me, the most important thing is do they have the will to fight, and if they do not have the will to fight to defend their country like the Ukrainians did we need to take a hard look at that.

Senator SCOTT. What do you think about—what do you think about the capacity of the military in South Korea and the willingness of the people to defend their freedoms?

General MCCONVILLE. I think the South Koreans have very good capacity and I think they are very committed to defending their freedom.

Senator SCOTT. So you think that North Korea should be concerned if they wanted to invade?

General MCCONVILLE. I think North Korea should be concerned.

Senator SCOTT. Okay. What about our North Atlantic Treaty Organization (NATO) allies? Do you think they are building the capacity they need and they have the willingness?

I mean, if you look at Germany as an example and you look at their pathetic response to the invasion of Ukraine where they have not put up the resources they should, they have not built the military they should—I mean, what do you think about what NATO allies are doing?

General MCCONVILLE. I think NATO allies respond to their interests. There are a lot of things that go on in each country. I look back to General Marshall when he had my job. He said, you know, when I had the time I did not have the money. Then when I got the money I did not have the time.

We are seeing that kind of play out right now and that is why it is very important that we invest in our militaries during a time we are not in a major conflict and that is why we want to develop these future systems right now while we have the time and we have some money before it is too late.

Senator SCOTT. Do you think that our NATO allies are doing their part?

General MCCONVILLE. I think the NATO allies I have seen—again, the ones that are most in, I would say, harm's way, absolutely. If you look at what the Poles are doing, you look at what the Romanians are doing, you look at what the Lithuanians are doing, Estonia, things have changed.

I have seen a fairly significant change in how NATO has come together because they see a real threat.

Senator SCOTT. Do you think the American public understands enough about the threat of communist China?

General MCCONVILLE. I think Americans may or may not. I would not speak for the Americans. But I think in a lot of ways people are focused on what is happening in this country and when you start to talk about what is happening in Ukraine or what happens in Taiwan it gets to this world order bit, and for a lot of people they are not quite sure how that plays into their lives.

But we can show that regional conflicts have global implications and we want to avoid regional conflicts. It is no one's interest to have a Ukraine or have a Taiwan.

Senator SCOTT. Thank you. Thank you, Chairman.

Chairman REED. Thank you very much, Senator Scott.

Senator King, please?

Senator KING. Thank you, Mr. Chairman.

First, Secretary Wormuth, I want to compliment you on something in the budget. In these hearings you rarely have that happen. The fact that you have a significant increase in R&D [research and development] I think that is very important because my next question is going to be to General McConville, which is about the changed nature of warfare.

We have seen enormous changes—cyber directed energy, all of space, all of those things that have become so much part of conflict that in the first day, I guess, the question is are your Army units going to be able to maneuver if they cannot communicate and if GPS [Global Positioning System] is gone? That is the kind of environment that we are facing.

General MCCONVILLE. I think what we are doing is we are prepared for that environment. So, in fact, one of our cross functional teams is we call it alternate precision navigation timing. Basically, it is how do we figure out what happens when they jam a GPS.

I come from the philosophy you never want to be a one option commander. You never want to be dependent on one option. You never want to be dependent on the weakest link of a supply chain.

As you mentioned so eloquently, Senator, we are moving from air-land battle—if you think about it that is two domains we are kind of focused on fighting, that has been the doctrine used for last 40 years—to multi-domain operations.

So we are going to be contested in space because the Army uses space a lot. Certainly going to be contested in cyber all the way to the Homeland because we are going to have to basically fight from port to—from fort to foxhole.

We are, certainly, going to be contested in the air. You can see how right now even Ukraine we have been contesting the sea. Ships are getting sunk and that matters, and then definitely on the ground.

So it is going to be a very complex battlefield. We have to teach our soldiers. Many of you have visited our soldiers in the field and our operation centers. They were huge operation centers. They had stadium seats. They had big screens on them. That is not the future. They are going to have to learn to move, and how they emit and how they communicate is going to become extremely important.

Senator KING. Are you satisfied that we are taking adequate in terms of both training, expenditure, and culture, if you will, to be thinking in new and different ways in order to deal with this entirely new threat environment?

General MCCONVILLE. I think we are, Senator, but I think we can always do more. But if you go out to our National Training Center and our Joint Readiness Training Center and other training centers, that is what we are making them do.

So they cannot set up the big operation centers. We make them move every couple hours, and they are seeing swarms of unmanned aerial systems and so they are getting their radios jammed. They are getting their GPS jammed, and so what we have to do to our soldiers, who a lot of them have spent the last 20 years doing counterinsurgency and counterterrorism, this is the new fight and we built new doctrine.

We are building new organizations to get after that. We are doing talent management differently now. We are going to be coding on the battlefield. We are going to have to have people that can actually code on the battlefield because then they are going to be trying to defeat algorithms and we have to be able to do that.

Senator KING. Well, I appreciate that, and I have been asking the same kind of questions of the Navy. In fact, the Secretary of the Navy showed up at my office last week with a sextant just to prove that GPS was not the be all and end all.

A question relating to my service on the Veterans Affairs Committee. One of the issues that we have identified with our veterans is the transition between Active Duty and veteran status and how we can facilitate that in a more active way.

Suicide—the disproportionate number of suicides occur within 2 or 3 years of separation from Active Duty.

General, I hope this is something that you are focused upon because it is critical to make sure that that transition happens smoothly and that the new veteran knows that there is available services and that there is somebody that cares about them when they leave the service.

General MCCONVILLE. Senator, as you and I talked about, I am absolutely committed to that. I want to make that work.

Transitions are the most dangerous time. I am a student of suicides. They break my heart every time we lose a soldier and they happen during transitions, whether it is a transition in their relationship, transition in their job, transition in their financial status, or even transition out of the military.

When they leave that warm web of friends, and we have to do a better job of—we do not want them to have a smooth landing. We want them to have a smooth takeoff. How do they leave the Army or the military as a whole and get into that welcome that we talked about and we have to manage that transition for them.

Senator KING. I appreciate that and I also—I want to end with a compliment to you not only for your many years of incredibly distinguished service but when you were talking about Taiwan you listed capability and capacity and I was madly writing notes, and you anticipated because you came down to the conclusion of the most important factor is will to fight—will to fight—and that is the one thing that we have learned from Ukraine was so critical. So thank you for your service and thank you for your important testimony here today.

Chairman REED. Thank you, Senator King.

Senator Budd, please?

Senator BUDD. Thank you, Chairman. Again, thank you both for being here. I just want to extend my condolences to the family of those killed at Fort Campbell last night. I come from a family of aviators including a Blackhawk pilot, so we are certainly keeping them in our prayers.

Secretary Wormuth, quality of life is a major factor in retaining soldiers and their families, as you know. The Army is investing to replace barracks and built a new child development center at Fort Bragg in my home State in North Carolina. These are going to go a long way but there is much more to be done.

Can you please discuss how the Army is investing in quality of life initiatives this year?

Ms. WORMUTH. Certainly, Senator.

One important quality of life investment we are doing is barracks, both building new ones, as you said, and renovating ones that we have.

We have got about a billion dollars in this year's budget for barracks across Active, Guard, and Reserve and we are going to keep that kind of investment until 2030 to really try to get after our entire inventory. In fact, General McConville and I are looking at can we find a way to invest even more in barracks.

We are also investing quite a bit in family housing and we work very, very closely with our five privatized housing partners to try to make sure that they are building new inventory and maintaining the inventory that we have.

We have had some challenges with those companies a few years ago but I think we are in a better place with them now, although there is always work to do.

Another big set of quality of life investments we are making are in—related to child care. In the last couple of years we have built a number of new Child Development Centers (CDCs). What we are really focusing on this year is trying to make sure that we are staffing our CDCs at the highest level possible so we can operate at maximum capacity.

We have raised the minimum wage for our daycare workers. We have raised the fee assistance for our soldiers from $1,500 a month to $1,700 a month. We are giving recruiting bonuses basically for CDC workers.

We are giving bonuses for our in-home child providers—spouses, in many cases, who open up their own homes. If they move from one duty station to another and stay with the program there is a bonus for that as well. So we are really trying to focus on child care.

Senator BUDD. Very good. Do not let up, particularly in North Carolina. If you would keep your eye on that, appreciate it.

General McConville, are the Army and the Marine Corps interoperable in the INDOPACOM theater?

General MCCONVILLE. I believe so. I think we work very closely together. We have done what we call Project Convergence where we are bringing together the forces. We are all trying to get to the point where we have a combined joint all-domain command and control capability and I know that the commandant and the chief level we work very closely. They are training together out there. We are sharing capabilities and, quite frankly, there is plenty of work for everybody out there.

Senator BUDD. So you mentioned their capabilities but how do their missions and their capabilities differ and how are they mutually supportive?

General MCCONVILLE. I think when we take a look at the—when I take a look at the Marine Corps, if you are going to do it. When you think about forced entries, okay, I have looked at the Marine Corps as the experts on amphibious operations.

I look at the Army as the experts on airborne operations from 82d Airborne Division, 18th Airborne Corps, 101st, the expert on air assault operations.

When you take a look at those type of operations that is where it plays out. But the Marine Corps has, certainly—from the maritime environment can do great things. But at the end of the day, where the where the Army comes in is, quite frankly, the capacity and the scale.

You are going to do large-scale combat operations on land. You can do them in the United States Army in conjunction with the Marine Corps.

Senator BUDD. Thank you.

So how is the Army incorporating multi-domain task forces into theater operational plans and theater formations to operate in a denied or degraded environment?

General MCCONVILLE. Yes. I think we are going to see the multi-domain task force being in tremendous demand by all combatant commanders. Quite frankly, it already is. We are seeing some of the value, and I can talk a little more about that in a classified session of what they are doing.

But when you think about what they exist to do is they provide long-range precision fires. So you are going to see hypersonics. You are going to see mid-range capability to sink ships. Precision Strike Missile (PrSM) can do that.

But they also provide long-range precision effects. So they are in intelligence. They are in IO—information operations. They do cyber. They do electronic warfare in space, and you can also bolt in air and missile defense.

So when you start thinking about the ability to assist in maybe a no-fly zone with—from the ground we can assist in that because we will have integrated air and missile defense.

If you think about maybe you want to have a no-sail zone or assist in that because we are going to have anti-ship capability, anti-axis capability, that organization will play very well into that.

Senator BUDD. Thank you very much. I have another question but I will submit it for the record. Thank you both.

Chairman REED. Thank you, Senator Budd.

Senator Blumenthal, please?

Senator BLUMENTHAL. Thanks, Mr. Chairman. Thank you both for your very articulate and informed testimony today, and I join in condolences to the family—the larger family—Army family of the nine soldiers who died at Fort Campbell.

Secretary Wormuth, I want to focus for the moment on helicopters, the Sikorsky and Bell competition for the next long-range assault aircraft contract.

That contract was awarded to Bell. I am sure you are familiar with efforts on my part and our delegation's part to get some of the basic facts, which we are entitled to receive as a matter of oversight.

I am deeply disappointed that we have received none of the essential facts that underlie the Army's decision to go with Bell rather than Sikorsky when, in fact, Sikorsky may have a less expensive, more maneuverable longer-range helicopter under FLRAA.

But as disappointed as I am with the decision I am more disappointed with the lack of an explanation and, in fact, the reliance, apparently, on a regulation, which Deputy Secretary Hicks acknowledged does not bind. The Army has not bound it in the past, does not bind it now from providing this information to us.

I am not going to get into a debate on the legalities here. What I am interested in knowing is your commitment to give us that explanation when the source selection process has concluded, which will be next week when the Government Accountability Office (GAO) issues its opinion.

Will you commit to give us a briefing and an explanation next week when the GAO finishes it?

Ms. WORMUTH. Absolutely, Senator. I have already asked Doug Bush, our Assistant Secretary for Acquisition, to be prepared to give you that briefing the minute the GAO completes its review.

Senator BLUMENTHAL. Thank you.

General McConville, I am struck by your quotation—I do not remember who it is attributed to—General Marshall, that when I had the time I did not have the money; when I had the money I did not have the time.

I am afraid that aptly describes our situation in Ukraine, or more specifically, the Ukrainians' position vis-á-vis are providing the money, the arms, the weapons that are needed because I too had been impressed with the will of Ukrainians.

When I visited three times over the last, roughly, year, speaking not only with President Zelensky but with his top military leadership, with everyday Ukrainians, they will fight to the last person. They will fight with pitchforks, if necessary. They do not want our troops on the ground. They want what we would give our troops if they were on the ground.

I have also been impressed, and I hope you will take this message back to the men and women under your command, with the training that we provide. I visited Grafenwohr in Germany and watched the training that our soldiers are providing to those Ukrainian freedom fighters, men and women who 6, 8, 10 weeks ago were bakers, computer programmers.

Now they are about to go to the trenches in Ukraine, and the bond between them and our soldiers is really inspiring and the kinds of skills that our soldiers are imparting to them really inspiring.

I hope we can give to them the arms that they need and you, as a professional—and I underscore the word professional—not only distinguished but a man who knows how wars are won will also support the kinds of increased arms that are needed now because time is not on our side. The spring is an essential time to provide that aid.

So I want to ask you whether you think Ukrainians are getting enough now to win because if they do get enough they will win, and in your professional judgment whether we should be doing more.

General MCCONVILLE. Some of that question I could talk in a classified session about. But I agree with you as far as on the Ukrainians.

I mean, they learned to operate our Patriots in weeks, which is really pretty incredible, and same thing over in Grafenwohr where they come in, they are really serious about the training, they are very, very professional, and they want to do it.

They are taking our things that people thought were not possible, some of our very sophisticated systems, which historically you could never give to another military because they could not maintain.

It is nice to have the gear but you have to maintain it, you have to sustain it, and so far, I think, they are doing a magnificent job of working that, and we are learning a lot from tele-maintenance to tele-training and when they are down range and they are very innovative on taking our systems and doing that extremely well.

From our standpoint we are giving them the weapon systems that are requested from us at the same time the Secretary and I are trying to make sure that we have what we need to go and do the job, and we appreciate your support in replenishing not only the ammunition but also allowing us to modernize the Army while we go ahead and provide them with the systems they need.

Senator BLUMENTHAL. My time is expired, but thank you both.

Chairman REED. Thank you, Senator Blumenthal.

Senator Sullivan, please?

Senator SULLIVAN. Thank you, Mr. Chairman and General. Madam Secretary, welcome. Thanks for your great service. Appreciated the call yesterday.

My condolences as well to the Army family members in this recent crash. It reminds us that it is a risky profession 24/7.

I wanted to ask you—first, compliment both of you and then ask kind of a two-part question. How is the 11th Airborne Division doing? We love them in Alaska. Very proud of them in Alaska.

General, it was great being with you for the patching ceremony in Fairbanks and Anchorage last year, I know that the Army is looking at standing up two or three—two more multi-domain task forces, and I am not trying to be greedy here but I just happen to live in the State that Billy Mitchell called the most strategic place in the world and, by the way, so did the NORTHCOM commander last week in a hearing. Best training in the world by far, and a gateway to the Arctic, gateway to the Pacific, a couple of miles away from Russia and the Taiwan Strait and—I am talking about Alaska.

We would love to have a multi-domain task force base in our great State. But maybe if you can talk about both 11th Airborne and where you are looking for the next multi-domain task force that would be great. Both of you.

Ms. WORMUTH. Thanks, Senator Sullivan.

We are very pleased with the 11th Airborne Division. I think the reestablishment of that division has really reinstilled our soldiers in Alaska with a sense of purpose. I think morale is quite high as we——

Senator SULLIVAN. Is it not the most—the highest?

Ms. WORMUTH. I was just about to say that. Yes.

Senator SULLIVAN. Okay. Sorry. Did not want to steal your thunder.

Ms. WORMUTH. It is the most popular—most popular duty station right now. One of the——

Senator SULLIVAN. In the U.S. Army. So everybody is requesting it more than—that is so great.

Ms. WORMUTH. Yes. Exactly. They just completed a major training exercise, which went very, very well. I think we set a goal in our Arctic strategy a few years ago to really bring back our cold weather expertise and we are really starting to do that in a way that I think is going very, very well.

As you know, General Eifler and Command Sergeant Major Daley are—and all of the leaders below them are very engaged and I think the division is doing great things.

Senator SULLIVAN. Good. General? Then maybe you can talk multi-domain task force as well.

General MCCONVILLE. Yes, Senator. It is really interesting when you take a look at a unit that gets purpose.

Senator SULLIVAN. Yes.

General MCCONVILLE. In the Army those who have served, like, little tabs, little patches——

Senator SULLIVAN. Mean a lot.

General MCCONVILLE.——mean a lot.

Senator SULLIVAN. Oh, yes.

General MCCONVILLE. What I see is there has been a huge change in Alaska because of the focus and now they—it used to be people were trying to survive up in the Arctic. Now they are thriving——

Senator SULLIVAN. Good.

General MCCONVILLE.——and they are becoming the best in the world and becoming masters of their craft, and now they are working with—around the world in other places, too, where we understand the importance of the Arctic as a strategic environment that we are going to have to deal with and a lot of people look in the Arctic and now we have a force that is fully capable of doing that.

They have taken that mission on from an airborne and air assault. Again, those type tabs mean a lot to our soldiers and I think they are making a huge difference.

On the multi-domain task force right now we are kind of taking a look. I think we are not going to—certainly, not commit here where we are starting to look, but in the Pacific when you start thinking about why you would want that capability is the anti-access capability.

You want the capability to provide maybe a no-sail zone, maybe a no-fly zone capability in conjunction with the joint partners, and then it is just a matter of the type of capabilities.

We are going to have long-range precision fires. Where is—and they do not necessarily have to be all together but you start to kind of lay that down how do you want to do that and then how do you want to position forces or rotate forces forward so they are also operating in the theater, and all those have to come together?

Senator SULLIVAN. Okay. If you can keep me and this Committee informed on what you are looking at for the next deployment and stationing of those that would be great.

My next question is on the budget, and I kind of took Secretary Austin and General Milley to task here. The Biden administration

keeps putting forward defense budget cuts, three in a row. We bolster it up in a bipartisan way. I think that is leading from behind. They know we are going to do that so they put forward significant cuts, and I pressed General Milley and Secretary Austin.

The current budget right now shrinks the Navy, shrinks the Marine Corps, and shrinks the Army to 450. It is a pretty low number for the U.S. Army, and I think this—but they also say it is the most dangerous time since World War II. It is kind of a disconnect there in terms of the signal we are sending, emboldening people like Putin and Xi Jinping.

Can you comment, Madam Secretary or General, on the—going from 485 to 450 and how does that enhance America's national security in terms of end strength for the U.S. Army?

Ms. WORMUTH. Thanks, Senator. I really appreciate the question because I want to make clear that the fact that Army's end strength is decreasing is not due to the budget. It is not because we have been told cut the Army or there is not enough money to invest in a larger army.

The issue, frankly, is really our recruiting challenge and we have talked a little bit about that with you. We have got to solve our recruiting challenge and what you can see in the 5-year budget that we submitted is our intent to build back our end strength.

So over the next 5 years we hope to start increasing our end strength by about 4,000 a year. But we are going to have to work really hard on recruiting to do that.

Senator SULLIVAN. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Sullivan.

Senator Warren, please?

Senator WARREN. Thank you, Mr. Chairman, and I would also like to express my condolences to the family and the friends of the nine soldiers who were killed in the Army helicopter crash at Fort Campbell. It is a reminder of how much we owe to every one of our servicemembers who put themselves in harm's way on our behalf. So it is a very sad day.

I want to thank our witnesses for being here today. What I want to talk about today is behavioral health. Improving behavioral health resources and access for our servicemembers is critical to supporting those who are already sacrificing so much to serve our country, and I am deeply concerned that we are not doing enough to address the crisis of substance use disorder for our servicemembers.

Last fall I sent a letter to the Defense Department along with my colleagues Senator Markey, Senator Cornyn, Senator Murkowski, and Senator Heinrich on reports of high levels of fatal drug overdoses involving opioids and fentanyl at Fort Bragg, Fort Bliss, and West Point.

In DOD's response we discovered a total of 15,293 Active Duty servicemember overdoses from 2017 to February 2023. There were 332 fatal overdoses.

Now, this is a problem for all of the services but the Army had the highest rate of overdose death.

Secretary Wormuth, one of the ways for us to be able to address this issue is to understand the extent of the problem. Is there any kind of annual public reporting on servicemember overdoses?

Ms. WORMUTH. Senator, I am sure that we track that data. I am actually——

Senator WARREN. I did not ask if you track the data. I asked if you had a regular reporting of the data because I could not find one.

Ms. WORMUTH. We may not and we probably should have one.

Senator WARREN. Okay. There is no annual reporting, and I just want to make clear the only reason we know the numbers that I just cited is because DOD provided it as an answer to our letter.

Public data that are updated on an ongoing basis would help us better understand and track this problem and whether any new policies that DOD implements are effective. We got to collect the numbers to know what is happening here.

Now, one other aspect of this DOD's data showed that more than 80 percent of fatal overdoses by servicemembers were accidental. One thing that could help us prevent accidental overdoses from becoming fatal overdoses is easy accessibility of the overdose reversal drug Naloxone.

Secretary Wormuth, DOD says that it provides Naloxone in high-risk cases, which is a good best practice. How often has the Army provided Naloxone to servicemembers and their families?

Ms. WORMUTH. I do not have that information, Senator Warren, off the top of my head. I do know that we have established a public awareness campaign for our soldiers called "One Pill Can Kill" and, for example, at Fort Bragg every single newly arriving soldier gets that prevention training because we are deeply concerned, particularly with fentanyl being as prevalent as it is—we are deeply concerned about making sure our soldiers know the dangers there.

Senator WARREN. I want you to know I very much appreciate that you are trying to engage in other harm reduction techniques here. I am in favor of that.

But I want to make the pitch that it needs to be more coordinated and that we need better accountability. You got to have the numbers—what programs are you trying and what effect is it having on outcomes.

We know across this country now that harm reduction services save lives. We need to be doing everything that we can to mitigate overdoses among our servicemembers including using harm reduction services that are available and then tracking whether or not they are having the outcomes that we hope for.

So I would like to be able to work with you more on this and see if we can get a stronger program in place.

Ms. WORMUTH. We would welcome that.

Senator WARREN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Warren.

Senator Shaheen, please?

Senator SHAHEEN. Thank you, Mr. Chairman, and thank you, Secretary Wormuth and General McConville, for being here this morning.

I would also like to offer my condolences. I was in Romania at the end of February and had a chance to meet personally with a number of members of the 101st Airborne who were there from Kentucky. So I can only imagine how devastating it is for the people, for everybody in the 101st but especially for the families.

I would like to begin, Secretary Wormuth, with asking you about the enhanced night vision goggle binoculars, or ENVGBs, because Congress stepped in to restore the full $300 million in funding for 2023 after the Army budget request did not include any funding for the ENVGBs, and as I have heard from a number of companies and soldiers it is very important to this critical program to maintain the industrial base for it.

That is why I was very concerned and did not really understand why again this year the Army has requested only $30 million for fiscal year 2024 for the ENVGB program and that is especially after, in the words of the Army's unfunded priority list last year, failure to fund the ENVGB program, and I quote, "decreases soldier survivability."

So how does the Army justify this decision?

Ms. WORMUTH. Thank you, Senator. The enhanced night vision goggle binoculars are a great product, great system. Our soldiers—they are very, very popular. They have got a lot of great capabilities.

I would say our approach to funding the ENVGBs is similar, in some cases, to other important systems like Abrams and Stryker. We are trying to strike a balance between investing in enduring programs or well tested systems like the enhanced night vision binoculars while also making sure that we have sufficient resources to invest in some of the new systems that we are developing.

So our judgment was that that funding level was sufficient and allowed us to be able to strike a balance across our program.

Senator SHAHEEN. Well, again, I understand and we have had these conversations before about the Integrated Visual Augmented System (IVAS) program and I know the Army has now ordered an IVAS 1.2 variant.

But I think it is not at all clear and, in fact, I would like, Mr. Chairman, to submit for the record the Integrated Visual Augmentation System report here that was done by the Inspector General—well, it was done by fiscal year 2022 directors of Operational Test and Evaluation. It is their report.

But it confirms, I think, what the Inspector General found when he said the Army is at risk of wasting, and I quote, "wasting up to $21.88 billion in taxpayer funds to field a system that soldiers may not want to use or use as intended and the fact is this report found that IVAS did not demonstrate improvements to deficiencies and that soldiers were, in fact, performing worse than they had without the system.

So, again, I understand the balance that you are trying to strike but it is hard for me to understand how much longer we are going to spend money on a program that does not seem to be accomplishing what you say is the intent.

Ms. WORMUTH. Senator, what I would say there is we have had some challenges with the IVAS program, that is for sure, and the $22 billion figure that is cited in that report assumes that we buy it for the entire Army, which is not our current plan.

With the 1.2 variant if Congress funds that what we are going to try to do is see if it can be successful. We are working very, very hard with Microsoft. But it is a new system that will allow us to train, to rehearse, and to fight and it gives some additional capa-

bilities beyond the night vision goggles, which, again, are superlative.

So if we think it can work then we will invest in it. If it does not prove out this time then we will move on. But I think we believe that we should give it a chance. It is a very important step forward in terms of wearable technology for our soldiers.

Senator SHAHEEN. Again, I understand the intent and why on paper it looks like a technology that would be worth investing in. But the fact is to date it has not proven to be a technology that soldiers can use and improve their ability to operate.

So I would again urge you to take a look at that program and to really question how far down the road we want to go investing in something that is not working.

Thank you, Mr. Chairman.

Chairman REED. All right, and without objection the report will be submitted for the record.

[The information referred to follows:]

Integrated Visual Augmentation System (IVAS)



The Army conducted an Operational Demonstration (Ops Demo) in May - June 2022 to support a production and rapid fielding decision. The Integrated Visual Augmentation System (IVAS) 1.0 did not demonstrate improvements to deficiencies identified during previous IVAS Capability Set (CS) 4 testing. Based on results of the Operational Demonstration (Ops Demo), the Army is adjusting the IVAS acquisition and fielding strategy. The IVAS 1.2 variant will be the full-rate production system, incorporating an improved form factor within 24 months.

SYSTEM DESCRIPTION

The Army intends for the IVAS to increase close combat lethality by providing improved communication, mobility, situational awareness, and marksmanship. The IVAS includes a heads-up display (HUD), a body-worn computer known as a puck, a networked data radio, and three conformal batteries for each soldier. The IVAS HUD provides a see through display and augmented reality capability with integrated thermal and low-light imaging sensors, a built-in compass for navigation, and Tactical Assault Kit situational awareness software. The Intra-Soldier Wireless ultra wide-band network enables passive targeting capabilities, connecting the Family of Weapon Sights – Individual (FWS-I) mounted on a soldier's weapon to the sight picture in the HUD. The IVAS radio enables all IVAS-equipped soldiers to pass data within the company.

MISSION

The Army intends close combat infantry forces to employ IVAS during day (optional) and night missions to increase warfighter lethality through improved mobility, situational awareness, and marksmanship by providing the ability to train, rehearse, and fight on a single system.

Squads will train with IVAS in the Squad Immersive Virtual Trainer in a high fidelity, live and mixed reality, immersive environment, enabling rapid conduct and repetition of training scenarios.

PROGRAM

IVAS is a Middle Tier of Acquisition program in the rapid prototyping and fielding phases, intended to equip over 100,000 close combat soldiers. The rapid prototyping program used an iterative approach of four CSs. In December 2020, after the completion of CS 3 testing, the USD(A&S) approved the IVAS program to transition from rapid prototyping to rapid fielding, authorizing the Army to procure up to 10,000 CS 4 systems. The Army established IVAS as a Middle Tier of Acquisition rapid fielding program. USD(A&S) required the Army to fix problems noted during CS 3 testing and verify corrections prior to Ops Demo and CS 4 fielding.

The Army intended IVAS CS 4 to be a production-ready system addressing CS 3 deficiencies. Microsoft and the Army made changes to IVAS CS 4 and tested CS 4 Engineering Version (EV) 1 at Soldier Touchpoint (STP) 4 in April 2021 and CS 4 EV 2 at User Jury 4.3 in July 2021. Based on the results from STP 4 and User Jury 4.3, the Army delayed the IVAS Ops Demo from September 2021 until May-June 2022, to allow time for the IVAS program to correct deficiencies. The Army conducted STP 5 in March 2022 with CS 4 EV 3 and the Ops Demo with IVAS 1.0 to inform a fielding decision. DOT&E approved the IVAS T&E strategy in May 2022.

Based on results of the Ops Demo, the Army is adjusting the IVAS acquisition and fielding strategy. The updated acquisition strategy provides time for the Program Office and Microsoft to grow reliability, improve low-light performance, and develop a new form factor. The Army intends to field 5,000 IVAS 1.0 systems with improved reliability and 5,000 IVAS 1.1 systems that meet the reliability requirement and are equipped with an improved low-light sensor. The IVAS 1.2 variant will be the full-rate production system, incorporating an improved form factor within 24 months.

» MAJOR CONTRACTOR

- Microsoft Corp., – Redmond, Washington

TEST ADEQUACY

The IVAS Program Manager, with support from Army Test and Evaluation Command, conducted STP 5 with IVAS CS 4 EV 3 in March 2022 at Fort Bragg, North Carolina to validate performance and reliability improvements. STP 5 did not have a DOT&E-approved test plan, but was observed by DOT&E. STP 5 was adequate to support an assessment of military utility, user acceptance, human factors, training, and reliability of CS 4 EV 3.

The Army conducted the Ops Demo with IVAS 1.0 in June 2022 at Fort Bragg, North Carolina in accordance with the DOT&E-approved test plan, and was observed by DOT&E. The Ops



Demo was adequate to assess operational performance, military utility, user acceptance, reliability, and cyber and electronic warfare vulnerabilities. Testing included two 72-hour company-level missions with soldiers equipped with the IVAS, one 72-hour company-level mission with soldiers equipped with their current equipment, and three live fire ranges. The live fire ranges consisted of an individual static qualification, buddy team maneuvering, and squad maneuvering live fire iterations. Soldiers executed all three ranges in both daytime and nighttime with IVAS and with their current equipment.

PERFORMANCE

» EFFECTIVENESS

IVAS CS 4 EV 3 did not demonstrate improvements to deficiencies identified during STP 3 or STP 4. DOT&E recommended improvements to FWS-I integration, low-light sensors, HUD display, and field of vision. IVAS CS 4 EV 3 changes focused on improvement to the HUD display quality. Display quality improvement was variable between systems and did not translate into increases in soldier satisfaction with sensors or with their ability to detect and recognize enemy forces. Performance results are detailed in the IVAS CS4 EV 3 STP 5 report from June 2022.

In the Ops Demo, the infantry company was more successful accomplishing their operational missions with their current equipment than with IVAS 1.0. Soldiers hit fewer targets and engaged targets more slowly with IVAS 1.0 than with their current equipment on the buddy team life fire range. IVAS 1.0 did not demonstrate improvements in low-light sensors, HUD display, FWS-I integration and field of vision identified during previous IVAS CS 4 testing. IVAS 1.0 performance is detailed in the IVAS 1.0 Ops Demo report published October 2022.

» SUITABILITY

IVAS CS4 EV 3 demonstrated its requirement for mean time between system abort (MTBSA) during STP 5. Suitability results are detailed in the IVAS CS4 EV 3 STP 5 report.

The results of the Ops Demo show user acceptance remains low. Soldiers prefer their current equipment (Nett Warrior and PVS-14 and Enhanced Night Vision Goggle-Binocular night vision devices) to IVAS. The majority of soldiers reported at least one symptom of physical impairment to include disorientation, dizziness, eyestrain, headaches, motion sickness and nausea, neck strain and tunnel vision. Soldiers cited IVAS 1.0's poor low-light performance, display quality, cumbersomeness, poor reliability, inability to distinguish friend from foe, difficulty shooting, physical impairments and limited peripheral vision as reasons for their dissatisfaction. IVAS 1.0 MTBSA reliability metric declined during Ops Demo compared to IVAS CS4 EV2 in STP 4. Although the results were less favorable than STP 5, MTBSA is improving. Results for mean time between essential function failures have not improved between CS4 EV2, CS4 EV3 and 1.0. Suitability results are detailed in the IVAS 1.0 Ops Demo report published October 2022.

» SURVIVABILITY

IVAS 1.0 vulnerabilities in a cyber-contested and electromagnetic spectrum environment are detailed in the classified survivability annex to the IVAS 1.0 Ops Demo report published October 2022.

RECOMMENDATIONS

The Army should:

1. Correct the deficiencies identified in the Ops Demo and verify the corrections in developmental testing/operational testing prior to further operational testing to reduce resources and ensure better operational test results.
2. Revise the T&E strategy to support an assessment of performance for IVAS 1.1 and 1.2.

Chairman REED. Senator Rosen, please?

Senator ROSEN. Well, thank you, Chairman Reed. I appreciate you holding this hearing. I would like to thank the witnesses for being here to testify today and, of course, for your service to this Nation.

General McConville, as this will be your last time before the Committee, thank you for your decades of distinguished service leading the brave men and women of the United States Army.

We appreciate you, and I also, too, like all of my colleagues want to express my deepest condolences for the families, the fellow soldiers, of those that were lost in last night's tragedy at Fort Campbell, and just to express my heartfelt sympathies.

So I am going to talk a little bit about Nevada and, General McConville, I want to revisit an issue that I raised with you last year. Thank you for your commitment to ensure that Nevada will finally have its first small arms qualification range, and as we discussed, Nevada's Guard and Reserve soldiers are traveling to surrounding states in order to satisfy their annual weapons qualification, and it is about an average cost of around $500,000 a year per unit.

I appreciate your commitment to look into this, which spurred the effort underway to build a permanent range in Hawthorne Army Depot by fiscal year 2025. I understand that the Nevada Army National Guard is on track to complete their planning and design to meet that timeline and so, General McConville, can I again have your commitment that the Army will see this project through in fiscal year 2025 so that soldiers can meet their annual requirements at greater convenience and lower tax cost to the taxpayer?

General MCCONVILLE. You have mine but I just want to check with the Secretary because she is going to be here. You have my commitment.

Ms. WORMUTH. We will follow through on it, Senator Rosen.

Senator ROSEN. I have been to where they proposed it, at Hawthorne Army Depot. Everyone is so excited. The plans are really great and everyone is looking forward to having that in Nevada and with all the rest of our military there and Reserves there how it can be used for everyone in our State. So thank you for that. Really appreciate it.

Again, I am going to move on to you then Secretary, about Hawthorne Army Depot. It is the world's largest ammunition depot and demilitarization facility, and the depot stores demilitarizes munitions and ensures munitions readiness for the DOD.

Despite its size and crucial role that Hawthorne plays it is in desperate, desperate need of significant infrastructure upgrades. As an example, I heard from folks in Hawthorne earlier this month that the boilers, which were installed in 1974, were inoperable and the facilities were without heat.

The need to invest in our munitions depots has only become more acute in light of our need to ramp up munitions production not to only arm Ukraine but to, of course, backfill our own stockpiles.

So given this, does the Army have plans to invest in repairs or upgrades to the munitions depot, and if it does not can I have your commitment that we can include Hawthorne in Army's—in the Army's next future years defense planning unfunded priority list so that we can—we really need to care about our munitions readiness.

Ms. WORMUTH. Yes, Senator Rosen.

First of all, I would say on life, health, and safety issues we always want to take care of those. So I will make sure that we go out and look at the—at Hawthorne and assess whether there is a life, health, and safety issue with the boiler because if there is we will want to take care of that right away.

We have a 15-year $18 billion organic industrial base strategy and plan to try to address modernizing all of these facilities and many of them are quite old, as you know. They are sort of vintage World War II.

Again, we cannot do all of the modernization in 1 year so we try to phase that over time and, certainly, I believe that there are investments planned for Hawthorne depot a couple of years from now.

We constantly assess that plan every year and will talk to General Hamilton, the new head of Army Materiel Command, to make sure that we have got investments in Hawthorne in the right prioritization.

Senator ROSEN. Yes. I think that—well, first of all, about the boilers not all of Nevada is a desert so it does get cold there and, really, our munitions readiness, building up our stockpile, they have been—they are always so busy but it has really played an even more integral role since we have been in Ukraine.

I guess I will go on to this. Ukraine keeps receiving more advanced equipment—the Abrams tanks, the Patriot missile defense system—and those demands for those teams and capabilities continue to grow.

So what are you doing to expand the current programs and ensure that we are equipped efficiently and accurately to respond to requests from the battlefield, especially as it relates to Ukraine?

Ms. WORMUTH. Senator, we are investing $1.5 billion in the organic industrial base this year to try to expand production for munitions precisely so that we can continue to supply Ukraine what they need but also to replenish our own stocks, and we are using some of the supplemental money that Congress has given us to replenish our stocks and not just buy new old stuff but we are buying new new stuff. So we are replacing M–113 vehicles with the new AMPVs, for example.

We are also working really closely with industry to try to see how they can increase the scope and scale of their munitions production to, again, try to make sure we can keep supplying the Ukrainians.

Senator ROSEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rosen.

Senator Duckworth, please?

Senator DUCKWORTH. Thank you, Mr. Chairman.

I do want to express my condolences.

General McConville, you and I know inherently how dangerous the job is, especially that of our helicopter crews, and I personally gave you some heavy, heavy nights in Iraq a lifetime ago when my own aircraft went down while you were in—where we were supporting your unit, the first Calvary Division (CAV) there. So know that I have been thinking about those crews and their families.

Good morning to both of our witnesses. I appreciate our candid conversation earlier this week. In your written testimony you highlighted the critical importance of contested logistics in both short sharp operations as well as for protected conflict.

My colleagues have heard me talk about these difficulties in this Committee for some time now, especially as we look into the Indo-Pacific region.

General McConville, in what ways does this year's Army budget request support contested logistics for the joint force and what efforts are you making to bolster sustainment capabilities and capacity, especially in Southeast Asia?

General MCCONVILLE. Thank you, Senator. As we take a look, one of the big things we have done right off the bat is stand up a cross functional team for contested logistics.

As you know very well, I mean, we cannot do what we do without logistics. We are seeing it playing out in Ukraine, and Ukraine is such a great lesson for us all because we are seeing it play out.

But it is on land and we have very robust capability to support logistics in Europe. We need to do the same thing in the Pacific and that is working with allies and partners. In the budget there is funding for watercraft.

There is funding for prepositioned stocks, which is really important moving them forward, fuel distribution, all these type things that we are going to need to operate these weapon systems.

These weapon systems without fuel, without parts, without bullets do not perform their duty. So we are working that very hard and we think it is very important.

Senator DUCKWORTH. Thank you.

A critical vulnerability for any military, as we said, is the logistical tail associated with delivering operational energy to its fielded forces. Both our readiness and our allies' and partners' readiness will be bolstered by, one, reducing reliance on fossil fuels and employing more diverse and renewable operational energy sources; developing innovative delivery systems; distributed storage, as you said pre-po; sources flexible contracting and improved automation; and, of course, ensuring supply lines are resilient in the face of climate change, disruption through energy supplies and also cyber attacks.

Secretary Wormuth, General McConville, how important is logistics cooperation in Europe and the Indo-Pacific, and what efforts in your budget request work toward operational energy security and resilience?

Ms. WORMUTH. Senator, as General McConville said, logistics are going to be critical. It is that old saying of amateurs do strategy and professionals do logistics, and we have made substantial investments in that area in this budget.

Specifically on operational energy, I would say we have got over $1.3 billion in our budget this year for two big areas—about a billion dollars in installations resilience, really making sure that our installations are adapting to extreme weather.

But the other $300 million is investing more in operational energy and looking at electrification of our vehicles, looking at investing in developing hybrid vehicles.

So, for example, we have a hybrid Bradley that I was able to see, as well as hybrid JLTVs, for example, and those are really important because they are going to be much more fuel efficient, which means that we will not have to have the kinds of fuel convoys that we saw in Iraq, for example, which means we are going to put fewer soldiers at risk.

But those hybrid vehicles are also lower signature, which is really important when you are looking at the kind of contested environment, and they are very, very quiet, which is going to increase their survivability and, ultimately, our lethality.

So those operational energy investments are really important.

Senator DUCKWORTH. DOD put out a statistic a while ago about Iraq that said that 80 percent of our casualties in Iraq came from convoy operations and over 50 percent of those convoys were for logistics and fuel—movement of fuel. I think it is highly important.

But when you look to the Indo-Pacific region we are going to have to be able to partner with so many folks both in terms of partner military and allies and friends but also commercial resources as well, and I think it is important to make sure that we plus up our cyber capabilities and that of our allies also.

I know that the Army Futures Command in particular is leading efforts when it comes to developing members across the total force with skill sets in advanced technology areas such as computer programming, coding, AI, ML [machine learning].

I would like to hear from each of you about the benefits to the Department that comes from leveraging the digital skills of its total force servicemembers, particularly those in the Reserve component who have tech skills from their civilian careers.

Ms. WORMUTH. Sure, Senator.

Just briefly, I would say we desperately need to build out our tech skills, our cyber capabilities. They are going to be incredibly important—our AI capabilities—and we need to be able to leverage them not just in the Active component but in the Guard and Reserves.

In many cases where we cannot compete, frankly, financially with the salaries that people can get in the commercial sector, being able to draw on cyber capabilities from people in the Guard and soldiers in the Reserves is a great way to sort of thread that needle.

Senator DUCKWORTH. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Duckworth.

Thank you, Secretary Wormuth, General McConville. We will recess the open hearing and reconvene at 1200 hours in SVC–217, and I have been informed there is a vote that will commence at 11:45.

Thank you very much and we will see you shortly, and thank you, and we recess.

[Whereupon, at 11:44 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

1. Senator WARREN. Secretary Wormuth and General McConville, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

Secretary WORMUTH and General MCCONVILLE. In accordance with 10 U.S.C. 222a, the Chief of Staff of the Army is required to submit an unfunded priorities list (UPL) to congressional defense committees. The Army's fiscal year 2024 UPL totals $1.93 billion and reflects rapidly evolving requirements and opportunities in the strategic and operational environment since developing the fiscal year 2024 budget request. The UPL identifies priority items in the event Congress decides to allocate resources above the resources requested in the annual President Budget Request (PBR).

Given the detailed level of specificity of questions regarding the 28 UPL items, coupled with the degree of sensitivity of some of the answers that address capability gaps with strategic competitors, we respectfully recommend an in-person briefing and discussion with appropriate staff to more fully address these questions, provide

broader context, and highlight how each UPL item, in addition to fully funding the PBR, supports the Army's continued priorities of People, Readiness and Modernization and maintains alignment with the National Defense Strategy.

The Army carefully considers all projects and programs through a rigorous review and prioritization process to build each year's budget request. This process is lengthy and takes place several months in advance of execution. As is the case for the Army's fiscal year 2024 UPL, the UPL items reflect rapidly evolving requirements and opportunities and are intended to supplement the annual PBR and are not intended to substitute or displace the fiscal year 2024 PBR.

2. Senator WARREN. Secretary Wormuth and General McConville, historically, have previous UPL items been included in the following year's base budget? Have UPL items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

Secretary WORMUTH and General MCCONVILLE. The annual Unfunded Priorities List (UPL) as an opportunity to enhance the Army's enduring priorities of People, Readiness, and Modernization. Some items were included to accelerate readiness such as the HMMWV ABS (OPA) and M-SHORAD (MSLS) lines whereas other items were included to address emergent priorities that presented after the annual PBR was locked.

LI#	PE / LN Item	APPN	TITLE	President's Budget 2023 ($ in millions)	Fiscal Year 2023 UPL (RQST)	Fiscal Year 2023 UPL (Cong. Add)	President's Budget 2024 ($ in millions)	Fiscal Year 2024 UPL (RQST)
81	0604121A	RDTEA	Synthetic Training Environment Refinement & Prototyping	166.452	13.500	40.000	109.714	0.000
3	8082C14300	MSLS	M-SHORAD—Procurement	135.747	275.062	0.000	400.697	22.700
15	8992DA0924	OPA	HMMWVAnti-lock Braking & Electronic Stability Control (ABS/ESC)	10.665	50.458	109.050	45.554	47.473

3. Senator WARREN. Secretary Wormuth and General McConville, do you agree that Federal agencies have to make tough decisions in regards to their priorities and budget?

Secretary WORMUTH and General MCCONVILLE. Agencies and organizations make tough decisions inherent to balancing resources against priorities. We are committed to providing the best Army we can with the resources available.

INFORMATION ON UPLS

4. Senator WARREN. Secretary Wormuth and General McConville, what was the cost of putting together your unfunded priorities list?

Secretary WORMUTH and General MCCONVILLE. In accordance with 10 U.S.C. 222a, the Chief of Staff of the Army is required to submit an UPL to congressional defense committees. The Army developed the fiscal year 2024 UPL as part of the FY24 budget development process, so there was minimal additional cost.

5. Senator WARREN. Secretary Wormuth and General McConville, the Army requested the following 28 items for 1.9 billion dollars in fiscal year 2024: Integrated Air and Missile Defense Battle Command System (IBCS), Maneuver-Short Range Air Defense (M-SHORAD) Increment 1, Trojan Special Purpose Integrated Remote Intelligence Terminal (SPIRIT), Air Launched Effects (ALE) Acceleration, Organic Industrial Base Modernization Planning & Design, Expanding INDOPACOM Campaigning Activities, Abrams SEPv3 Procurement, AH–64E Apache New Generator, Water System Upgrade Projects in Hawaii, Water Intake Pump Upgrades, Radford Army Ammunition Plant, VA, Maneuver Support Vessel, Heavy; Army Watercraft, ARNG Vehicle Maintenance Shop, Network Enterprise Center, Fort Hunter Ligget (FHL), CA, Cost to Complete (CTC) Active Army, Cost to Complete (CTC) Army National Guard, Cost to Complete (CTC) Army Reserve, Army Reserve Center (ARC) located on USMC Logistics Base Albany, GA, Planning and Design MILCON Projects Active Army, Planning and Design MILCON Projects Army National Guard, Automated Multipurpose Machine Gun Range, Camp Blanding, FL, National Guard Readiness Center, New York, NY, Multi-Purpose Athletic Field, Fort Polk, LA, Integrated Visual Augmentation System (IVAS) Development, Integrated Visual Augmentation System (IVAS) Procurement, Black Hawk (HH–60M) Replacement, Apache (AH–64E) Replacement, HMMWV Anti-lock Braking & Electronic Stability

Control (ABS/ESC), Demilitarization Preparation for Hazardous Material (HAZMAT) For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

6. Senator WARREN. Secretary Wormuth and General McConville, what is the description of this UPL?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

7. Senator WARREN. Secretary Wormuth and General McConville, what does the UPL purchase? (Include all end items with quantities, contractor FTEs, etc.)

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

8. Senator WARREN. Secretary Wormuth and General McConville, what specific capability will the UPL provide?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

9. Senator WARREN. Secretary Wormuth and General McConville, what gap will this fill that is not in the base budget?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

10. Senator WARREN. Secretary Wormuth and General McConville, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

11. Senator WARREN. Secretary Wormuth and General McConville, what is the operational requirement? How does this UPL support current or future operations?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

12. Senator WARREN. Secretary Wormuth and General McConville, what is the operational impact if this UPL is not funded in fiscal year 2024?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

13. Senator WARREN. Secretary Wormuth and General McConville, are there plans to include this item in the fiscal year 2025 base budget?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

14. Senator WARREN. Secretary Wormuth and General McConville, why was this UPL not included in the fiscal year 2024 President's Budget submission?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

15. Senator WARREN. Secretary Wormuth and General McConville, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

16. Senator WARREN. Secretary Wormuth and General McConville, how often has your command met with the vendor executing this effort?

Secretary WORMUTH and General MCCONVILLE. Specific to UPL item numbers 1, 2, 7, 23–27, the Department has existing programs and/or contracts and, therefore, has statutory and regulatory responsibilities required for their management. The Department, at every level—from contracting officer, to Program Manager, to Army Senior Leadership, to numerous personnel in-between—regularly meets with the vendors to ensure compliance with contracts and provides appropriate programmatic oversight. Our engagements with vendors are considered a regular and necessary tool in the prudent oversight and supervision of programs and the expenditure of taxpayer dollars.

In addition, the Department regularly meets with all sectors of business so that industry has the opportunity to discuss with the Government possible materiel solutions or technologies with potential utility to fulfill Army requirements. Again, this is a part of the normal course of doing business within the Acquisition arena.

17. Senator WARREN. Secretary Wormuth and General McConville, what is your relationship history with this vendor?

Secretary WORMUTH and General MCCONVILLE. Specific to UPL item numbers 1, 2, 7, 23–27, the Department has existing programs and/or contracts and, therefore, has statutory and regulatory responsibilities required for their management. The Department, at every level—from contracting officer, to Program Manager, to Army Senior Leadership, to numerous personnel in-between—regularly meets with the vendors to ensure compliance with contracts and provides appropriate programmatic oversight. Our engagements with vendors are considered a regular and necessary tool in the prudent oversight and supervision of programs and the expenditure of taxpayer dollars. In addition, the Department regularly meets with all sectors of business so that industry has the opportunity to discuss with the Government possible materiel solutions or technologies with potential utility to fulfill Army requirements. Again, this is a part of the normal course of doing business within the Acquisition arena.

18. Senator WARREN. Secretary Wormuth and General McConville, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

Secretary WORMUTH and General MCCONVILLE. Specific to UPL item numbers 1, 2, 7, 23–27, the Department has existing programs and/or contracts and, therefore, has statutory and regulatory responsibilities required for their management. The Department, at every level—from contracting officer, to Program Manager, to Army Senior Leadership, to numerous personnel in-between—regularly meets with the vendors to ensure compliance with contracts and provides appropriate programmatic oversight. Our engagements with vendors are considered a regular and necessary tool in the prudent oversight and supervision of programs and the expenditure of taxpayer dollars.

In addition, the Department regularly meets with all sectors of business so that industry has the opportunity to discuss with the Government possible materiel solutions or technologies with potential utility to fulfill Army requirements. Again, this is a part of the normal course of doing business within the Acquisition arena.

19. Senator WARREN. Secretary Wormuth and General McConville, in which city/State will the UPL be executed?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

20. Senator WARREN. Secretary Wormuth and General McConville, is this requirement on an existing contract? If so, with who? What is the history of the contract?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

21. Senator WARREN. Secretary Wormuth and General McConville, what is the anticipated contract award date if the UPL receives funding?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

22. Senator WARREN. Secretary Wormuth and General McConville, what funding lines are associated with this UPL?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

23. Senator WARREN. Secretary Wormuth and General McConville, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

24. Senator WARREN. Secretary Wormuth and General McConville, how much was enacted and obligated (or expended for RDT&E) in fiscal year 2022 2023 for this requirement?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

25. Senator WARREN. Secretary Wormuth and General McConville, how much was requested in fiscal year 2024 for this requirement?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

26. Senator WARREN. Secretary Wormuth and General McConville, is there a tail associated with this UPL?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

27. Senator WARREN. Secretary Wormuth and General McConville, is any tail funded in the future years defense plan?

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

28. Senator WARREN. Secretary Wormuth and General McConville, please describe how much the requirement will cost per year for the next 5 years.

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29. [The spreadsheet has been retained in Committee files.]

29. Senator WARREN. Secretary Wormuth and General McConville, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or UPL.

Secretary WORMUTH and General MCCONVILLE. Please see the enclosed spreadsheet to address questions 5–29.

30. Senator WARREN. Secretary Wormuth and General McConville, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

Secretary WORMUTH and General MCCONVILLE. The Army carefully considers all projects and programs through a rigorous review and prioritization process to build each year's budget request.

31. Senator WARREN. Secretary Wormuth and General McConville, please provide photos of this requirement for visual aid.

Secretary WORMUTH and General MCCONVILLE. We are unable to provide photographs of each UPL item at this time.

LOWER TIER AIR AND MISSILE DEFENSE SENSOR (LTAMDS)

32. Senator WARREN. Secretary Wormuth and General McConville, how does the Army feel about the first two allotments produced of the LTAMDS?

Secretary WORMUTH and General MCCONVILLE. The Lower Tier Air and Missile Defense Sensor (LTAMDS) is the Army's modernization effort to develop the next generation, 360-degree sensor, intended to replace the aging PATRIOT radar. The LTAMDS systems on hand are currently undergoing testing and the Army is encouraged by the emerging results. LTAMDS will mitigate critical capability gaps in defending forces against rotary, fixed-wing, tactical ballistic missiles, and next-generation threats including hypersonic weapons. The Army anticipates providing LTAMDS primary sector capability by December 2023.

33. Senator WARREN. Secretary Wormuth and General McConville, when do you expect the Army to request Lot 3 of the LTAMDS and when does the Army want Lot 3 completed?

Secretary WORMUTH and General MCCONVILLE. The President's Fiscal Year 2024 Budget Request includes funds to award a contract for production of the five sensors in 2d quarter fiscal year 2024 with anticipated delivery beginning in 3d quarter fiscal year 2026.

34. Senator WARREN. Secretary Wormuth and General McConville, how many units for Lot 3 will you request?

Secretary WORMUTH and General MCCONVILLE. The President's Fiscal Year 2024 Budget Request includes funds for three sensors to support the Pacific Deterrence Initiative (PDI), which will provide an Early Operational Capability for the Defense of Guam, and an additional two sensors to support the LTAMDS program's Initial Operational Test and Evaluation activates beginning in fiscal year 2026.

35. Senator WARREN. Secretary Wormuth and General McConville, are there any outstanding issues for the workers regarding the LTAMDS?

Secretary WORMUTH and General MCCONVILLE. Based on the current schedule for production and deliveries, the Army does not anticipate any issues for the workers regarding the LTAMDS program.

MILITARY HOUSING

36. Senator WARREN. Secretary Wormuth and General McConville, a survey from the Military Family Advisory Network found that in 2021 found 40 percent of respondents were unaware of the Tenant Bill of Rights. What is the Army specifically doing to ensure servicemembers and their families are aware about the Tenant Bill of Rights?

Secretary WORMUTH and General MCCONVILLE. All military lessees receive the Plain Language Brief prior to their lease signing and again 30 days after they move in. This Army brief covers the Tenant Bill of Rights and explains tenant responsibilities, informal and formal dispute resolution processes, and off post housing services. Military family members are invited to the Plain Language Brief but are not required to attend.

37. Secretary Wormuth and General McConville, does the Army have any survey data estimating the percentage of members and their families who are aware of the Tenant Bill of Rights? What does that survey data show?

Secretary WORMUTH and General MCCONVILLE. The Army does not conduct such a survey, but will encourage the Office of the Secretary of Defense (OSD) to add it to the annual tenant satisfaction survey in the future. The Army uses the housing office record of delivery of the Plain Language Brief as a proxy for receipt of the Tenant Bill of Rights. Every military lessee receives the mandatory Plain Language Brief prior to signing the lease, and again 30 days after moving in. Military family members are invited to the Plain Language Brief, but are not required to attend.

38. Senator WARREN. Secretary Wormuth and General McConville, if the Army isn't tracking this information, is this something the Army would track in the future?

Secretary WORMUTH and General MCCONVILLE. The Army will request that OSD revamp its annual Tenant Satisfaction Survey to include survey questions regarding the Tenant Bill of Rights. In addition, the Army already has sound processes and policies in place to inform residents of the Tenant Bill of Rights, and will further refine these processes to ensure residents understand their rights.

QUESTIONS SUBMITTED BY SENATOR GARY C. PETERS

CONTESTED TRAINING

39. Senator PETERS. General McConville, the National Defense Strategy places great emphasis on the ability of our forces to operate in contested environments and the need to overcome enemy disruption. Outside of J-R-T-C and N-T-C, would the Army benefit from having training locations with standing approvals to employ Cyber, Electronic Warfare, Space, and Influence Operations into Large Scale Combat Operation training exercises?

General MCCONVILLE. The Army has not identified a requirement for additional training locations. The Army is presently evaluating the optimization of existing training locations and training products for the Combat Training Centers (CTC) including the Joint Readiness Training Center and the National Training Center as well as home station training (HST). Optimization of CTC and HST products to create a contested, congested, and complicated electromatic spectrum environment will include the employment of cyberspace, electronic, and space warfare products and will influence both opposing and friendly forces during training for Large Scale Combat Operations.

The Army has several other initiatives ongoing with regards to operating in a contested, congested, and complicated environment. In fiscal year 2028, the Army is programming an electromagnetic warfare training range at Fort Huachuca, AZ that will provide a realistic representation of adversary capabilities across the electromagnetic spectrum and multiple domains. The Army is also planning a cyberspace and electromagnetic warfare (EW) multipurpose training range at Fort Gordon, GA in fiscal year 2029 that will provide a sophisticated institutional EW training capability for initial entry training for the Army's EW Soldiers. The Army is developing ranges capable of providing a cyber training environment within existing footprints, as well as multi-component training options. The Army is exploring the development of live, virtual, and constructive training capabilities to provide for a more realistic and robust training environment for multidomain operations and opportunities for training integrated with testing and experimentation.

ELECTRONIC WARFARE—MULTI-DOMAIN OPERATIONS

40. Senator PETERS. Secretary Wormuth, on several occasions, the Senate Armed Services Committee (SASC) has expressed concerns about how the Department of Defense is tasked and organized to support Electronic Warfare operations in support of the Joint Force or newly established Multi-Domain Task Forces (MDTF). Although both Cyber and Electronic Warfare personnel are attached to the Army Cyber Branch, EW lacks a 3-star proponent in the Department, and EW capabilities are funded through the Force Development Intelligence (FDI) portfolio—meaning EW funding competes with the intelligence portfolio and priorities. Can you outline what entity owns or will own the manning, training, equipping, budgeting, and capability development for Electronic Warfare operations in the Army?

Secretary WORMUTH. Electromagnetic Warfare (EW) is a warfighting capability which the Army enterprise provides through manning, training, equipping, budgeting, and capability development. The Army Cyber Command (ARCYBER) is the Army's primary Army Service Component Command (ASCC) responsible for directing, and conducting integrated Cyberspace Operations (CO), EW, and Information Operations (IO). ARCYBER is the 3-star ASCC designated to serve as the focal point for identifying, receiving, integrating, synchronizing, and advocating for operational capability requirements through Service, Joint, and DOD-level processes in support of Joint and Service Cyberspace Operations, Information Operations, and Electromagnetic Warfare.

Personnel proponency for EW belongs to the Cyber Center of Excellence aligned under the Combined Arms Center and U.S. Army Training and Doctrine Command (TRADOC). Modernization proponency of EW belongs to Army Futures Command (AFC) for force design and force development and is the capabilities developer and operational architect for the future Army. In addition, the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)) and U.S. Army Materiel Command (AMC) is responsible sustainment and logistics of EW materiel. The Deputy Chief of Staff (DCS), G–3/5/7 is the Army's lead integrator and synchronizer across force modernization time horizons. The G–3/5/7 performs force modernization activities and uses the Army Campaign Plan to execute these activities and reach decisions through the Army Synchronization Meeting. Coordinated and synchronized, ARCYBER will manage EW requirements as the Army Command focused on integrated cyberspace operations and EW capabilities. Last, Forces Command (FORSCOM) along with Human Resources Command (HRC) are responsible for pro-

viding, assigning and stationing of EW Soldiers to ASCCs, Army Commands, Field Operating Agencies and Direct Reporting Units.

41. Senator PETERS. Secretary Wormuth, IF NOT, today's threat environment seems misaligned to picking winners and losers for employing capabilities designed to enhance survivability and lethality during Large-Scale Combat Operations (LSCO) or below the threshold of armed conflict. What do you need from us to push this critical effort across the finish line?

Secretary WORMUTH. The Army is investing in three major EW programs. First is the Terrestrial Layered System (TLS) which provides commanders an integrated SIGINT/EW/Cyber capability at all echelons. Each echelon is tailored for their specific operations and likely adversary signals of interest. Second, is the Multi-Function Electronic Warfare—Air Large (MFEW-AL). This system is an EW pod that supports Divisions and BCTs with all facets of EW. It is currently configured to mount to the Gray Eagle, however, it is platform agnostic. Third, is the Electronic Warfare Planning & Management Tool (EWPMT). EWPMT is the cornerstone for EW capabilities and provides command and control for EW and spectrum management.

TLS is an integrated Ground Tactical SIGINT/EW/ and RF-Enabled Cyber capability. It will be developed in two (2) variants—Brigade Combat Team (BCT) and Echelon Above Brigade (EAB). TLS-Brigade Combat Team (BCT) will be fielded on a platform based on the type of formation (e.g. Stryker for Stryker BCT, Armored Multi-Purpose Vehicle (AMPV) for Armored BCT, and a dismounted manpack for Infantry BCT). The First Unit Issue for Stryker is fiscal year 2024 and fiscal year 2025 for AMPV. TLS-EAB will be fielded on a Family of Medium Tactical Vehicles (FMTV) to MDTFs, Corps, and Divisions with First Unit Issue in fiscal year 2026.

MFEW-Air Large is in the testing phase and will be fielded to Division Combat Aviation Brigades (CABs). First Unit Issue is fiscal year 2025.

EWPMT is a software-based program that provides the Common Operating Picture, situational awareness, and planning capabilities within the Electromagnetic Spectrum. It will synchronize all Army EW efforts and is being fielded in fiscal year 2024.

To push the critical effort of employing EW capabilities with today's threat environment, the Army will work with DOD to ensure enabling policies directives are developed to allow for actions in the electromagnetic spectrum that provide Commander's options to support campaigning and integrated deterrence in support of national defense priorities.

M–SHORAD

42. Senator PETERS. Secretary Wormuth, what is the plan to move beyond the initial four battalion goal for MSHORAD and resource the Army's stated need of up to nine battalions of this critical air defense capability? How can Congress help you achieve your goal of nine battalions?

Secretary WORMUTH. The Army uses all components to resource required capabilities and will welcome any assistance with modernization. Fielding additional Maneuver Short Range Air Defense (M-SHORAD) battalions (BNs) will help tactical formations defeat aerial threats that could limit the Army's ability to conduct multi-domain operations. We have three Active Component M-SHORAD BNs with a fourth activating in fiscal year 2025. The National Guard will convert four Avenger Battalions to M-SHORAD BNs starting in fiscal year 2027 upon materiel procurement. The Army will use future Total Army Analyses to determine how to create additional M-SHORAD BNs in our force structure.

C-UAS

43. Senator PETERS. General McConville, when does the Army intend to resource a counter small, unmanned aircraft system (C-sUAS) single vehicle solution?

General MCCONVILLE. The Army has programmed funding for nine Counter-small Unmanned Aircraft System (C-sUAS) Division Sets to protect critical assets and maneuver formations from the sUAS threat. The current composition of those Division Sets includes the two-vehicle configuration of the Mobile, Low, Slow, Unmanned Aircraft Integrated Defeat System (M-LIDS). The Air and Missile Defense Cross Functional Team (AMD CFT), as the Army's C-sUAS lead for operational requirements and capability development, continues to evaluate new capabilities and emerging technologies to keep pace with the evolving sUAS threat. The Army is assessing opportunities to move toward a single-vehicle configuration at the earliest

opportunity and will request resourcing in the appropriate year. The Army appreciates Congress's continued support as the Army continues to develop C-sUAS capabilities to address the evolving threat.

QUESTIONS SUBMITTED BY SENATOR JACKY ROSEN

REMOTE MAINTENANCE SUPPORT TO UKRAINE

44. Senator ROSEN. Secretary Wormuth, as you saw during your visit to Poland last year, the Army is providing remote maintenance teams to allow Ukrainians on the frontlines to receive immediate advice from U.S. Soldiers on weapons and equipment maintenance. As Ukraine receives more advanced equipment, such as Abrams tanks and the Patriot missile defense system, the demand for these teams and capabilities will grow. What is the Army doing to expand this program and ensure it is equipped to efficiently and accurately respond to requests from the battlefield, particularly as we expect Ukraine to soon mount a counteroffensive?

Secretary WORMUTH. Remote Maintenance Operations (RMO) are conducted at the Remote Maintenance and Distribution Center-Ukraine (RDC-U) in Jasionka/Rzeszow, Poland. While uniformed servicemembers are present to administer the RMO program, remote maintenance is currently being conducted by contracted Field Service Representatives (FSRs) from OEMs and defense industry partners. FSRs directly engage with Ukrainian Armed Forces (UAF) users and depots to identify faults, troubleshoot, and determine repair part requirements via group chats.

There are currently 29 U.S. platforms and 33 International platforms supported by the Remote Maintenance Cell at RDC-U, to include Patriot. FSRs for M1 Abrams are expected to establish presence at RDC-U following the completion of initial training and transfer of Abrams to the UAF.

While the remote maintenance operation concept has been proven to be an essential enabler of UAF combat readiness, office space for FSRs at the RDC-U is quickly becoming limited. The RDC-U command team has requested Special Assistance Group-Ukraine (SAG-U)/J4 to establish a process to validate FSR requirements. Based on the complexity and number of components in a platform or weapon system, the number of FSRs required can vary greatly. For example, there are 45 FSRs at the RDC-U to support the Patriot while there is 1 FSR each for M777 and Bradley Fighting Vehicles.

As an alternative method, several coalition partners support internationally donated platforms by conducting remote maintenance from the host country. This and other alternatives will be a consideration for SAG-U's validation process of FSR requirements. Additionally, all chat rooms are being supported by a pool of contracted interpreters which will be considered as the increased number of FSRs and platforms will require increased interpreter support.

ARMY'S IMPLEMENTATION OF ZERO TRUST

45. Senator ROSEN. General McConville, in November, the Department of Defense released its Zero Trust Strategy and Roadmap, which lists as a key goal technological acceleration at a pace that equals or exceeds industry advancements. I am encouraged by the Army's efforts to accelerate its digital transformation by requesting $439 million for Zero Trust Implementation and $95 million for defensive cyber tools. In addition to funding critical digital infrastructure necessary for Zero Trust implementation, what is the Army's strategy to accelerate its technological advancements?

General MCCONVILLE. The Army completed a comprehensive Network Capability Portfolio Review (N-CPR) of Army network requirements from enterprise to tactical levels to ensure the Army has a complete set of stable requirements for advancing the Unified Network, underpinned by Zero Trust (ZT) principles. The CPR examined network operations, cloud and data center infrastructure, transport, software, services and ZT implementation.

Informed by the N-CPR, the Army Unified Network Plan and Implementation Plan established the strategic direction and specific activities required for the Army to modernize its networks and accelerate initial ZT capabilities during fiscal year 2023–2024.

The Army established the Army Functional Management Office—Zero Trust to synchronize, implement, and execute Army ZT efforts across the enterprise to ensure prioritization, resourcing, and alignment with DOD and Service ZT directives, goals, and objectives.

As part of the strategy, the Army accelerated Identity, Credential, and Access Management, a foundational capability to zero trust, that provides endpoint security

and compliance. Additionally, the Army is collapsing several stovepipe networks under Army Cyber Command to ensure a common security approach across the Army. These accelerated activities underpin enhanced ZT capabilities in fiscal year 2025–2026 to include Software Defined Networking, Data Tagging, and Automated Incident Response. The Army's goal is to reach a complete ZT architecture by fiscal year 2027.

This effort will culminate in a Unified Network based on ZT principles, aligned to the DOD Strategy, and will deliver a survivable, secure, end-to-end capability that enables the Army to operate as part of the Joint Force across the competition continuum in all operational domains.

46. Senator ROSEN. General McConville, how do you plan to allocate resources to attract a sufficiently skilled workforce in this domain?

General MCCONVILLE. The Network Capability Portfolio Review (N-CPR) also addressed the required workforce necessary to develop and maintain a unified network aligned with Zero Trust (ZT) principles. The Army continues to use all authorities by Congress to attract the most skilled workforce in this domain. Specifically, the Army is currently expanding the Cyber Excepted Service alternate personnel system, which provides enhanced flexibilities to recruit, compensate, and retain civilian talent for cyber workforce positions.

Additionally, the Army is capitalizing on workforce flexibilities as a key component in identifying, attracting, and maintaining talent. A current example is the Targeted Local Market Supplement (TLMS), which provides additional compensation incentives for critical cyber work roles. Simultaneously, the Army is developing and employing key execution enablers such as ZT Curriculum for the workforce and Army Regulations that incorporate ZT principles. These efforts will enable us to both attract and maintain a sufficiently skilled workforce.

ARMY'S MULTI-DOMAIN TASK FORCES (MDTFS)

47. Senator ROSEN. General McConville, the Army describes the Multi-Domain Task Forces (MDTFs) as theater-level maneuver elements that are designed to employ long-range precision effects to combat our adversaries' "anti-access/area denial" networks in all domains. The Army has further described the MDTF as the "centerpiece" of its ability to operate in a highly contested multi-domain environment. Should future military engagement in the Taiwan Strait involve our allies and partners, what steps is the Army taking to ensure that the MDTFs can generate multinational interoperability?

General MCCONVILLE. The development of the Multi-Domain Task Forces has always been intended to provide the range, speed, and convergence of cutting-edge technologies that gives the Joint Force Commander the decision dominance and overmatch required to fight and win.

The Army has collaborated with key Allies in the development of some of the technologies that are organic to the MDTF as well as collaboration in exercises with those Allies related to the employment of this new formation. During Project Convergence 2022, the Army prioritized assessing the all-service ability to connect and collaborate with allied nations.

The Army will be able to integrate with Allies or partners in the employment of certain capabilities of the MDTF while ultimately providing the Joint Force with the overmatch necessary to fulfill the Combatant Commander's requirements. Examples of this integration is IAW the Australia, United Kingdom, United States (AUKUS) tri-signed Statement of Intent to develop and provide joint advanced military capabilities to promote security and stability in the Indo-Pacific region.

48. Senator ROSEN. General McConville, is there a plan to station future MDTFs in, or closer to, theater in an effort to better integrate our multinational partners?

General MCCONVILLE. Ultimately, the decision to station forces overseas is reserved for the Secretary of Defense and the National Security Council. Based on the priorities established in the National Defense Strategy, the Army will determine the appropriate support to the Pacific, Europe, and integrated deterrence.

QUESTIONS SUBMITTED BY SENATOR MARK KELLY

HUMAN MACHINE TEAMING

49. Senator KELLY. Secretary Wormuth, as Chair of the Airland Subcommittee, I met with General Rainey, the commander of Army Futures Command, a few weeks ago. We had a great conversation about the success of the last Project Con-

vergence exercise at Yuma Proving Ground in Arizona, as well as some of his priorities. We talked about development of uncrewed vehicles and the ability to offload menial tasks, logistics, re-supply capabilities on machines. I see a lot of potential with human-machine teaming. We've seen the success in the air with remotely piloted aircraft, and I want to see success on the ground. What is your vision for how you see human-machine teaming working in the future for the Army?

Secretary WORMUTH. Human machine teaming is a complicated initiative with exciting possibilities for the reduction in cognitive load for soldiers, increased operational capabilities at every level from the squad up, and enhanced logistics to remove soldiers from harm's way by reducing the need for human operators in certain circumstances. The Army is investing $74.3 million (Science and Technology (S&T)) in fiscal year 2024 to address the questions of how to integrate human-machine teams, and how to best leverage the unique strengths of human-machine teams. Key research areas for human-machine teaming for autonomy include the allocation and switching of operational tasks to both human and machine team members; enabling soldiers to rapidly train and adapt machines in the field; a means to assess human-machine teams; and tools to enable mission planning and after mission assessment. S&T initiatives are demonstrating flexible, adaptive interactions between soldiers and unmanned assets including in the areas of autonomous mobility technologies and weapon engagement systems to enable robust manned-unmanned team dynamic environments. The Army's goals are to demonstrate data-driven task handoff in 2024, dynamic-retasking and custom situational awareness by role in 2026, with more natural interactions being demonstrated in 2028.

50. Senator KELLY. Secretary Wormuth, this is something I hear about from innovators in Arizona. How are you thinking about onboarding these capabilities?

Secretary WORMUTH. Onboarding and leveraging the full potential of Robotic Enabled Maneuver requires an integrated and phased approach. Interdependent and mutually supporting themes of soldiers, data, and technology will adapt and undergo a cultural change to deliver a modern capability that can be constantly adapted in response to both threats and tech maturity. Key to aligning and delivering Robotic Autonomous System capabilities is the development of suitable processes and trust, all of which underpin the effective employment of Robotic Enabled Maneuver.

51. Senator KELLY. Secretary Wormuth, how will these efforts support us in future conflicts?

Secretary WORMUTH. Robotic and autonomous systems will exist in future conflicts operating both with and against U.S. forces. The challenge is to learn how to best use robotic and autonomous systems to gain and maintain the advantage on the battlefield. AFC's campaign of persistent experimentation is designed to drive the learning that gives us that advantage.

52. Senator KELLY. Secretary Wormuth, what is the roadmap for development, and how does the Army's budget request support these efforts?

Secretary WORMUTH. Human machine teaming is a complicated problem with exciting possibilities for the reduction in cognitive load for soldiers, increased operational capabilities at every level from the squad up, and enhanced logistics to remove soldiers from harm's way by reducing the need for human operators in certain circumstances. Science and Technology (S&T) is investing $74.3 million in fiscal year 2024 to answer the questions of how to integrate human-machine teams, and how to best leverage the unique strengths of human-machine teams. Key research areas for human-machine teaming for autonomy include the allocation and switching of operational tasks to both human and machine team members; enabling soldiers to rapidly train and adapt machines in the field; a means to assess human-machine teams; and tools to enable mission planning and after mission assessment. S&T is demonstrating flexible, adaptive interactions between soldiers and unmanned assets including autonomous mobility technologies and weapon engagement systems to enable robust manned-unmanned team dynamic environments. The Army's goals are to demonstrate data-driven task handoff in 2024, dynamic-retasking and custom situational awareness by role in 2026, with more natural interactions being demonstrated in 2028.

53. Senator KELLY. Secretary Wormuth, what obstacles do you see in the future with these efforts, and is there anything Congress can do to help?

Secretary WORMUTH. The biggest obstacles to the Army's development and fielding of ground maneuver robotics systems include the development of technologies and software for autonomous cross-country maneuver and human-machine inte-

grated command and control. Rapid technological advances in these areas are primarily driven by Army investments since commercial industry focuses on on-road autonomous technologies. Additional Army funding would increase the speed of innovation and support the accelerated development of the Army's marquee ground robotics effort—the Robotic Combat Vehicle (RCV).

Additional funding for the RCV program will enable the Army to accelerate development of human-machine teams capable of fighting as a robotic enabled maneuver element, which combines crewed combat and control vehicles with robotic combat vehicles capable of performing in operationally relevant off-road, all-weather, and limited visibility combat conditions. Further, the Army would be able to accelerate the development of a robust and resilient network and modular payload integration on the RCVs. These payloads enable Army formations to counter the increased threat of enemy unmanned aerial systems, employ electronic warfare capabilities, and launch loitering munitions. Increased funding for software development would improve the RCV's cross-country mobility and enable the transfer of more tasks from remote operation to autonomous operation, which would reduce soldiers' cognitive loads and accelerate the decisionmaking process.

QUESTIONS SUBMITTED BY SENATOR ROGER WICKER

MEDEVAC OPERATIONS

54. Senator WICKER. Secretary Wormuth and General McConville, as we look to improve the readiness of the Army in a Great Power competition, the speed and consistency of things like MEDEVAC operations take on a new level of urgency. The longer a helicopter is in a hovering position to extract a wounded soldier, the more our soldiers and aircraft are at risk to incoming enemy fire and engine failure related incidents. Any accelerating capability would also have a dual use during peacetime, as MEDEVAC-like operations are routinely conducted by the National Guard in search and rescue missions following natural disasters. What dual use capabilities are currently being evaluated by the Army that would accelerate and improve the confidence of these extractions in the field, and is there anything we can do to accelerate the adoption of these capabilities into the Army and National Guard?

Secretary WORMUTH and General MCCONVILLE. Currently, the Army has three operational techniques for Medical Evacuation (MEDEVAC) missions, with a fourth one under user testing. These techniques can be used in both combat and homeland support scenarios. At present, there are no suggestions to speed up the adoption of these strategies since they are in the developmental testing phase or currently being used. Three systems (dynamic hoist, tag line, and Vita Rescue System-Litter Attachment (VRS-LA)) are currently in development. One technology, the Cascade Rescue Stable Flight Heli-Bag, was recently approved for use on Army Aircraft, the Heli-Bag uses an aerodynamic brake (rudder) to mitigate the spin and oscillation caused by rotor downwash. It provides patient immobilization and containment. This system can be combined with the dynamic hoist technique or used during stationary hovering. It's presently being utilized by certain Army National Guard and Special Operations Units.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

MUNITIONS PRODUCTION

55. Senator COTTON. Secretary Wormuth, the Russian invasion of Ukraine highlighted a longstanding problem in our defense industrial base. Our nation simply does not produce munitions fast enough. This is not about Ukraine depleting our war stocks—most of the munitions used in Taiwan would be fundamentally different than the ones used in Ukraine. This is about the fact that Ukraine has exposed some cracks in our defense industrial base that we need to shore up to ensure our national security. Here's some sobering facts: In 1945, the U.S. operated 86 ammunition plants. Today, we operate five. In 1 week, the Ukrainian military fires more 155mm artillery shells than the U.S. produces in a month. In the first 8 months of the war, the Ukrainians launched more Javelin antitank missiles than the U.S. produces in 5 years, and fired more Stinger anti-aircraft missiles than we manufacture in 13 years. Beyond Ukraine, war games have shown that the U.S. would run out of some munitions in less than 1 week in a Taiwan conflict. While DOD has made significant strides in beginning to increase our munitions stockpile, I remain concerned about the scale and efficiency of its munitions production. We must act

with the urgency this situation requires. What concrete steps are you taking to decrease delivery times?

Secretary WORMUTH. In order to accelerate deliveries, the Army is reducing acquisition and contracting lead times by taking advantage of the new authorities granted by Section 1244 of the fiscal year 2023 National Defense Authorization Act that allow for streamlined staffing of Justification and Approval documents and increased flexibilities for Undefinitized Contract Actions. The Army is also working to reduce production lead times by ramping up capacity where the Army can and employing second and third-shifts on certain production lines.

Additionally, the Army is working in close coordination with industry partners on three lines of effort to accelerate and increase deliveries: 1) the expansion and modernization of government-owned, contractor operated facilities; 2) the establishment of contractor owned, contractor operated second sources; and, 3) leveraging international partnerships for end items and component production.

Last, the Army is using supplemental funds provided by Congress to shore up current production lines and add additional production lines to expedite the replenishment of U.S. stockpiles.

56. Senator COTTON. Secretary Wormuth, what are your main challenges?

Secretary WORMUTH. The Army's main challenges are speeding up facility modernization, increasing production capacity in a timely fashion to support present requirements, and forecasting future requirements from allies. In addition, the Army has identified certain munitions components and precursor materials—such as propellants and explosives, and nitrocellulose—that are experiencing supply challenges due to a spike in global demand. The Army is currently exploring means to secure those sources of supply, including options to onshore many of them.

57. Senator COTTON. Secretary Wormuth, what can Congress do to break down barriers for you?

Secretary WORMUTH. Congress is providing key support to enable the Army to rapidly respond to Russia's war against Ukraine and to expand production capacity within the munitions industrial base. In particular, the Army is greatly benefited from the temporary contracting and acquisition authorities provided under Section 1244 of the fiscal year 2023 National Defense Authorization Act that have allowed the Army to more rapidly award contracts to provide capabilities to Ukraine, to allies and partners who are assisting Ukraine, and to replenish domestic stocks. Importantly, Section 1244 also provides the authority to enter into multiyear contracts for a select set of munitions. The Army plans to use this authority for munitions in fiscal year 2023 and have requested congressional approval to enter into multiyear procurements (MYP) in fiscal year 2024. These MYPs provide production stability and predictability to industry partners, allowing us to build and sustain capacity within the defense industrial base, while achieving cost savings for the government. Additionally, congressional support of the Army's fiscal year 2024 budget request will be valuable as the request includes significant funding for a range of munitions, including precisions munitions and artillery ammunition, as well as investments in the munitions industrial base.

58. Senator COTTON. Secretary Wormuth, bolstering our defense industrial base it critical. Multi-Year procurement authorities are one of the ways we can help provide a steady demand signal to defense companies. Per your budget request, the Army still has yet to leverage Multi-Year procurement authorities but have stated you are looking at it for the PAC–3 (patriot anti-aircraft system missile) and the GMLRS (artillery round). When should we expect to see that?

Secretary WORMUTH. The Army has submitted MYP requests to Congress for PATRIOT Advanced Capability (PAC–3) Missile Segment Enhancement (MSE) and Guided Multiple Launch Rocket System (GMLRS).

The Army also submitted fiscal year 2023 MYP requests for the 155mm M1128 projectile program and the Modular Artillery Charge System program. Initial contract awards for these programs are expected in fiscal 2023.

59. Senator COTTON. Secretary Wormuth, why are you only using these authorities for two systems?

Secretary WORMUTH. In addition to the four planned MYP opportunities already identified, the Army continues to explore additional systems where use of MYP authority may make sense. The four planned MYP contracts were identified due to the priority of the requirement and, moving forward, we will take a managed risk approach prior to applying the authority to more programs. One of the key challenges in implementing MYP contracts is having a stable funding profile over time. Histori-

cally, the ammunition portfolio has not had stable funding profiles, and thus has not met the criteria for MYP implementation.

60. Senator COTTON. Secretary Wormuth, PrSM is one of your key long range fires capabilities. Have you considered multi-year procurement for PrSM?

Secretary WORMUTH. The Army is not considering utilizing MYP authority for the Precision Strike Missile (PrSM) program at this time. PrSM, Increment 1, continues to execute the engineering and manufacturing development (EMD) phase of the program through fiscal year 2025. Key activities include Production Qualification flight Testing and validating the missile design meets Key Performance Parameters requirements. Once completed, the program will conduct a Production Readiness Review and request Milestone C approval for Full Rate Production (FRP). Based on the current program plan, MYP would be considered beginning in fiscal year 2026 at the earliest. In the interim, PrSM will begin delivering limited quantities of Early Operational Capability missiles in 4th quarter fiscal year 2023 and continue until FRP occurs.

61. Senator COTTON. Secretary Wormuth, are there steps you can take to accelerate its delivery?

Secretary WORMUTH. The program could conduct analysis with the prime contractor and key missile component suppliers to add shift work, additional overtime, examine supply chain bottlenecks, and other factors, to accelerate PrSM production. Currently, the program is executing two more years of technical integration, test, and manufacturing development to mature and document the design and associated technical data, therefore an acceleration of deliveries is not advisable until the program achieves Full Rate Production in fiscal year 2025.

62. Senator COTTON. Secretary Wormuth, will you still be able to effectively execute multi-year procurement authorities under a continuing resolution?

Secretary WORMUTH. Yes, the Army will be able to effectively execute MYP under a continuing resolution. The programs that the Army has identified for MYP contracts are not new starts. Therefore, each system can be funded up to the level of what was appropriated in fiscal year 2023.

63. Senator COTTON. Secretary Wormuth, another key vulnerability of our munitions base is our reliance on foreign nations—at times sworn enemies—for essential materials. DOD does not purchase any munitions fully sourced in the U.S.—not a single bullet, bomb, or missile. Secretary Wormuth, can you tell me what percentage of the Army munitions supply chain relies on China?

Secretary WORMUTH. The Army is currently executing a Munitions Assurance program with the goal of identifying and mitigating those components or precursor materials that come from foreign sources. Mitigation plans include, but are not limited to, onshoring the components and materials in question, and developing new products that "design out" the material or component. The Army can provide additional detail in a classified setting.

64. Senator COTTON. Secretary Wormuth, do you believe any dependence is acceptable?

Secretary WORMUTH. I believe that dependence on critical materials from potentially adversarial nations is not within our national interest, and that is why sourcing mitigating dependence of foreign sources is a top priority for management of the industrial base.

65. Senator COTTON. Secretary Wormuth, are you worried that China would attempt to cutoff our access to rare earth material critical to our munitions development the way they did with Japan in 2010?

Secretary WORMUTH. I would expect any potential adversary to utilize all their levers of power if deemed advantageous to their aims.

66. Senator COTTON. Secretary Wormuth, what steps are you taking to end this dependence?

Secretary WORMUTH. The tools available to the Army for mitigation include: 1) The ability to establish safety stocks or stockpiles of materials where that is feasible and warranted, 2) The establishment of domestic, National Technology and Industrial Base (NTIB), or at least friendly nation sources of supply, and 3) Designing problematic materials out of the supply chain to eliminate the risk posed by them.

Authorities granted to expand the National Stockpile have enabled the addition or expansion of several materials important to munitions production. The Army has

and will continue to leverage the authorities provided under Defense Production Act Title III to establish domestic or NTIB sources of supply for materials sourced from potentially adversarial nations. In addition, Defense Logistics Agency sponsored Small Business Innovative Research efforts are being leveraged to establish more favorable sources of supply for materials. Science and Technology efforts are underway to design alternate paths to achieve munitions solutions that do not require materials sourced from potentially adversarial nations. Once mature, these solutions would be transitioned into munitions programs.

67. Senator COTTON. Secretary Wormuth, Army stated that much of your munitions' requirements have been met by Ukraine supplemental funds, which are not reflected in this budget. What is your estimate of how much funding you have or will received from the appropriated supplemental funds?

Secretary WORMUTH. To date, the Army has received $2.1 billion in Ukraine supplemental funding for munitions.

68. Senator COTTON. Secretary Wormuth, are you confident that this request, in addition to Ukraine supplemental funding already provided, will allow you to replenish your stocks to maintain U.S. readiness?

Secretary WORMUTH. The Army is confident that the supplemental funding requested will be approved for distribution to the Army for replenishment.

69. Senator COTTON. Secretary Wormuth, as the war in Ukraine has shown, our allies' munitions stockpiles will be crucial to any future conflict. What steps are is the Army taking to ensure our allies have the munitions they need in case of conflict?

Secretary WORMUTH. The Army is working with allies to replenish munitions stockpiles by supplementing current production lines with U.S. munitions. This is based on ally stock requirements and current production efforts to support replenishment efforts within ally industrial bases. The Army is also working closely with allies to make munitions fully interoperable with their weapons and fire control systems.

70. Senator COTTON. Secretary Wormuth, are there any additional authorities or resources you need?

Secretary WORMUTH. The Army has received considerable support from Congress to enhance munitions production. Specifically, the temporary authorities provided under Section 1244 of the fiscal year 2023 National Defense Authorization Act enable the Army to accelerate munitions production through contracting flexibilities and the authority to commit to multiyear procurement contracts for select munitions beginning in fiscal year 2023. The Army will work with Congress to assess the need for extending or modifying these authorities, as appropriate, given the ongoing conflict in Ukraine. Additionally, the supplemental funding provided by Congress has allowed the Army to meet many of its munitions-related requirements. The Army's fiscal year 2024 budget request includes significant additional funding for a range of munitions and investments in the munitions industrial base. Congressional support for this request will enable the Army to continue meeting those requirements.

71. Senator COTTON. Secretary Wormuth, the Army budget invests in the defense industrial base, with $726 million slated for ammunition facilities and another $115 million for modernization and upgrades for depots that work on weapons and tracked combat vehicles. Will this funding provide you with adequate capacity to meet all of your munition production goals?

Secretary WORMUTH. At this time, yes. However, efforts to further accelerate artillery production are being developed and if approved by OSD will be provided to Congress in the near future. In addition, the replenishment funding provided to the Army to date is adequate for replenishing stockpiles and supporting Ukraine efforts for present and forecasted worldwide munitions requirements.

72. Senator COTTON. Secretary Wormuth, if not, where do you need additional investment to expand capacity?

Secretary WORMUTH. Likely, the Army will need additional investment to expand capacity. The Army is working on needed investments in artillery shell and propellant charge production to further accelerate and sustain the planned ramp up in production. The Army is working to get that to Congress for consideration in a Ukraine Replenishment Tranche request very soon. In addition, there are enduring requirements outlined in the Army Ammunition Modernization Plan that will help

sustain the needed capacity. The report is provided to Congress on a yearly basis, with the latest delivered in March 2023.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

DEPARTMENT OF EDUCATION NONCOMPLIANCE

73. Senator ERNST. Secretary Wormuth, would you agree that those administrators of schools that deny access to recruiters are harming your recruitment effort?

Secretary WORMUTH. Administrators who deny or limit the access of Recruiting noncommissioned officers (NCO) into schools impede the Army's recruiting ability. Meaningful, face-to-face interactions between our Recruiting NCOs and potential applicants is the best way for students to learn about the opportunities and benefits the military offers and what military service is really like. In schools where Recruiting NCOs are unable to speak with students, or are not supported by administrators and teachers, it is difficult to ensure those youth are aware of the opportunities and benefits available to them through military service. Recruiting NCOs are not seeking access to convince every student to join, but instead to have the opportunity to educate today's youth about opportunities, benefits, and the role the Army plays in supporting and defending the Constitution; in the end allowing students to make informed decisions about their future.

74. Senator ERNST. Secretary Wormuth, would you further agree that the Federal Government must enforce the law—including by withholding funds?

Secretary WORMUTH. Withholding Federal funding is an available tool. However, in most cases, access issues can be resolved through leader engagement. Professional relationships between Army Recruiters and the school administration are crucial and when local, State, and Federal leadership also support those relationships, it is truly invaluable. The Army fully recognizes that school districts have State and local education requirements that must be met during the calendar year and the Army's Recruiting NCOs do their best to work with schools to achieve the best balance to achieve mutual success. The Army continues to work with local education officials to improve access and in most cases, issues of denying access can be resolved through proactive leader engagement at all levels. This approach opens doors for Recruiting NCOs to develop rapport with school administrators, teachers, and student bodies. It takes time, but quality, meaningful access is almost always achieved as relationships and trust develop. The Army also supports a whole-of-government approach to ensure relationships are built, sustained, and where needed, created if they are not present. Local, State and Federal leadership and agencies play a crucial role in developing trust and sustaining meaningful relationships.

75. Senator ERNST. Secretary Wormuth, what are you going to do to ensure recruiter access?

Secretary WORMUTH. Army leaders continue to work with our local recruiting partners (Civilian Aides to the Secretary of the Army (CASAs), influencers, community partners, Superintendents etc.) to increase meaningful access to schools. For example, in January 2023, U.S. Army Recruiting Command (USAREC) reported approximately 400 of 17,000 high schools denied access to Recruiters. However, USAREC made significant progress by leveraging CASAs, Army Reserve Ambassadors, and local leaders and regained access to all but one high school between January and March 2023. The Army continues to experience success accessing student populations across the country. One example is through USAREC's "High School Blitz" in which they conduct hundreds of high school engagements on a weekly basis. A few challenges that recruiters have faced include the belief that college remains the only viable option for post-high school education, which further creates a disconnect between communities and the military. Recruiters are overcoming this challenge as they continue to develop a positive rapport with school administrators, teachers, and student bodies. These relationships take time but significant progress is being made in building relationship that led to open lines of communication and fact sharing.

76. Senator ERNST. Secretary Wormuth, will you commit to report back on your progress in 60 days?

Secretary WORMUTH. Yes—the Army can provide an update for full transparency in efforts to improve meaningful access to high schools across the country.

PREVENTING THREATS TO NATO

77. Senator ERNST. General McConville, has degradation of Russia's military likely decreased our operational requirements in Europe?

General MCCONVILLE. DOD continues to assess the operational requirements in Europe following Russia's invasion of Ukraine. The Army contributes to the ongoing evaluation of requirements in Europe to ensure the right capabilities fulfill requirements while preserving the readiness of forces. The Army continues to provide trained and ready forces to Europe to support operational requirements determined by the Commander, U.S. European Command and approved by the Secretary of Defense. Rotational and forward-stationed Army forces in Europe are actively contributing to deterrence by integrating with Allies and partners and participating in training exercises. It is important to note that only Russia's conventional ground forces have been degraded and they still remain a significant threat. Also, Russia still remains lethal air, naval, hybrid, and strategic/non-strategic nuclear capabilities. For this reason, deterrence and defense of Europe through NATO will remain a priority.

GROUND-BASED MISSILE CAPABILITIES IN WESTERN PACIFIC

78. Senator ERNST. General McConville, would U.S. ground-launched, theater-range missiles in the Western Pacific help availability of persistent, prompt, and survivable strike options?

General MCCONVILLE. Yes, the synergy and the varied capabilities of the services long range fire capabilities work in concert to provide complex dilemmas for an adversary allowing the DOD to synchronize efforts against singular or numerous targets simultaneously. Missile platforms are rapidly transported via air or sea to engage enemy forces throughout the Western Pacific which avoids lingering to become targets for enemy counter fire.

79. Senator ERNST. General McConville, would U.S. ground-launched, theater-range missiles in the Western Pacific help deter of enemy attack or escalation?

General MCCONVILLE. Yes, U.S. ground-launched, theater-range missiles in the Western Pacific in mutually supporting relationships with their air and maritime launched counterparts provide a combined arms threat to enemy forces. This increased lethality affects enemy decision calculus and contributes to deterring attack or escalation by greatly increasing the joint force's capability to impose operational costs on enemy forces. In addition, the inclusion of ground-launched theater-range missile capability requires the enemy to allocate kinetic and non-kinetic resources to seek and destroy these assets diminishing enemy capacity to concentrate efforts on a singular DOD service.

80. Senator ERNST. General McConville, would U.S. ground-launched, theater-range missiles in the Western Pacific help impose of operational costs on enemy forces?

General MCCONVILLE. Yes, U.S. ground-launched, theater-range missiles in the Western Pacific in mutually supporting relationships with their air and maritime launched counterparts provide a combined arms threat to enemy forces far beyond the threat that each individual platform would pose individually. This increased lethality greatly increases the joint force's capability to impose operational costs on enemy forces and contributes to deterring attack or escalation by affecting enemy decision calculus.

81. Senator ERNST. General McConville, would U.S. ground-launched, theater-range missiles in the Western Pacific help deliver responsive strikes against time-critical enemy targets?

General MCCONVILLE. Yes, the persistent presence of U.S. ground-launched, theater-range missiles in the first and second island chains provides a proximity and high reload speed that helps deliver responsive strikes against time-critical targets. In mutually supporting relationships with their air and maritime launched counterparts, ground launched capabilities provide a combined arms threat to enemy forces far beyond the threat that each individual platform would pose individually.

82. Senator ERNST. General McConville, would U.S. ground-launched, theater-range missiles in the Western Pacific help destroy high-value targets to enable other joint forces?

General MCCONVILLE. Yes, U.S. ground-launched, theater-range missiles in the Western Pacific with their persistent presence, high reload speeds, and proximity to enemy targets form a mutually supporting relationships with their air and mari-

time launched counterparts and provide a combined arms threat to enemy forces far beyond the threat that each individual platform would pose individually.

83. Senator ERNST. General McConville, would U.S. ground-launched missiles at various ranges and launch locations in the Western Pacific create dilemmas for enemy forces?

General MCCONVILLE. Yes, U.S. ground-launched, theater-range missiles in the Western Pacific with various capabilities complicate enemy decision calculus to include ranges and launch locations creating dilemmas for an adversary through supporting relationships from multiple domains providing long range fires from air, ground, and maritime launched (both from the surface and sub-surface fleet) creating a joint combined arms threat to enemy forces far beyond the threat that each individual platform would pose individually.

SHORT RANGE AIR DEFENSE SYSTEMS

84. Senator ERNST. Secretary Wormuth and General McConville, what is the plan to move beyond the initial 4 battalion goal for MSHORAD and resource the Army's stated need of up to 9 battalions of this critical air defense capability?

Secretary WORMUTH and General MCCONVILLE. The Army utilizes all components to resource required capabilities and will welcome any assistance with modernization. Fielding additional M-SHORAD Battalions will help the Army's tactical formations defeat aerial threats that could limit ability to conduct multi-domain operations. The Army will have to balance increased force structure to modernize the Army of 2030. Guided by the National Defense Strategy, the Army is in the process of determining how and where to make these changes. Once analysis is complete and documented in structure, the Army will assess impacts to modernization priorities and Army procurement.

85. Senator ERNST. Secretary Wormuth and General McConville, what is the Army's current timeline to resource a counter small, unmanned aircraft system (C-sUAS) single vehicle solution?

Secretary WORMUTH and General MCCONVILLE. The Army has programmed funding for nine C-sUAS Division Sets to protect critical assets and maneuver formations from the sUAS threat. The current composition of those Division Sets includes the two-vehicle configuration of the Mobile, Low, Slow, Unmanned Aircraft Integrated Defeat System (M-LIDS). The Air and Missile Defense Cross Functional Team (AMD CFT), as the Army's C-sUAS lead for operational requirements and capability development, continues to evaluate new capabilities and emerging technologies to keep pace with the evolving sUAS threat. The Army is assessing opportunities to move toward a single-vehicle configuration at the earliest opportunity and will request resourcing in the appropriate year. The Army appreciates the continued support from Congress as the Army continues to develop C-sUAS capabilities to address the evolving threat.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

MULTI-DOMAIN TASK FORCES IN ALASKA

86. Senator SULLIVAN. Secretary Wormuth and General McConville, since 2017, the Army has fielded three theater-specific multi-domain task forces capable of employing long-range precision effects to include intelligence collection and precision strikes. Currently, two of the Army's multi-domain task forces are concentrated on the PACOM AOR and the third is focused on EUCOM/ AFRICOM. Currently, the Army is looking to field a fourth and possibly a fifth multi-domain task force. Your department's Arctic strategy states "with increasing levels of adversary activities in the region, it is essential for the U.S. Army to employ a calibrated force posture with units that are manned, trained, and equipped to maintain a credible deterrence and the first line of defense of the homeland." The study additionally rightfully points out the Arctic's place as a center of Strategic Competition. With the importance of the Arctic as laid out in your strategy on the region and the Army's interest in creating two more theater-specific multi-domain task forces, can you please speak to the benefits of having the next multi-domain task force in Alaska?

Secretary WORMUTH and General MCCONVILLE. MDTF stationing is a decision reserved for the Secretary of the Army. The Headquarters, Department of the Army develops options to station our limited resources based on operational requirements found in the National Defense Strategy (NDS) and the Defense Planning Guidance (DPG). The Army Staff is still currently assessing those requirements in our annual

Total Army Analysis (TAA) that will be approved by the Secretary of the Army. Specific for the Arctic, all Arctic-capable force structure decisions will be aligned with the National Strategy for the Arctic Region and other relevant posture guidance. The Army fully realizes and values that Alaska is an ideal location for the development of new capabilities applicable to cold weather environments and for the threats unique to the region.

11TH AIRBORNE DIVISION

87. Senator SULLIVAN. Secretary Wormuth and General McConville, as you know, last June, on the anniversary of D-Day to be exact, the 11th Airborne Division or "Arctic Angels" was stood up at Joint-Base Elmendorf-Richardson in Anchorage. Prior to the stand up, the U.S. Army's Alaska Headquarters was suffering from an identity crisis which unfortunately was contributing to a mental health crisis among the soldiers in my State. Since its stand up, the 11th Airborne Division under General Eifler and Sergeant Major Daly has been nothing but remarkable for the morale of soldiers stationed in Alaska. In fact, as you both know, Alaska is now the top requested duty station in the country. Over the last few months, the 11th Airborne Division completed a forced entry airfield seizure in Scandinavia and next week will conduct an exercise called the "Joint Pacific Multinational Readiness Center-Alaska Exercise." What lessons has the army learned on the 11th Airborne's successes that can be applied to other service's other divisions?"

Secretary WORMUTH and General MCCONVILLE. The Army is very proud of everything that the 11th Airborne Division has accomplished since standing up last summer, as the cutting edge of the Army's Arctic capability. In addition to what the Army is learning on the ground in Alaska about Arctic operations, there are two broader lessons that could be applied across the force.

The first is a strong reminder that America's soldiers are always ready to face a challenge, no matter how great, as long as the Army ensures a clear sense of purpose. In the case of the 11th Airborne Division, this meant orienting on the developing strategic importance of the Arctic, but every formation has a distinct purpose that should animate everything from its training to a sense of *esprit de corps.*

The second lesson is on the importance of symbols like the maroon beret of the paratrooper or the storied patch of the 11th Airborne Division under which the Army pulled Alaska-based forces together. Symbols have an important role in building collective identity and pride. Soldiers are motivated by those distinctive elements that mark them as experts or identify challenges they have overcome. The Army continues to harness the potential of distinctive symbols that create a sense of purpose and belonging attractive to recruits, for diverse units across the Army.

SUICIDE PREVENTION IN ALASKA

88. Senator SULLIVAN. Secretary Wormuth and General McConville, as you know, unfortunately on Monday a soldier in Alaska died by suicide. While the suicide rate among soldiers assigned to Alaska has dropped, from 17 in 2021 to 6 in 2022, we can all agree that one is too many. I do want to commend both your and the rest of the Army's response on this difficult, difficult issue. Part of your response so far has included sending 40 mental health counselors to Alaska. However, I think we can all agree there is more to be done. I have tried to work alongside you to also prevent suicide including my introduction of the Don Young Arctic Warrior Act in last year's NDAA which sought to provide additional services including a home leave demonstration program and special pay for cold weather operations. Again I want to highlight what you both have done so far but can you please tell us what other important steps the Army is taking this year to prevent suicide?

Secretary WORMUTH and General MCCONVILLE. To get at the root cause of suicide and other harmful behaviors, the Army is shifting from responding to events to an integrated primary prevention model as the Army continues efforts to enhance leader engagement; strengthen individual, unit, and community resilience and connectedness; and mitigate stressors that may lead someone to suicide. This comprehensive approach focuses on the integration of a variety of primary prevention and intervention strategies and activities.

In addition, the Army continues to invest in upstream prevention efforts like quality-of-life improvements, sponsorship for new soldiers and families coming into a new unit, and financial literacy to help soldiers and families thrive and navigate the challenges they might face in Army life. The Army will soon publish a standalone suicide prevention regulation and Lethal Means Safety Toolkit.

The Army is actively participating in the DOD working group that is developing the roadmap for implementation of the Suicide Prevention and Response Inde-

pendent Review Committee's (SPRIRC) recommendations. In addition, the Army is proactively addressing the Secretary of Defense's immediate actions directed following the release of the SPRIRC report. Specifically, the directive that Commanders at all levels promote mission readiness through healthy sleep throughout the force.

Again, the Army appreciates Senator Sullivan's support of Army Suicide Prevention efforts. The Army is dedicated to eliminating these tragedies and will not stop until this critical task is accomplished.

WOKEISM IN THE MILITARY

89. Senator SULLIVAN. Secretary Wormuth and General McConville, I want to point out some of the excellent messaging you have created in your recent advertisements which really get at the "Be All You Can Be" spirit of the Army and drive home what our military should be doing, which is increasing lethality and readiness. As you both know, I was confused like many others on the target audience of the "Calling" series last year which featured one segment in particular called "Emma." Additionally, I want to point out as I did in our hearing on recruitment that continued messaging on fake extremism in the military by left-leaning publications is damaging to our Army's recruitment efforts. What is the Army's strategy to ensure wokeism and false allegations of extremism in the military are countered so that we are not pushing away potential recruits from serving their country?

Secretary WORMUTH and General MCCONVILLE. In the current competitive labor market, there are multiple options for young Americans. To compete in this market, the Army continues to tell its story in new ways to ensure the Army remains a top choice for those Americans who want to serve their country. Through the re-introduction of the "Be All You Can Be" campaign, the Army is reaching out to Americans from all backgrounds, talents, and regions and give them multiple reasons to come in and stay in the Army. The U.S. Army is committed to providing opportunities for every American who wishes to serve their country. With that, the Army continues to invest in our country's youth through programs focused on improving test taking skills, advanced degree programs, and safe and effective weight loss training.

THE ARMY'S ARCTIC STRATEGY

90. Senator SULLIVAN. Secretary Wormuth and General McConville, in August 2022, the U.S. Army announced the first BAE-produced BvS 10 "Beowulf" Cold Weather All-Terrain Vehicle (CATV) would be delivered to the U.S. Army Northern Warfare Training Center in Fort Wainwright, Alaska in 2023. In what month do you expect the first CATVs to be delivered to Alaska?

Secretary WORMUTH and General MCCONVILLE. The first Cold Weather All-Terrain Vehicles is anticipated to be delivered to Alaska by September 2023.

QUESTIONS SUBMITTED BY SENATOR ERIC SCHMITT

FUTURE SOLDIER PREPARATORY COURSE (FSPC)

91. Senator SCHMITT. Secretary Wormuth, I was encouraged and interested to learn from your testimony about the early success of the Future Soldier Preparatory Course (FSPC) pilot program. Have the candidates who successfully completed the FSPC continued to basic training only at Fort Jackson, or were some also transferred to other basic or One Station Unit Training sites as well?

Secretary WORMUTH. Future Soldier Preparatory Course pilot program graduates primarily attend either Basic Combat Training (BCT) at Fort Jackson or One Station Unit training either Fort Moore or Fort Leonard Wood based on their contracted Military Occupational Specialty. In rare cases, some may attend training at another BCT location.

92. Senator SCHMITT. Secretary Wormuth, last week, Under Secretary Camarillo testified that the Army will grow the FSPC with "two additional companies at Fort Jackson, South Carolina, and two companies at Fort Benning, Georgia." I think it is great that the Army is expanding the program. Are there currently plans to expand FSPC into other basic training sites like Fort Leonard Wood?

Secretary WORMUTH. At this time, further expansion is not required based on capacity at Fort Jackson and Fort Moore. However, the Army does have conditions-based decisions to expand to other training locations if necessary.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, APRIL 18, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

NAVY POSTURE

The Committee met, pursuant to notice, at 9:29 a.m. in room SD–106, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Blumenthal, Hirono, Kaine, King, Warren, Peters, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Good morning. The Committee meets today to receive testimony on the President's Budget Request for the Department of the Navy (DON) for fiscal year 2024.

I would like to welcome the Secretary of the Navy Carlos Del Toro, Chief of Naval Operations Admiral Michael Gilday, and Commandant of the Marine Corps General David Berger.

We are grateful for your service, for the service of the men and women under your command, and for the support of all Navy and Marine Corps families. Thank you.

Admiral Gilday, General Berger, this will be your last posture hearing before the Committee in your current role. I would like to thank you for your remarkable leadership of the Navy and the Marine Corps as well as your many decades of service to the Nation.

You have guided your services through significant challenges with resolve and vision and we are deeply grateful.

The Navy and Marines are faced with a dangerous and evolving global security environment. Certainly, threats from Russia, Iran, North Korea, and violent extremist groups remain persistent and the Navy has an important role to play in addressing them.

But the clear pacing challenge for our naval forces is China. In the Indo-Pacific and in seas and ports around the world the United States Navy and the Marine Corps will continue to be the first line of deterrence and defense against the PRC's [People's Republic of China] expanding global ambitions.

Recognizing this challenge, the Biden administration has requested approximately $256 billion in funding for the Department of the Navy for fiscal year 2024. This represents an increase of $12.8 billion more than the 2023 enacted budget, the largest increase among the services.

Within this budget the Navy has requested nine new ships. The procurement of several new submarines, destroyers, frigates, and logistics vessels is well reasoned. At the same time, the Navy is proposing to retire a number of ships before the end of their service lives including several Littoral Combat Ships and dock landing ships.

I understand the Navy made the difficult choice to retire some of these ships now, to free up more resources in the future. But it seems that this plan would take us in the opposite direction of the Navy's goal for a 355-ship fleet, particularly regarding the amphibious force structure.

The Committee will want an update on these issues as well as the Navy's forthcoming 30-year shipbuilding plan. Even as the Navy requests newer, more advanced ships I am concerned by the continuing struggles to maintain our current fleet. Deferred ship maintenance, reduced steaming and flying hours, and canceled training and deployments have created serious readiness problems within the Navy.

These problems are also being experienced by private shipyards and Navy shipyards. The 2022 National Defense Authorization Act (NDAA) directed the Navy to study how to improve the capacity in our shipyard industrial base and the Department has since begun the Shipyard Infrastructure Optimization Program, or SIOP.

This program represents more than $25 billion in planned investments over the next 25 years to modernize and improve our shipyards.

Admiral Gilday, I would ask for an update on SIOP and the outlook for Navy maintenance efforts.

The Marine Corps, while maintaining its ability to operate worldwide, is continuing to restructure around two concepts, Littoral Operations in a Contested Environment and Expeditionary Advanced Base Operations.

The key elements of these concepts is a more flexible amphibious force that can support a broader naval fight once ashore. Rather than simply acting as a landing force the Marine Corps intends to help control the sea and air in support of the Navy and as part of the joint force.

To achieve this the Marine Corps is prioritizing a number of modernization efforts including deep sensing, long-range fires to include anti-surface capabilities, enhanced air and missile defense, and improved ground and amphibious combat vehicles.

These platforms will equip the marines with improved force protection and enhanced lethality with a particular emphasis on providing highly mobile capabilities and addressing contested logistics.

General Berger, I appreciated your thoughtful approach throughout this restructuring. Your posture toward adjusting Marine Corps requirements based on the results of experimentation and wargaming has yielded valuable outcomes such as updating the

number of cannon batteries and the size of fighter attack squadrons.

The Committee looks forward to continued engagement on these modernization efforts as they proceed.

Finally, I would note that the United States' greatest competitive advantage over China is our global network of allies and partners.

The recent agreement between the United States, Australia, and the United Kingdom to collaborate on nuclear submarine production through the AUKUS [Australia, United Kingdom and the United States] partnership is a meaningful step forward in ensuring a free and open Indo-Pacific.

Successful implementation of this plan will require responsible oversight and a stable industrial base. I would ask our witnesses for their views on what we have the capacity to produce now and in the future and how we can provide the budget and resources to match.

Again, I want to thank the witnesses for appearing today. I look forward to your testimonies, and now let me recognize the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman.

I welcome our witnesses and thank them for their years of distinguished service. I want to associate myself with the generous words of appreciation that the distinguished Chairman has made with regard to Admiral Gilday and General Berger.

I would add to that my appreciation for the talented team of marines and sailors who are seated behind you and have been such a great help to all of us in our efforts to get this right.

I also want to share and associate myself with the remarks made by the distinguished Chairman and his concern that the budget proposal would take us in the wrong direction and I think on a bipartisan basis we will be able to rectify that.

Members of this Committee know all too well that the Chinese Communist Party represents a major threat to the Nation. Today, we are in a more complex and sobering threat environment than we have been in since World War II.

In that war our economy was larger than all of our adversaries combined with an unmatched industrial base. We no longer enjoy that advantage, not by a long shot. The evidence is clear China has launched 75 new warships since 2018 compared to our 35, 75 to our 35.

China has over 200 hardened aircraft shelters, more than eight times what we have available in the Western Pacific, and there are other examples of this imbalance.

I am troubled by China's recent creation of defense mobilization offices, air raid shelters, and wartime emergency hospitals. China is rapidly expanding its military forces and preparedness. We cannot be complacent in our response.

Yet, late yesterday the Navy submitted its statutorily required 30-year shipbuilding plan, which seems to embrace complacency. Even in the most aggressive alternative plan the Navy would not reach the statutory 355-ship requirement until fiscal year 2042.

Compared to last year's plan, it trades 35 amphibious warfare ships for support vessels, harming the ability of our marines to project force. The Navy's fiscal year 2024 budget request is anemic. Under the President's proposal the size of the fleet would shrink further.

Let me be clear. This budget request has failed yet again to build a U.S. Navy fleet that is capable of meeting even basic tasks to say nothing of growing strong enough to deter near-term threats.

Thankfully, there is bipartisan agreement that we must substantially increase the shipbuilding budget. I am concerned with production constraints at our shipyards. Despite congressional support the Navy has proved unable to achieve delivery of two attack subs per year, three destroyers per year, and two frigates per year.

This trend puts us further and further behind the goal to build the Navy we need. Expanding our shipbuilding capacity will require generational investments combined with new approaches to growing the workforce.

Growing our shipbuilding capacity will also require stable demand signals to industry. The Navy introduced uncertainty in the shipbuilding industry by excluding the LPD amphibious ship from the fiscal year 2024 budget. Congress has reversed decisions like this in the past and I certainly hope and I actually am confident that we will do so again this year for LPD 33.

I am also concerned about ship maintenance, which is essential to avoiding a smaller fleet available in the near term. Lack of investment and maintenance together with rising requirements has left the fleet in brittle condition. As a result of decades of deferred maintenance. The Navy wants to decommission 11 ships including 8 before the end of their expected service life.

This strategy of divest to invest does not work. In fact, that failed doctrine is a contributing reason we are in this predicament.

The assumptions included in this budget have the size of the fleet shrinking even more in the next 5 years. I see a whole lot of divest and very little invest in this budget.

I fully expect that Congress will work together in a bipartisan and patriotic way to put a stop to this disgraceful lack of commitment to our naval forces.

Finally, I am concerned that the Navy is not sufficiently leveraging promising new technologies. This is in contrast to the Marine Corps, which has embraced innovative concepts and equipment relevant to the high-end fight.

The Navy should adopt resilient communication advances, invest in autonomous technology, make use of additive manufacturing such as 3D printing, and move to alternative materials such as composites.

Navy acquisition must do a better job of moving cutting-edge programs into production and do so urgently. A Western Pacific conflict would lean heavily on our naval and air forces.

Congress needs to exercise its constitutional obligation to provide these resources, the equipment, and ships necessary to provide for the common defense and I am certain we will.

Thank you all for your service and thank you very much, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker.

Mr. Secretary, please?

STATEMENT OF THE HONORABLE CARLOS DEL TORO, SECRETARY OF THE NAVY

Mr. DEL TORO. Good morning, Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee. It is an honor to appear before you today alongside General Berger and Admiral Gilday to discuss the posture of our Department of the Navy.

Today, our Nation, as you both have highlighted, does face challenges in every region and domain that we operate in. From the seabed to the stars, we recognize principally the People's Republic of China is our pacing threat, executing a strategy aimed at upending international order.

To preserve our way of life, the National Defense Strategy calls upon the joint force to deter aggression while being prepared to prevail in conflict. A strong Navy and Marine Corps are the foundation upon which the successes of the joint force exists.

The President's 2024 Budget does send a strong signal to the American people of the value that President Biden and Secretary Austin place in maintaining a robust Navy and Marine Corps to confront the threats that we face to the tune of an increase of $11 billion.

This year's budget request supports our three enduring priorities: to strengthen our maritime dominance, to build a culture of warfighting excellence, and enhancing our strategic partnerships around the globe.

With your support over the past year we have made major strides to modernize our fleet and our force. The year 2022 saw the deployment of the aircraft carrier USS *Gerald R. Ford,* providing the Navy with lessons learned that will benefit future *Ford*-class carriers.

Construction of high-end surface combatants continue, including the first *Constellation*-class frigate, USS *Constellation,* and the first of our *Arleigh Burke* Flight III destroyers, the USS *Jack Lucas.*

We continue progress on our first *Columbia*-class ballistic missile submarine, the USS *District of Columbia,* while preconstruction activities on the second *Columbia* SSBN, USS *Wisconsin,* have also begun.

On the innovation front, Task Force 59, just as one example, in Bahrain, continues to test a wide range of unmanned surface vessels and we are looking forward to expanding this effort to Fourth Fleet this coming year.

When we consider the composition of our fleet we seek to strike a balance between readiness, modernization, and capacity with an immediate emphasis on readiness. This year our divestment request includes three amphibious ships and at least two cruisers in poor material condition that offer very limited warfighting capability.

Further investment in these platforms just simply does not make sense. It is a waste of the taxpayers' money. Our decisions to divest or extend a ship life are based on a hull by hull evaluation.

For example, we recently announced the modernization of the destroyer USS *Arleigh Burke* DDG–51 to keep it sailing through 2031, 5 years beyond its estimated service life. We hope to be able

to continue that trend with other ships when possible in the *Arleigh Burke*-class and even with our cruisers, the *Ticonderoga*-class cruisers.

We owe it to the American people to be responsible stewards of taxpayer dollars. Investing in platforms with limited capability conflicts with that responsibility.

Our naval forces are more than just platforms and systems, however. It is our sailors, our marines, that are truly our greatest strength. This year's budget request contains multiple investments to support them and their families with services, benefits, housing, and education that they deserve.

In addition to our commitments to our people we are reinforcing our international relationships including those with our Ukrainian partners as they defend their sovereignty in response to Russia's illegal and unprovoked invasion.

In the Indo-Pacific we continue to play a leading role in the AUKUS security partnership. Our Navy will be critical to this initiative's success as we support Australia's acquisition of conventionally armed nuclear-powered fast attack submarines.

We continue to hone our skills with allies and partners in the Arctic, ensuring we are prepared to operate in this challenging and unforgiving environment. Along with our partnerships abroad we are committed to also strengthening our relationships here at home. We value your support and we recommit our leadership toward defueling and remediating the Red Hill bulk fuel storage facility spills.

We are committed to doing what it takes to address the concerns of servicemembers, their families, the people of Hawaii, and all other communities throughout the United States.

As I have said before, we build trust 1 day at a time, one action at a time.

As I close, I would like to emphasize that to meet these commitments and obligations the Department of the Navy does require a strong cadre of senior leaders. Delaying the approval of our flag and general officer nominations before the Senate is especially harmful to our readiness. I urge all of you to reconsider this situation and allow our nominations to please move forward.

Finally, I am grateful for the trust that you have placed in me to lead this department. I look forward to discussing how best to support our sailors, marines, and their families and defense of our Nation working very collaboratively with each and every one of you.

Thank you.

[The prepared statement of The Honorable Carlos Del Toro follows:]

PREPARED STATEMENT BY THE HONORABLE CARLOS DEL TORO

INTRODUCTION

Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee, it is an honor to appear before you alongside General Berger and Admiral Gilday to discuss the posture of the Department of the Navy (DON). We appreciate your trust and confidence in us to lead the DON, and appreciate opportunities like this to come together with you and address how to best to recruit, train, equip, and

prepare our sailors and marines so they can fulfill their vital role in support of the Joint Force, protecting our national security interests.

The United States requires a strong Navy and Marine Corps. The national and economic security of our Nation depends on free and open access to the sea. Ninety percent of international trade travels over the seas and one third of that transits the South China Sea. Over 400 undersea fiber-optic cables carry more than a trillion dollars in transactions every day. And the rules-based international order that benefits us all requires a strong maritime force, campaigning forward alongside allies and partners to provide the sea control and integrated deterrence we need to counter strategic competitors today and into the future.

We find ourselves at an inflection point, one that demands we renew our commitment to naval primacy as we chart a course through this century of intense maritime competition. Over the past two decades, the People's Republic of China (PRC) has more than quadrupled its export trade and used its growing wealth and economic power to rapidly expand and modernize its military and its navy. The People's Liberation Army Navy has added over one hundred combatants to its fleet in that time—a naval buildup that is a key component of its increasingly aggressive military posture. Today it has approximately 340 ships, and is moving toward a fleet of 440 ships by 2030. The PRC is conducting active, aggressive maritime activities in the South China Sea and beyond that have the potential to undermine our system of international law, including the freedom of the seas, a foundational United States interest.

Our maritime challenges are not confined to the Indo-Pacific. Moscow has not abated in its efforts to control large swaths of the Black, Baltic, and Arctic Seas, trying to intimidate and deny other countries the opportunity to exercise their rights to free passage. That is why six of seven of NATO's priority operating regions are maritime-focused, and NATO is moving to adopt its first maritime strategy.

Our Navy and Marine Corps team are meeting these threats on the sea, under the sea, in the air, and in cyberspace every single day. To defend freedom of the sea, we must ensure our sailors and marines have the capability and forward presence to stand by our allies and our partners. That is why I have directed our Navy and Marine Corps team to prioritize our investment in readiness, to make sure our ships and aircraft are always prepared to deploy. This approach will deliver the integrated deterrence at sea required by our National Defense Strategy.

Three Enduring Priorities Guiding the Department of the Navy

Last year I had the privilege of introducing my strategic vision for the Department of the Navy to this Committee, centered on our Department's three enduring priorities, which are complementary to and supportive of both the CNO's *Navigation Plan 2022* and the Commandant's *Force Design 2030.*

First, we are strengthening our maritime dominance so that we can deter potential adversaries, and if called upon, fight and win our Nation's wars. Second, we are building a culture of warfighting excellence, founded on strong leadership, and rooted in treating each other with dignity and respect. And third, we are enhancing our strategic partnerships, across the Joint Force, with industry, with academia, and with our allies and partners around the globe. Over the past year and a half, our DON team has made irreversible progress across our three enduring priorities, supporting positive growth and modernization in our naval force. I highlight the progress we've made and successes we've enjoyed over the past year through the support of the Committee and your other colleagues throughout Congress.

Strengthening maritime dominance requires us to rapidly field the concepts and capabilities that create advantage relative to our pacing threat, with the sustainment necessary to generate integrated, all-domain naval power. That is why we are making the investments now, guided by the CNO's *Navigation Plan* and *Marine Corps Force Design 2030,* to ensure we remain the most lethal, capable, and globally postured force on this planet for decades to come.

Last June, our shipbuilders laid the keel for USS *District of Columbia,* the first of a new class of nuclear-powered ballistic missile submarines that will underwrite the Nation's nuclear deterrent out to the year 2080. The second *Columbia*-class hull, USS *Wisconsin,* has begun pre-construction activities.

In July, we commissioned USS *Fort Lauderdale,* an amphibious warship that will help modernize our amphibious fleet and extend the reach of our marines to fight from the sea wherever there is a need.

What's more, USS *Tripoli,* the second of our *America*-class amphibious assault ships, completed its maiden deployment in 2022, operating throughout the Indo-Pacific with our larger, traditional aircraft carriers as a test of our F–35B "Lightning Carrier / Assault Carrier" concept. Deployments like this one highlight the Navy

and Marine Corps' interoperability as well as the strategic and operational advantages that amphibious ships continue to provide to the Joint Force.

With regard to aircraft carriers, we've made significant progress on USS *Gerald R. Ford,* the first new carrier to be deployed in almost 50 years. We are taking the lessons learned from the *Ford* as we build the future USS *John F. Kennedy,* USS *Enterprise,* and USS *Doris Miller.* Our carriers are not only vital to deterrence, they are also the cornerstone of our interoperability with our allies.

Our most advanced fighter aircraft, the F–35 Lightning II, now brings fifth-generation stealth and multi-role, multi-mission reach and power wherever we need to fight. Meanwhile, the F/A–18E/F Super Hornet will be the numerically predominant aircraft in the carrier air wing well into the 2030's. Service-life modification initiatives and capability upgrades enhance our inventory by advancing the tactical relevance of the F/A–18 E/F and closing the Navy's strike-fighter gap. We are working with industry to ensure trained mechanics are prepared to support induction schedules, and that they are bringing electrical and avionics experts onboard to support Block III transition efforts.

Marine aviation continues to build capability and capacity in the image of the future force. Recently, we stood up Marine Aerial Refueler Transport Squadron 153 in Kaneohe Bay, Hawaii, significantly increasing the reach and sustainment capabilities of marines in the Pacific theater.

The 15 KC–130J tanker aircraft that VMGR–153 will have by 2026 will enhance the organic mobility available to marines during training, in response to crisis, or in conflict. We are approaching 1 year since the CH–53K Sea Stallion program became operational, and we are well underway transitioning Marine Heavy Helicopter Squadron 461 into our first fully operational Sea Stallion squadron. While it is still in transition, HMH–461 is already conducting heavy-lift assault support missions previously impossible with legacy aircraft.

Over the past year, DON personnel have also demonstrated the immense potential of unmanned and autonomous vehicles. The Overlord Surface Vessel Ranger successfully transited from the Gulf Coast to the West Coast without an embarked crew. These unmanned surface vehicles will reduce the risk to our personnel, lower operating costs, and protect access to areas like the South China Sea. In addition, United States Naval Forces Central Command's Task Force 59, a new, first-of-its-kind task force, is rapidly integrating unmanned systems and artificial intelligence into maritime domain awareness in the Fifth Fleet area of operations, and we will soon expand that capability to other regions of the world.

In addition to procuring the modern platforms, we are also expanding the areas available for our personnel to train. With our partners in Congress, through the National Defense Authorization Act of 2023, we are expanding and modernizing our training ranges at Naval Air Station Fallon. This initiative will provide our pilots with the airspace and ground necessary to hone their skills in the advanced aircraft we field.

Another area of improvement is shipyard performance: our significant investment in the Shipyard Infrastructure Optimization Program, known as SIOP, is modernizing our four aging public shipyards by optimizing facilities and infrastructure as well as increasing dry-dock capacity and capability. We are also looking at establishing a parallel high-end technical track in nuclear welding, robotics, hull technology, software and electronics integration, as well as additive manufacturing for high-paying blue collar career.

We have made significant improvements to surface ship readiness. Working with industry partners, we have reduced maintenance delays on major maintenance periods in private shipyards by 39 percent since 2019. On-time completion of availabilities has also steadily increased from 34 percent in fiscal year 2019 to 41 percent for all maintenance periods completed in fiscal year 2022. We have brought data and advanced analytics to inform the plan for each maintenance and repair availability period, and improved our processes to better scope work and structure each availability well before ship arrival dates.

Public shipyards are also improving from fiscal year 2019 in both fewer days of maintenance delay and increases to on-time completion percentages. In fiscal year 2022, despite lingering COVID challenges to production, the public shipyards reduced number of days of maintenance delay by 29 percent from 2019 with on-time completions now at 33 percent.

Our second enduring priority, building a culture of warfighting excellence, demands more aggressive recruiting, more "training like we fight," and a stronger commitment to retaining a strong, diverse, and healthy force—a force that is ready at all times and focused on warfighting and strong, positive leadership at every level. That's why we have expanded community-and school-based outreach while simultaneously increasing media campaigns in underserved and minority markets.

We must attract the broadest possible talent pool from throughout our all Nation, including more women.

Recognizing that quality of life for our servicemembers and families is inseparable from warfighting excellence, we have directed substantial investments in quality-of-life initiatives, infrastructure improvement, and the largest military pay raise in over 20 years. All of these efforts are centered on one goal: combat readiness. Our sailors and marines are better prepared and more focused when they know their families are being cared for and doing well.

Our third strategic priority, enhancing our strategic partnerships, sustains and expands our advantage by seeking to achieve seamless integration, communication, and collaboration with each of our partners. With our Government partners, we have strived toward greater agility, adaptability, trust, and transparency in support of our warfighters. Globally, we have strengthened our relationships with like-minded maritime nations, deepening interoperability and interchangeability in order to enable mutual action to address shared challenges.

Our actions in the face of adversity will long be remembered by our allies and partners. Since the start of the conflict in Ukraine, the Navy and Marine Corps have supported our Ukrainian partners as they continue to defend their sovereign territory in the face of unprovoked Russian aggression. Together, we have risen to the occasion, supplying an unprecedented volume of capabilities to assist in their time of need. In 2022 alone, the Department of the Navy coordinated the identification, adjudication, and delivery of over $1.3 billion in critical systems, weapons platforms, munitions, and support equipment to address critical Ukrainian needs.

Beyond tending to our international partnerships, we are working to expand on relationships here at home. We have made a concerted effort to support our defense industrial base, with special attention paid to supporting entrepreneurs leading small and medium-sized businesses. As a direct result of the President of the United States' Executive Order 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," the DON took action to further develop and refine our strategic and tactical approaches to maximize small-business utilization across a diverse industrial base. These deliberate actions have increased our outreach to small businesses, improved subcontracting compliance and oversight, fostered more opportunities to fully utilize the Department of Defense (DOD) Mentor-Protege Program, and increased Phase III Small Business Innovation Research program funding by 16 percent over the previous year.

All of these endeavors contribute to our desired expansion of the DOD's supply chain marketplace.

THE FISCAL YEAR 2024 PRESIDENT'S BUDGET

Despite the successes and progress highlighted above, there is still work to be done on all fronts. The President's Budget for fiscal year 2024 Request to Congress is a clear signal of President Biden's support for our Navy and Marine Corps team and of the recognition of our critical role in the Joint Force especially in light of the complex strategic environment. Our request this year totals $255.8 billion, a 4.5 percent increase over last year. Every dollar of this request will contribute to the warfighting strength of our Navy and Marine Corps, from research and development of next-generation technologies and systems to procurement of high-end platforms critical to defending our Nation, infrastructure improvements, and most importantly, taking care of our sailors, marines, and their families who sacrifice so much.

Strengthening Maritime Dominance

Fleet Investments

A modern, capable, and lethal Navy requires sustained investment across a variety of platforms to complete missions in all environments. President's Budget 2024 prioritizes the development, procurement, and sustainment of our Navy's ships to provide our Nation with the most capable platforms. The request includes the full funding for two destroyers, two nuclear-powered attack submarines, two frigates, one T-AO fleet replenishment oiler, and one AS(X) submarine tender, while providing the next increment of funding for construction of CVN 80, CVN 81, and LHA 9, as well as the first year of incremental funding for the second *Columbia*-class ballistic missile submarine.

The budget request also includes a significant investment in submarine maintenance with the goal of reducing maintenance periods and improving the operational availability of these critical assets. These funds are aimed at improving material availability and strengthening the private and public industrial bases.

President's Budget 2024 prioritizes modernization of the *Zumwalt*-class (DDG–1000) guided-missile destroyer to enable the Navy's first fielding of the conventional

prompt strike sea-based hypersonic weapon system. It also includes key enablers for the Integrated Combat System such as Infrastructure-as-Service. The Integrated Combat System will allow the Navy to deliver future capabilities through software uploads instead of hardware installations.

Fleet Divestments

Within President's Budget 2024 is the request for the divestment of eight surface combatants: three cruisers (CG); three Landing Ships, Dock (LSD); and two Littoral Combat Ships (LCS). The three CGs—USS *Cowpens* (CG–63), USS *Shiloh* (CG–67), and USS *Vicksburg* (CG–69) are all within 3 years of their end-of-service-life dates. While these cruisers have a large vertical-launch capacity for a variety of weapons, the cost associated with repairing, modernizing, and sustaining the hulls requested significantly outweigh any warfighting contribution they provide to the fleet, and occupy limited, valuable private shipyard space that could be better used for maintaining more-lethal ships.

In addition to the three cruisers, we are requesting divestment of USS *Jackson* (LCS–06) and USS *Montgomery* (LCS–08), both *Independence*-class LCS variants. We acknowledge that both hulls are a third of the way through their projected service life of 25 years. However, these platforms are less lethal, less capable, and far more expensive to sustain than what is needed for the contested seas our Navy now finds itself operating in.

Finally, we are requesting the divestment of USS *Germantown* (LSD–42), USS *Gunston Hall* (LSD–44), and USS *Tortuga* (LSD–46), three amphibious ships that are all at or over 34 years of service and in unsatisfactory material condition. The planning and repair periods required for these ships to reach a deployable status would put all three at or near their 40-year end-of-service-life mark. Undertaking the repair of these ships, with potential cost growth, would tie up funding, shipyard capacity, and take an enormous personal toll on our sailors assigned to the projects. However, we recognize this request brings us below the 31 amphibious ships we are required to maintain per the National Defense Authorization Act for fiscal year 2023. The CNO, Commandant, and I are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come.

In President's Budget 2023, the DON proposed 16 ship divestments, but was only allowed to divest four. Ultimately, it is our sailors and marines who pay the price when we are restricted from retiring legacy platforms and investing in the capabilities needed for the future.

Research and Development (R&D) of Enhanced Capabilities

President's Budget 2024 requests a total of $26.9 billion to increase innovation and modernization efforts in R&D. The budget request commits $718 million of R&D funding to the recapitalization of all portions of the undersea leg of the triad including *Columbia*-class submarines, Take Charge and Move Out (TACAMO) capability, and the Trident D5 life extension 2. The next-generation air defense family of systems includes the F/A-XX, the "Quarterback" of the manned/unmanned team concept, directing multiple tactical platforms at the leading edge of the battlespace. President's Budget 2024 also funds $861 million in R&D for unmanned platforms, including the MQ–4 Triton, the MQ–25 Stingray, the Large Unmanned Surface Vessel, the Extra Large Unmanned Undersea Vehicle, and the MQ–9A Reaper.

Sustaining Maritime Information Superiority

Information is combat power, and we will continue modernizing our information technology infrastructure, ashore and afloat to ensure this essential backbone of our maritime power remains secure and survivable and continues to deliver information everywhere to maintain decision advantage over our adversaries. President's Budget 2024 budgets approximately $13 billion for Enterprise IT, cyber activities, business systems, and other communications across the DON.

These investments are a critical warfighting priority for the Department. The DON is building information superiority to win the naval fight by modernizing its infrastructure, innovating and deploying new capabilities, and defending its information. These initiatives are enabled by data that is managed as a strategic asset.

Bringing the DON's enterprise infrastructure to parity with Industry is essential for us to maintain our advantage in competition, crisis and conflict. We have charted a path to a digital work environment where users can securely access their data anywhere on any device with performance that rivals best-in-class experiences in Industry.

The DON is accelerating the modernization and transformation of our IT capabilities by ensuring that decisions made to sunset or rationalize unneeded, obsolete, unproductive, insecure, and un-auditable IT applications are realized. This effort,

coined Cattle Drive, will accelerate modernization within multiple business and core IT portfolios and self-identify funds for potential re-alignment to transformational investments

The DON is accelerating adoption of game-changing low-earth orbit commercial satellite technology to provide resilient, low-latency, high-speed communications for warfighting, support, and quality-of-life-and-work solutions. We are adopting a new approach to cybersecurity that will move the DON from its current ineffective compliance-based cybersecurity approach to one based on readiness where the right to operate is earned and managed every day.

The DON is a leader within the DOD on the initiative to implement a more effective cybersecurity model called zero trust that is better adapted to today's threat and computing environments. Finally, data management and analytics progress the DON is making on multiple fronts is enabling us to improve decisionmaking, sustain information superiority and meet the goals of the DOD data strategy by ensuring quality data are accessible, understood, and shared to the point of need.

Enabling Cyberspace Superiority

In addition to building information superiority, the Department will ensure our networks and systems are secure, our critical infrastructure and weapon systems are survivable, and our cyber forces can impose costs on adversaries in and through cyberspace when required.

Adversaries and competitors worldwide leverage cyber vulnerabilities to hold our capacity and capabilities at risk. This malign behavior requires a robust response, and we will prioritize building cyber resilience and strengthening our capacity to withstand, fight through, and recover quickly from disruption. To do this, the Department must "bake in" cybersecurity to new capabilities and platforms we procure while "bolting on" cybersecurity capabilities to legacy platforms. This strategy also requires training our sailors and marines to operate in cyber contested environments.

In addition to building cyber resilience, the Department is advancing the technology, tactics, and readiness of our military cyberspace operations forces. One example of this force development is the Navy's forthcoming establishment of a specific cyber warfare officer designator and enlisted rating. The Department is similarly committed to improving the readiness of the cyber forces we present to U.S. Cyber Command, and we will expand the integration of non-kinetic effects afloat.

Marine Corps Information Command, which operates under the Marine Forces Command, achieved initial operational capacity in January 2023. Marine Corps Information Command provides critical linkages at the operational level as well as task-organized elements to support campaign objectives by providing decisionmakers the ability to leverage authorities and approvals across the cyber, space, influence, and intelligence functions, generating multi-domain advantages.

Our information space requires new approaches to training, such as the Persistent Cyber Training Environment, which integrates capabilities to continuously evolve cyber training and exercises. This joint capability has expanded access over the last year, enabling force readiness and driving decisions on the tactical, operational, and strategic levels.

Munitions Procurement

President's Budget 2024 takes full advantage of new authorities granted by Congress in the fiscal year 2023 National Defense Authorization Act that provided a streamlined multiyear procurement process for critical munitions. Not only will this authority allow the Department to replenish munitions stockpiles which are reduced in support of the war in Ukraine, it will also support efforts to strengthen the industrial base capacity to develop, produce, and field munitions. We are requesting funding for the procurement of 34 Block V Tactical Tomahawk missiles for the Marine Corps, as well as several hundred Tactical Tomahawk recertification kits, navigation and communications kits, and Maritime Strike Tomahawk kits for the Navy. Additionally, President's Budget 2024 supports the awarding of multi-year procurement contracts for critical munitions, including Standard Missile (SM–6), the Naval Strike Missile, and Long Range Anti-Ship Missile (LRASM). Overall, funding for these and other weapons increased by $2 billion in this budget—a growth of nearly 50 percent compared to last year.

Organic Industrial Base

The DON's organic industrial base is vital to our national security, and the DON is committed to ongoing depot modernization and optimization efforts. A modernized and ready organic industrial base generates Fleet readiness and strengthens our Nation's security.

President's Budget 2024 continues the investment in our industrial base to further efforts to train, recruit, and retain the workforce, expand capacity and enable the development and integration of new technologies. Deliberate investments in the planning and design of facilities and optimization within the depots, as well as contract execution in dry-dock repair and refurbishment are focus areas of the budget cycle.

President's Budget 2024 reflects the three named efforts within the Organic Industrial Base where these investments highlight the commitment to the Nation's security with regard to maintaining our wartime assets. First, the Shipyard Infrastructure Optimization Program consists of four public shipyards located in Portsmouth, VA; Kittery, ME; Bremerton, WA; and Pearl Harbor, HI. President's Budget 2024 funding totals $2.7 billion across multiple accounts. Replacing Dry Dock 3 at Pearl Harbor Naval Shipyard is a critical enabler of increased naval capability. This project will construct a graving dock in order to support Pearl Harbor Naval Shipyard's ability to continue serving the Navy decades into the future by maintaining and modernizing the Pacific Fleet's nuclear-powered submarines. Second, the Fleet Readiness Center Infrastructure Optimization Program consists of three Fleet Readiness Centers located in NAS North Island San Diego, CA; NAS Jacksonville, FL; MCAS Cherry Point, NC. And finally, the Marine Corps Organic Industrial Base consists of two Marine Corps production plants located in Albany, GA and Barstow, CA.

The Presidential Budget Request funds public shipyard depot maintenance to 100 percent, and increases the overall workforce from 37,089 to 37,234 full-time employees, adding an additional 145 full-time employees for the Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Guam Detachment. President's Budget 2024 also aligns funding to improve supply chain capability and materiel availability in order to make proper budget and schedule decisions for items such as long-lead-time materiel.

Aviation Investments

The F/A–18E/F Super Hornet will be the numerically predominant aircraft in the carrier air wing into the 2030's. President's Budget 2024 funds service-life modification initiatives and capability upgrades that enhance our strike-fighter inventory by maintaining the tactical relevance of the F/A–18 E/F and minimizing the Navy's strike-fighter shortfall. The Presidential budget request also funds delivery and support of survivable, reliable, and resilient airborne command, control, and communications through the installation of critical modifications to the existing E–6B fleet, along with platform recapitalization to procure a follow-on TACAMO capability.

We will prioritize the continued development and production of unmanned aircraft systems to support current Fleet intelligence, surveillance, and reconnaissance requirements and to support future unmanned aircraft system integration into the carrier air wing. The budget funds two MQ–4 Tritons, three MQ–25 Stingrays, and five MQ–9A Reapers for the Marine Corps. President's Budget 2024 requests funding for 35 F–35s: 19 F–35C variants for the Navy and Marine Corps and 16 F–35B variants for the Marine Corps. These aircraft will be the backbone of DON air combat superiority for decades to come, complementing the carrier strike group with a dominant, multirole, fifth-generation aircraft capable of projecting U.S. power and deterring potential adversaries.

President's Budget 2024 also requests funding for the procurement of 15 CH–53K King Stallions. These production assets will be part of a 2-year block buy contract authorized by Congress in the Fiscal Year 2023 NDAA. The program recently achieved a Full Rate Production decision.

Climate Readiness

For the Navy and Marine Corps, a changing climate means a contested operational environment. Climate change brings extreme weather events, more humanitarian crises, and heightened friction around essential natural resources. A more volatile world increases demands on our Navy and Marine Corps forces while simultaneously impacting the capacity to respond to those demands. Improving the energy performance of our platforms and weapons systems is essential to providing a combat-effective force in contested operating environments. To do this, the Department is working to establish rigorous, energy-informed requirements for new capabilities that are then sustained throughout our acquisition decisionmaking.

Last year, the DON published *Climate Action 2030* to maintain the superiority of our naval forces through resilience and reducing the national security threat of climate change. In support of this initiative, last December, the Naval Postgraduate School signed an education partnership agreement with Stanford University's Doerr School of Sustainability. In bringing together these two globally recognized institu-

tions, it is our hope to realize solutions our Navy and our Nation can employ to mitigate and reduce effects of a changing climate.

Jointly with our partners in Congress, we are constantly seeking innovative solutions, leveraging science, partnering with industry and other government entities, and investing responsibly to ensure mission readiness. Climate readiness is a tactical, operational, and strategic enabler, and we must ensure our naval forces can operate and succeed in any environment.

Building a Culture of Warfighting Excellence

Building the Future Force

The civilian workforce is comprised of talented individuals from all walks of life whose experiences and skillsets are critical not just to our economic success, but to the overall security of our Nation. Today's Navy and Marine Corps team is a forward-deployed highly sophisticated network that is one of the most technologically advanced networks ever conceived and which operates either in concert with other combat units or fully self-sustained, and able to dominate in the air, sea and undersea.

As we become a more technologically advanced force, top civilian talent is increasingly critical to maintaining America's might upon the sea. Technical talent is needed for the wide array of challenges the DON faces. More than half of the civilian workforce are top-tier scientists, logisticians, engineers, mathematicians, technology specialists, or cyber experts; almost a quarter of the workforce are artisans performing critical work at the shipyards, depots, civilian mariners, or safeguarding our facilities and activities. As one indication of the quality and expertise of our workforce, the DON was issued 225 patents (more than the Air Force and Army combined) in fiscal year 2022 and holds more than 58 percent of all active DOD patents (4,129).

Our civilian workforce ensures a 24/7 rapid response to warfighter requirements, develops and manufactures critical systems, repairs and maintains our ships and aircraft and develops game-changing technology and equipment. The civilian workforce is present in 55 countries, supporting sailors and marines around the world.

We are in a competition for talent with many other employment sectors, which is driving us to re-evaluate how we manage the careers of our sailors, marines, and civilians, from initial recruitment to retirement. To maintain a Fleet that is prepared to defend our Nation from all potential adversaries, we must continue to enhance our ability to attract, develop, and retain a workforce equally as talented and diverse as the American people they serve. This includes maintaining an appropriate number of senior executive leadership (general officer, flag officer, and SES) billets to ensure optimal operational readiness.

The Marine Corps continues to make great strides toward retaining more experienced marines under the Service's Talent Management program. Leveraging authorities previously enabled by Congress, the Service enacted nine initiatives in 2022, from which they will expand and accelerate in 2023 including Early Reenlistment Authority, SNCO Promotion Board Realignment, Recruiting Station Commanding Officer Selection Boards, the Special Duty Assignment volunteer program, MarineView 360-degree leadership reviews, officer promotion opt-outs, Digital Boardroom 2.0, Separate Competitive Promotion Categories, and the Career Intermission Program.

As a result of many of these programs, the Marine Corps met or exceeded its first and subsequent term alignment program goals for the first time in 13 years and retained a statistically higher-quality group of marines. The Service is examining numerous other evolutionary initiatives and remains committed to evolving the talent management system with the primary goal of improving warfighting readiness in an increasingly complex world.

As another example of a positive development in force development, in August 2022, Naval Special Warfare Command (NSW) formally established its Assessment Command (NSWAC) to transform how its units compete for talent by building a sustainable architecture for diversified outreach. It conducted more rigorous pre-assessments for character, cognitive, and leadership attributes, and strengthened NSW's culture of continuous assessment. NSWAC is taking a whole-person approach to identify, prepare, and mentor qualified candidates from diverse backgrounds to complete training programs and pursue a successful career in NSW. As this new command was being developed, NSW conducted 60 outreach events with more than half specifically focused on increasing force diversity and inclusivity with underrepresented demographics. These efforts will enhance the way NSW continuously assesses and selects its incoming officers and enlisted personnel.

Educational Initiatives

Last year I talked about the Targeted Re-entry Program, which empowers commanding officers to identify and nominate their sailors for an accelerated return to Active Duty. This year we want to highlight our increased partnership with the Department of Education, trade schools, and colleges and universities to develop and recruit the military and civilian workforce we need.

As we become a more technologically advanced force, education will be a crucial warfighting enabler to maintaining America's might upon the sea. Our naval education enterprise is working to develop leaders with warfighting knowledge, intellectual dynamism, and creativity to maintain a strategic advantage against competitors and global adversaries. Through our naval university system, we are creating a continuum of learning that develops such leaders to serve at every level and equips them with skills to maintain and operate increasingly complex systems in an ever-changing warfighting environment.

President's Budget 2024 requests a $480.2 million investment to continue supporting and growing our naval education institutions. We maintain several world-class institutions, including the United States Naval Academy, Naval Postgraduate School, Naval War College, and Marine Corps University. This requested funding will also sustain our efforts to expand our enlisted personnel's access to the Naval Community College to support their education goals. We are deeply committed to formalizing a culture of lifelong learning for both our enlisted and officer communities.

Resiliency & Readiness

Mental health concerns and rising suicide rates are national-level issues to which the Services have not been immune. We are well aware of the inextricable link between mental health, resiliency, and the readiness of our force. To that end, Admiral Gilday, General Berger, and I are committed to supporting and ensuring the mental health, safety, and well-being of all sailors, marines, and their families, and the Department's civilian workforce.

We must do everything we can to foster the well-being of our people and prevent suicide. No one solution applies to every sailor, marine, family member, or civilian. We are constantly evaluating how we do business when it comes to providing services and resources to ensure they are meeting needs. Military service entails sacrifice not just for the servicemembers, but for their families as well, and we want to make sure family members feel seen, heard, and taken care of regardless of whether their sailor or marine is home, stationed overseas, or deployed. The DON offers multiple mental-health and counseling resources to all servicemembers at all levels. As we continue to encourage positive help-seeking behaviors and combat the stigma around mental healthcare among our marines and sailors, President's Budget 2024 requests $87 million for mental health support, an increase of $13.1 million from last year. This additional funding will provide for increases to our Sailor Assistance and Intercept for Life (SAIL) program, which provides rapid assistance to those in crisis, as well as the addition of two Warrior Toughness Teams for each coast.

Given the complexity of this challenge, our Office of Force Resiliency has taken an integrated approach to enhance holistic, data-driven suicide-prevention strategies which recognize the benefits of addressing common risk and protective factors to promote healthy cultures and climates. As such, our suicide prevention efforts draw from and harmonize with the Defense Strategy for Suicide Prevention and the White House Strategy to Reduce Military and Veteran Suicide. We are taking action on the recently released report from the Suicide Prevention and Response Independent Review Committee, and will work within DOD's coordination framework to implement key recommendations that will strengthen our prevention effort.

The Department of the Navy is laser-focused on countering sexual assault and sexual harassment at every level. In addition to the toll on victims, sexual assault and sexual harassment directly impact unit cohesion and ultimately undercuts our readiness. We must create environments that foster respect, maintain the dignity of military service, and increase our warfighting readiness. Sexual assault and sexual harassment are a persistent challenge requiring a multi-pronged approach that leverages a wide range of initiatives, not only to address these issues, but also to prevent them before they occur.

I directed the establishment of an Implementation Advisory Panel for the Department of the Navy last spring, bringing leaders to the table to pinpoint strategies for the Navy and Marine Corps to implement the recommendations of the Independent Review Commission on Sexual Assault in the Military, as approved by the Secretary of Defense. Through the Implementation Advisory Panel, the DON has already made significant strides to implement the Independent Review Commission's

recommendations, focusing on the Committee's highest-priority efforts first. We fully recognize that we need to continue to confront and prevent these destructive behaviors. We are investing significant resources to fuel the needed changes and we have made substantial progress in standing up a dedicated prevention workforce to prevent harmful behaviors, professionalizing the sexual assault response workforce to better provide victim care and support, and establishing Offices of Special Trial Counsel.

Additionally, our Office of Force Resiliency actively synchronizes the DON's sexual assault awareness and training, prevention, victim response, and accountability initiatives with the DOD Office of Force Resiliency. Sexual assault and harassment are more than just criminal matters. They undermine the trust and commitment that are foundational to our forces and they erode faith in our leaders, institutions, shipmates, and marines. This is a leadership issue, and you have my commitment to clearly and actively support these efforts and to demonstrate that sexual assault and sexual harassment will not be tolerated in any way, shape, or form.

Taking Care of Our People

We continue to make great strides in providing quality-of-life services and improving housing options available to our sailors, marines, and their families. In President's Budget 2024, we are asking you to support our DON families with $622 million aimed at sustaining our child and youth services. Additionally, we continue our investments in housing for both accompanied and unaccompanied personnel. Notably, our request includes $131.8 million for the construction of a Bachelor's Enlisted Quarters and Support Facility at Marine Corps Barracks, here in Washington, DC. We are also requesting funding to support housing renovations at multiple bases, to include Naval Base San Diego, Naval Air Station Lemoore, Naval Air Station Oceana, and Naval Base Ventura County. These investments will yield dividends for years to come as we continue to offer safe, affordable, and convenient housing to those who defend our Nation.

Strengthening Strategic Partnerships

Community Partnerships

The DON is leveraging the Department of Defense Readiness and Environmental Protection Integration Program (REPI) to partner with local governments and nongovernmental organizations to advance mission readiness through mutually beneficial, sustainable communities near our installations and ranges. The recently announced 2023 REPI Challenge includes several projects that support DON installations, to include: invasive species management and reef preservation near Pacific Missile Range Facility Barking Sands and Marine Corps Base Hawaii; habitat improvement and species management at Marine Corps Base Camp Pendleton, Naval Base Coronado, Naval Base Ventura County Point Mugu, and Naval Weapons Station Seal Beach in California; and shoreline stabilization near Marine Corps Base Quantico, Virginia.

Outside our fence lines, the communities that host our Navy and Marine Corps installations continue to utilize the Defense Community Infrastructure Pilot (DCIP) program to fund community infrastructure projects that benefit local installations, enable the DON's warfighting mission, and provide support to our servicemembers and their families. Using 2022 DCIP grant funds, Onslow County in North Carolina will upgrade a runway at a local airport to benefit travel in southeastern North Carolina, including Marine Corps Base Camp Lejeune, Marine Corps Air Station New River, and Marine Corps Air Station Cherry Point. In Florida, a new water main will improve capacity and pressure for not only for Naval Station Mayport, but also the surrounding community where many of our sailors, marines, civilians and their families live. Finally, the city of Newport News in Virginia will undertake a $15 million project at the Harwood's Mill Reservoir Dam to increase flood protection for the entire community and ensure a reliable water supply to Naval Weapons Station Yorktown.

We continue to work with our partners across the Federal Government, the State of Hawaii, and Congress to close the Red Hill Bulk Fuel Storage Facility and remediate the effects of the 2021 spill. We are committed to doing what it takes to address the concerns of servicemembers, their families, and the people of Hawaii. As I've said before, we rebuild trust 1 day at a time, one action at a time. Aging infrastructure such as that at Red Hill is a challenge we face at the national level, and we appreciate Congress's support and partnership as we increase our focus on revitalizing the shore infrastructure our Navy and Marines Corps rely upon.

Joint Force and Government

The Department of the Navy is committed to providing the right mix of capabilities and remaining dominant against threats defined in the National Defense Strategy. Across both Services and throughout the DON, President's Budget 2024 will invest in capabilities for maritime dominance.

Successful implementation of the concepts within the Navigation Plan and Force Design 2030 will be pursued through a unified, integrated effort at every echelon. But our fully integrated naval force is only part of the formidable Joint Force team that stands united in the protection of the American people. Collaboration between military departments and with the interagency is critical to the defense of the United States.

We are constantly seeking opportunities to maximize the combined efficiency and effectiveness of our Navy and Marine Corps in cooperation with the Army, Air Force, and Space Force. For example, we continue to work with our fellow Services on critical advanced research programs including hypersonic weapons. And worldwide, the Joint Strike Fighter program is yielding unprecedented reach and agility for the entire Joint Force.

The Department of the Navy, as a forward-deployed force, is a key contributor to Integrated Deterrence as our daily interactions with allies, partners, and potential adversaries impact diplomatic, economic, and intelligence equities in addition to the obvious military impacts.

Our most significant contribution as a military department is America's naval forces. The combat-credible forces of the Marine Corps and the Navy are unique as America's most timely, flexible, and forward-deployed force across the full spectrum of challenges—from naval diplomacy to strategic deterrence, resource competition, crisis, and conflict. Our allies and partners as well as our potential adversaries see these forces conducting forward operations and training, alongside partner nations. This constant forward presence engenders trust through episodic engagements as well as urgent response in the event of a national emergency.

The iconic presence of marines in our embassies is just one highly visible way the Department of the Navy supports the State Department and whole-of-government activities. Behind the scenes, military attachés strengthen our bonds with international partners as they facilitate and coordinate activities, from small-scale personnel exchanges to large-scale multi-lateral military exercises.

Allies and Partners

Over the past 18 months, the Department of the Navy has been fully committed to the multi-phased, commitments-based process, known as the Australia—United Kingdom—United States Partnership (AUKUS) to facilitate the development of the optimal pathway for Australia's acquisition of conventionally armed nuclear-powered submarines, which will contribute to maintaining peace and stability in the Indo-Pacific region by enhancing deterrence. As part of this initiative, Australian sailors will embed on United States SSNs and the United States Navy will increase SSN port visits to Australia beginning this year. Additionally, as early as 2027, the Navy plans to rotate up to four U.S. *Virginia*-class submarines to HMAS Stirling near Perth, an initiative we are calling "Submarine Rotational Force—West (SRF-W; "Surf West"). Beginning in the early 2030's, pending statutory authority, we intend to sell Australia at least three *Virginia*-class SSNs, and potentially an additional two more if needed. The AUKUS partners will begin delivering the trilaterally developed SSN-AUKUS in the late 2030's. The cost sharing through the different phases of AUKUS will be fair, transparent, and proportional—with the United States and Australia making investments to upgrade the United States submarine industrial base. We will continue to lead and advance this effort as directed by the President and Secretary of Defense.

As the world has seen over the last year with Russia's unprovoked and indefensible invasion of Ukraine, and the strengthened resolve and solidarity of NATO and like-minded nations around the world, the value of allies and partners cannot be overstated; the global landscape offers a stark contrast between those countries with strong international partnerships and those who are isolated due to their antithetical stance vis-á-vis the rules-based international order. Globally, we have strengthened our relationships with like-minded maritime nations, deepening interoperability in order to enable mutual action to address shared challenges.

As we emerged from the COVID pandemic and returned to our historic operating pace, we have looked for ways to expand cooperative deployments and operations around the world. Our recent growth in cooperative efforts with our partners has been focused on increasing interoperability and moving toward interchangeability with allied and partner maritime forces. In every international engagement, I have consistently heard the same message from our allies and partners: "We want to do

more with the U.S. Navy and Marine Corps"—a signal that we are the partner of choice across the globe.

In January 2023, the United States and Japan reaffirmed the necessity to optimize our force posture and enhance response capability through a readjustment in the laydown of United States Forces in Japan. This will provide for stationing of the 12th Marine Littoral Regiment in Japan by 2025, and with it, advanced intelligence, surveillance, and reconnaissance capabilities as well as anti-ship and transportation capabilities.

In a demonstration of the capabilities and resolve of NATO, the USS *George H.W. Bush* Carrier Strike Group recently completed Exercise Neptune Strike 22.2., operating under the command of Striking Forces NATO (STRIKFORNATO), and flexing the capabilities of all-domain warfare at a critical time.

During the same period, we employed the USS *Gerald R. Ford* Carrier Strike Group for the first time with our NATO allies during Exercise Silent Wolverine. The exercise was designed to test the carrier's capabilities through integrated high-end naval warfare scenarios, leading to its inaugural deployment this year. The USS *Kearsarge* Amphibious Ready Group and 22 Marine Expeditionary Unit provided persistent presence in the Baltic Sea. This demonstration of capability exemplifies the unparalleled power of alliance and partnerships.

Last year, I personally witnessed the power of partnership during RIMPAC 2022, when forces from 26 nations from nearly every continent converged at Pearl Harbor. We came together as capable, adaptive partners, and declared our commitment to work together, to grow our collective capability, and to nurture and enhance relationships that are critical to ensuring the safety of the sea lanes and the security of the world's interconnected oceans.

Strengthening maritime dominance requires us to rapidly field the concepts and capabilities that create advantage relative to our pacing threat with the sustainment necessary to generate integrated, all-domain naval power.

Alongside our Filipino allies, marines from 3d Marine Littoral Regiment completed the largest iteration of Exercise Balikatan last April. This was the initial operational employment of 3d Marine Littoral Regiment, and they used it to flex their capability to deploy from Hawaii and carry out amphibious landings in northern Luzon, ultimately enabling combined coastal defense training. This exercise not only strengthened the bond with our Filipino partners but tested small, distributed, and austere encampments, resulting in refinements of the concepts integral to the Marine Littoral Regiment.

This month, marines and sailors with the 31st Marine Expeditionary Unit completed the first Japan-based Iron Fist exercise, which increased interoperability and strengthened relationships between the DON and the Japan Self-Defense Forces, and demonstrated the commitment of United States and Japan forces to maintain a free and open Indo-Pacific.

Last November I had the chance to visit my Indian counterparts in an effort to drive forward high-end navy-to-navy cooperation to address challenges in the undersea warfare domain. While we continue to advance thinking on concepts and technology, we are furthering our defense information sharing and exercising in ways that are relevant to our shared goals, as exemplified by the USS *Ronald Reagan* Carrier Strike Group's participation in Exercise Malabar with India, Australia, and Japan, and which included high-end tactical anti-submarine warfare.

While in Brazil, I had the privilege of presiding over the opening ceremony of the longest-running maritime exercise, UNITAS, and took the opportunity to spotlight the importance of partnerships in our own hemisphere and the Atlantic basin. It was a particular honor to meet with the Cameroonian Head of Navy and visit his two ships, which had conducted their first-ever trans-Atlantic voyage in order to participate in the exercise. Their pride, determination, and dedication to being a part of this U.S.-led multinational exercise were evident as they celebrated this exceptional achievement. Strengthening our relationships across Africa and the Western Hemisphere is an important aspect of furthering the National Defense Strategy as the PRC endeavors to extend its influence over our neighbors and African partners.

One of the most significant detriments to local economies is illegal, unreported, and unregulated (IUU) fishing. I have been keenly interested in this complex challenge, and we are working with our partners across the globe to increase maritime domain awareness, information sharing, and information operations to counter this scourge. Massive fishing fleets from countries such as the PRC prey on countries with weak capabilities to protect their exclusive economic zones. Closely linked to the IUU fishing problem is a country's ability to effectively conduct maritime domain awareness.

As the Navy and Marine Corps team works tirelessly to ensure our forward presence, we are in an intense global competition with the PRC for strategic access and influence. That competition is particularly concentrated in the Indo-Pacific. To prevail, we will continue to innovate, leveraging our naval diplomacy to maximum advantage. Improving ports and enabling enhanced maritime patrolling capacity from modern airfields serves U.S. security interests as well as island nations' interests.

Combined, these critical enablers of U.S. influence, posture, and readiness in the Indo-Pacific are also the core components of the DOD's ability to deliver humanitarian assistance and disaster relief in the region as the catastrophic consequences of climate change accelerate. A resilient, distributed posture to meet our operational needs and outcompeting the PRC for strategic access and influence in the Indo-Pacific go hand in hand.

President's Budget 2024 will strengthen global alliances and partnerships with funding for joint operations and exercises around the world, including CARAT, Malabar, and Balikatan in the Indo-Pacific; NATO operations in the Mediterranean; and exercises like UNITAS in our own hemisphere.

We will continue to foster opportunities for sailors, marines, and DON civilians to train, learn, and operate side-by side with their counterparts in partner and allied forces. We will work on operationally integrating with our allies and partners through shared warfighting concepts, continually campaigning forward to deter adversaries and protect the rules-based international order.

Our sailors, marines and civilians are warrior-diplomats for our Nation. Their professionalism and dedication promote the connections that strengthen our collective security and cultivate shared ideals that send the message that the United States is a friend worth having.

CLOSING

The United States Navy and Marine Corps Team is on the front lines of defending the free and open rules-based international order against those who would cast us into a new dark age defined by the principle of "might makes right."

I have a sacred obligation to Congress and to the American people to ensure that our Navy and Marine Corps are always prepared to defend those liberties, those non-negotiable American values wherever the Nation's interests may be threatened. The Navy and Marine Corps remain, after all, this Nation's single most versatile instrument of national power.

For this, I am grateful for your sustained, bipartisan support of a strong Navy and Marine Corps.

I look forward to working with old friends and new partners in Congress to advance the Nation's security with a Navy and Marine Corps supremely able, first and foremost, to deter all potential adversaries, and if called upon to fight and win our Nation's wars.

Chairman REED. Thank you, Mr. Secretary.

Admiral Gilday, please?

STATEMENT OF ADMIRAL MICHAEL M. GILDAY, USN, CHIEF OF NAVAL OPERATIONS

Admiral GILDAY. Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee——

Chairman REED. Could you bring that closer to you please, sir?

Admiral GILDAY. For the Chairman and Ranking Member, I appreciate your thanks for our service this morning, and my wife has joined me this morning. I would like to thank her as well for her support. I appreciate the opportunity to appear with both the Secretary of the Navy Del Toro and General Berger this morning.

For more than three quarters of a century the United States Navy has been an anchor of world stability, deterring war, upholding international law, and ensuring access to the seas. Today, our Navy's role has never been more expansive or more consequential.

This past year the Navy and Marine Corps team executed more than 22,000 steaming miles and nearly 1 million flying hours. We participated in, roughly, 100 exercises with allies and partners around the globe including the Arctic.

At this moment we have about a hundred ships at sea, a third of the force, reassuring America's allies and partners that we stand the watch alongside them and remind the world that we seek to preserve peace but we are prepared for any fight.

We are America's away team, constantly present, in contact with allies, partners, and potential adversaries every single day. Operating forward, your naval forces defend the rules-based international order. Our Navy flies, it operates, and it steams wherever international law allows so that others can, too.

The United States has always been a maritime nation. To preserve our security and our prosperity America needs a combat credible naval force to protect our interests in peace and to prevail in war, not just today but for the long run.

Our fiscal year 2024 budget request remains consistent with the Navy's enduring priorities. As the Secretary stated, we are prioritizing readiness first with an emphasis on the sailors who empower everything that we do, ensuring that we are always combat ready.

Next, we are modernizing our current fleet, 70 percent of which we will have in the water a decade from now, and third, we are continuing to build our capacity, ensuring we have relevant, lethal platforms to achieve warfighting advantage with a hybrid fleet of manned and unmanned platforms on, above, and below the seas.

Our budget request reflects the Navy's commitment to deliver, to deploy, and to maintain that fleet. It fully funds the *Columbia*-class submarine, ensuring the on time delivery of the most survivable leg of the Nation's strategic deterrent triad.

It keeps our fleet ready to fight tonight. Dedicating the resources necessary to train and educate resilient sailors that can out think, that can out decide, and that can outfight any potential adversary.

It funds private and public sector ship maintenance to 100 percent. Increasing the capacity and retaining highly skilled labor to get our ships back to sea faster with full magazines and spare parts in our storeroom to be prepared for any contingency.

It invests in modernizing our fleet. Procuring weapons with range and speed along with integrated systems to improve fleet survivability, and a resilient cyber secure network infrastructure. It invests in capable capacity, building toward a larger distributed hybrid fleet. Fielding a ready fleet today while modernizing for the future.

Our competitors are investing heavily in warfighting capabilities of their own and the oceans we are operating in are growing more lethal and more contested every single day. Failing to modernize and meet those threats would erode America's maritime superiority at a time when command of the seas will determine the balance of power for the rest of this century.

This means we can no longer afford to maintain ships designed for a bygone era, especially at the expense of readiness and modernization or at the expense of buying new ships most relevant to today's fight.

America cannot afford to field a hollow force. We have been there before and we have seen the tragic results. It is a mistake that we must never repeat. Ships, submarines, and aircraft are no doubt expensive instruments of national power as are the costs of main-

taining them. But history shows that without a powerful navy the price tag could be much higher.

Thank you again for inviting me to testify today. I look forward to answering your questions.

[The prepared statement of Admiral Gilday follows:]

PREPARED STATEMENT BY ADMIRAL MICHAEL M. GILDAY

Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, thank you for the opportunity to testify on the posture of the United States Navy. On behalf of every American sailor, Navy civilian, and their families, thank you for your continued leadership and support.

With increased funding in the 2023 Defense Appropriations Act, Congress has provided the means for the U.S. Navy to deliver the fleet our Nation needs in support of the 2022 National Defense Strategy. This investment will help us turn the corner on readiness to meet strategic competitors in peace and war, ensuring our ability to maintain free and open oceans and the international rules-based order. Moreover, consistent, steady funding is necessary to provide a clear signal to our industry partners, especially our shipbuilders, on the way ahead. This statement will detail where we are—and what we must do—to ensure our maritime dominance deep into this century.

Flanked by two oceans, the United States has always been a maritime nation. The seas remain the lifeblood of our economy, our national security, and, consequentially, our way of life. Our livelihood depends upon free, open, and secure maritime trade. A strong naval force is essential to U.S. national security and long-term economic health. The United States Navy has and will continue to serve as our Nation's primary instrument of sea control and power projection, ensuring our global maritime access during times of peace and war.

From our humble beginnings with six wooden frigates, the composition of the U.S. Navy has steadily evolved to defend U.S. interests around the world and ensure American security. For the past 247 years, the U.S. Navy has played a critical part in defending and advancing national policy. For the past 77 years, we have been an anchor of world stability by deterring war, upholding international law, and assuring access to the global maritime domain for our Nation, our Allies, and our partners.

Today, our Navy's role has never been more expansive or consequential. We now face challengers who are attempting to rewrite the rules-based international order and reshape the world to meet their autocratic desires. The People's Republic of China (PRC) has aggressively modernized its militaries and fielded offensive warfighting capabilities at unprecedented speed and scale across all domains. These developments are not solely to support regional designs. They are for global ambitions. At the same time, Russia's unprovoked, full-scale invasion of Ukraine has triggered the largest conflict in Europe since the Second World War—with combat occurring on land, sea, and air. The future of the global order depends on the actions we take in this moment.

Our fiscal year 2024 budget request remains consistent with the Navy's priorities. To meet the challenges of today while building the fleet of tomorrow, our Navy continues to prioritize readiness first—with a special emphasis on the sailors who empower everything we do. Next, we are focused on modernizing our capabilities. Then, we will continue to build the capacity of the fleet. Prioritized investments in people, technologies, critical infrastructure, and platforms ensure that we are ready to fight tonight, while making progress on the capabilities we need to maintain our combat credibility far into the future. To enable Distributed Maritime Operations (DMO), we must generate cost-effective capacity to achieve warfighting advantage with acceptable risk. We have already begun building the future fleet—a hybrid force enhanced by unmanned platforms operating on, above, and below the waterline.

NAVY'S UNIQUE PEACETIME MISSION

With the passage of the Fiscal Year 2023 National Defense Authorization Act, the United States Navy has a new mission statement. The old mission statement, articulated in Title 10 of U.S. Code, called for the Navy to be "organized, trained and equipped primarily for prompt and sustained combat." Now, Congress has additionally charged the Navy with supporting "the peacetime promotion of the national security interests and prosperity of the United States."

Though the mission statement is new, the mission is not. U.S. naval power has always played a unique and vital role in promoting our Nation's security and prosperity during peacetime. The law now accurately reflects our Navy's contributions throughout the history of our Republic.

Whether providing humanitarian assistance and disaster relief, countering sea-based illicit activity, safeguarding global shipping lanes, saving lives, or deterring conflict, sailors advance U.S. interests every day. Constantly on call, our sailors are forward deployed in submarines, ships, and aircraft, standing guard with our allies and partners around the world. In part, the change to title 10 acknowledges our historic mission and recognizes that peacetime activities can produce strategic results. However, the change does more than describe what the Navy has always done. It also highlights the need to build a healthy, ready naval force that will safeguard our Nation—one that is properly sized, equipped, and trained for the vast array of operations needed to preserve peace and prevail in competition, crisis, and conflict.

Of all the peacetime missions that promote security and prosperity, deterring conflict is foremost. Our sailors are constantly present, operating, and training, often in parts of the world that may become hotspots. We are America's away team, deployed in peace and ready to answer the call if we are needed in war.

During peacetime, the U.S. Navy must continue strengthening and expanding our network of Allies and partners. Whether in day-to-day competition, crisis, or conflict, Allies and partners add significant defense capabilities and resources. They provide integrated deterrence against adversaries by expanding access to maritime infrastructure through cost-effective, secure, reliable, and geographically distributed bases, and provide information in support of distributed operations.

Thanks to support from Congress, we are starting to rebuild our fleet following two decades of ground wars. Still, rebuilding will not happen overnight. It will require years of stable and predictable funding and a long-range plan that incentivizes our industry partners to invest in the infrastructure and capacity needed to support our growing fleet.

While most combat forces generally only meet in times of war, navies are in contact with potential adversaries every single day. We are forward deployed around the globe, sailing waters in close proximity to other navies, coast guards, and maritime militias, contesting threats to the rules-based international order and ensuring the world's waterways are free and open for all. In this critical decade, the challenges we face are mounting.

THE MARITIME CHALLENGES TO U.S. NATIONAL SECURITY

The United States continues to face pacing, acute, and persistent challenges to our national security. Above all, our pacing challenge is the PRC. As we have witnessed over the past several decades, the PRC seeks to undermine U.S. alliances and security partnerships in the Indo-Pacific region, and leverage its growing capabilities, including its economic influence and the People's Liberation Army's (PLA) growing strength and military footprint, to coerce its neighbors and threaten their interests. In only two decades, the PRC has tripled the size of its Navy—and is on pace to quadruple to over 400 ships by 2030. Additionally, it has expanded its strategic nuclear capacity and capability, advanced its cyber, irregular warfare, and space capabilities, and constructed a system of sophisticated sensors and long-range precision weapons to intimidate neighbors, challenge free and open access to the seas, and hold U.S. forces and the Homeland at risk.

The PRC seeks to deny United States and allied forces access within the First Island Chain and beyond. Advances in missile technology by the People's Liberation Army (PLA) Rocket Force have provided the PRC with the offensive means of striking U.S. and Allied forces. As the PRC has attempted to displace the U.S. Navy from the waters in the Western Pacific, the PLA Navy, alongside the People's Armed Forces Maritime Militia (PAFMM) and China Coast Guard (CCG), has increasingly conducted aggressive operations—actions just short of war—to intimidate neighbors and force nations to submit to Chinese territorial claims. Through these "gray zone" operations, the PRC has staked illegal maritime claims to offshore resources that threaten the peace, prosperity, and ecological stability of the world's oceans. Without question, the PRC's investments in offensive warfighting systems—across all domains—are aimed at the heart of America's maritime power.

Russia remains an acute threat as its unprovoked war of aggression against Ukraine continues. Although the Kremlin predicted Ukraine would fall within days and NATO would fracture, the citizens of Ukraine have successfully contested Russian forces on land, sea, and air, bolstered by the support of the United States and other like-minded nations. This war has reminded Russia, and would-be aggressors everywhere, of the power and importance of Allies and partners. Along with our Al-

lies, we draw inspiration and strength from the tenacity and courage of the Ukrainian people, and we remain resolute in our responsibility to uphold the rules-based international order, and every nation's inherent right to freedom and self-determination.

In its most provocative year of missile launches ever, North Korea has been a persistent threat on the Korean Peninsula as it continues to expand its nuclear and missile capability to threaten the United States Homeland, deployed United States forces, and the Republic of Korea (ROK) and Japan. With forces on the peninsula and vessels in the surrounding seas, the United States Navy and the Joint Force stand with our ROK Allies. During my visit to the ROK this past November, I confirmed that our alliance and friendship remain strong. We left no doubt that our commitment to extended deterrence for the Korean Peninsula is ironclad.

Iran, beyond its nuclear advancements and development of missile systems, has been building and exporting unmanned aircraft, most notably to support Russia's brutal campaign in Ukraine. All the while, Iran is advancing maritime capabilities that threaten maritime chokepoints, putting at risk the free flow of energy resources and international commerce. Further, Iran is undermining regional stability supporting terrorist groups and military proxies, employing its own paramilitary forces, engaging in military provocations, and conducting malicious cyber and information operations. Global terrorist groups have had their capabilities degraded, but some may be able to reconstitute them in short order, which will require monitoring indications and warning against this threat.

Whether they are pacing, acute, or persistent challengers, our adversaries are focused on acquiring sophisticated technologies that are changing the battlespace. From drone technologies to robust networks of sensors, our adversaries—both state- and non-state-sponsored—have the ability to harm our national interests in myriad ways. In the coming years, developments in new technologies such as artificial intelligence (AI), quantum computing, and additive manufacturing will continue to disrupt the way war is conducted.

CONTRIBUTIONS TO THE JOINT FORCE, NESTED IN THE NATIONAL DEFENSE STRATEGY

A combat-credible U.S. Navy—forward-deployed and integrated with all elements of national power—remains our Nation's most potent, flexible, and versatile instrument of military influence. Together with the U.S. Marine Corps and U.S. Coast Guard, our Navy must deploy forward and campaign with a ready, capable, combat-credible fleet. Decisive naval power is a critical component of the Joint Force.

This past July, I released an updated Navigation Plan, aligning our priorities of Readiness, Capabilities, and Capacity to the 2022 National Defense Strategy (NDS). The U.S. Navy remains committed to (1) strengthening our Nation's deterrence, (2) campaigning through forward presence, and (3) building enduring warfighting advantages. In this rapidly changing world, a formidable naval force is crucial in effectively implementing the NDS and the 2022 National Security Strategy (NSS). The Navy's fiscal year 2024 budget request will deliver on our commitments to the Joint Force by aligning our planning, resources, and investments with national policy objectives:

Strengthening Deterrence. Integrated deterrence—the cornerstone of the 2022 NDS and a strategic focus of the 2022 NSS—is how the Department of Defense (DOD) aligns DOD's policies, investments, and activities to sustain and strengthen deterrence. It is tailored to specific competitors and coordinated to maximum effect inside and outside of the DOD. Integrated deterrence leverages the Joint Force's combined capabilities in all domains. It emphasizes a unity of effort throughout the U.S. Government as the Department of Defense (DOD) coordinates with and supports the State Department, Intelligence Community, and other government agencies. Additionally, integrated deterrence promotes the importance of working with our Allies and partners to uphold the international rules-based order throughout the globe. Neither the DOD nor the public sector holds a monopoly on delivering deterrent effects—thus, we must work with America's vast and innovative private sector to ensure peace.

A secure and reliable strategic nuclear deterrent backstops integrated deterrence. Our Navy operates and maintains the most survivable leg of the Nation's nuclear triad, representing approximately 70 percent of America's treaty-accountable, nuclear arsenal. Navy's fiscal year 2024 budget requests the resources to replace the 14 *Ohio*-class submarines with the more capable *Columbia*-class and continue development of the second life extension of the TRIDENT II D5 missile, as well as refresh supporting infrastructure and modernize our nuclear command, control, and communications systems. Our *Ohio*-class submarines have been patrolling the oceans on deterrent missions for 42 years. This once-in-a-generation overhaul of our

ballistic missile submarine force comes with a massive price tag, but it is a must-pay bill for the Nation so that we maintain America's assured second-strike capability.

In addition to our nuclear forces, our combat-credible conventional naval forces reinforce deterrence. These forces deploy globally to protect American interests across the spectrum of conflict. Operating far from U.S. shores, naval forces provide the first physical line of U.S. Homeland Defense, preventing potential adversaries from using the seas to threaten the American Homeland. Naval Forces are the only element of national power that can fulfill this role.

To deter war, we must continue to work more seamlessly with our Allies and partners across all domains and by integrating key technologies and other instruments of national power. Among other initiatives, we have been working hard to bolster the trilateral security partnership of Australia, the United Kingdom, and the United States, known as AUKUS. AUKUS is a generational opportunity to reinforce the collective defense and prosperity of the United States and two vital Allies who always stand beside us. With the overarching objective of promoting peace and stability in the Indo-Pacific, through our efforts to enable Australia to acquire a conventionally armed, nuclear-powered submarine capability, AUKUS provides a unique opportunity to strengthen the U.S. Submarine Industrial Base while enhancing two of our Allies' military capabilities. This trilateral security partnership also provides an opportunity to set the highest standards of nuclear nonproliferation for this critical endeavor. To successfully compete with the PRC and ensure a free and open Indo-Pacific region, we will continue to find ways to integrate our efforts with our robust network of Allies and partners.

The naval service's ability to control the seas and project power has underpinned America's national defense and economic vitality for generations. Sea control provides freedom of maneuver to the Joint Force and our Allies while denying it to our adversaries in conflict. Our ability to project power deters aggression by convincing rivals they have no viable means of achieving their objectives through force. Should conflict arise, forward deployed sailors and marines stand ready to fight alongside the rest of the Joint Force, our Allies, and our partners to deny enemy objectives, destroy enemy forces, and compel war termination.

Forward Presence and Campaigning. Naval forces provide the United States strategic advantages in position, influence, and flexibility, independent of access to overseas land bases. Our forward posture guarantees our Nation the ability to respond to crisis, blunt gray-zone activities, and preserve a stable and secure global maritime order. The Navy's global maneuverability supports diplomacy, reassures our Allies, and generates favorable influence and access in critical regions.

Alliances and partnerships remain the United States' greatest strategic advantage. Our Allies and partners recognize U.S. naval forces as their on-scene partner of choice for building combined maritime strength. In turn, the U.S. Navy recognizes the value of America's unmatched network. Having met with over 40 heads of navies around the world over the past year, I have witnessed the power of personal connections to bolster our collective strength. Relationships forged on the seas for over seven decades have been the bedrock of the free and open, international, rules-based order. And they will continue to be so.

Our adversaries do not have the same reinforcing strength and global backing that America shares with like-minded nations. In turn, the United States provides maritime power that no other country can. The U.S. Navy also brings to NATO an ability to further the interoperable naval combat power of Allies and partners and enable continued deterrence in response to Russia's war on Ukraine. We also leverage the strength of our allies and partners as part of our integrated deterrence of the PRC as well. We are constantly strengthening interoperability, sharing maritime domain awareness, and helping to build capacity for resilient, integrated logistics for our allies and partners.

Across the spectrum of conflict, the U.S. Navy operates forward, exposing and contesting malign activities of our adversaries. The U.S. Navy remains the partner of choice not just because of our strength, but also because of our respect for the rule of law.

Building enduring warfighting advantages. To maintain our warfighting advantage at sea, America needs a larger and more capable Navy. Faced with competitors and emerging disruptive technologies, we must become more agile in developing and delivering our future force. Above all, our naval forces must be combat credible—measured by our ability to deliver lethal effects in contested and persistently surveilled battlespaces.

In collaboration with the other U.S. Armed Services, we have prioritized the future capabilities we need to employ our warfighting concepts and maintain credible

deterrence. As we build the future fleet, we group these critical capabilities into six overarching Force Design Imperatives, as I described in Navigation Plan 2022.

Expand *Distance.* Long-range precision fires across all domains and platforms with greater reach enable naval forces to strike hostile targets while increasing our own survivability.

Leverage *Deception.* Deceptive measures—including stealth, concealment and maneuver, emissions control, and electronic warfare—degrade enemy surveillance and increase adversary uncertainty, enabling naval forces to operate effectively in contested battlespaces.

Harden *Defense.* Integrating directed energy with hard-kill and soft-kill defensive systems disrupts attacks and keeps naval forces survivable when targeted by adversaries.

Increase *Distribution.* Distributing forces geographically and in all domains enables them to threaten an adversary from multiple attack axes. Smaller, lethal, and less costly platforms—including those manned, unmanned, and optionally manned—further complicate threat targeting, generate confusion, and impose dilemmas for our adversaries.

Ensure *Delivery.* Resilient logistics connecting the foundry to the fleet—enabled by secure communications and information technology—refuel, rearm, resupply, repair, and revive distributed naval forces down to the last tactical mile.

Generate *Decision Advantage.* Naval forces will out-sense, out-decide, and outfight any adversary by accelerating our decision cycles with secure, survivable, and resilient networks, accurate data, and the assistance of AI-enabled decision aids. Connecting sensors, weapons, and decisionmakers across all domains enables naval forces to mass firepower and influence without massing forces.

Together, these six Force Design Imperatives enable DMO and other Joint warfighting concepts. These imperatives also define the requirements for the surface, subsurface, aviation, and information platforms that our fleet needs and will guide our priority investments going forward.

U.S. NAVY PRIORITIES

Navy's fiscal year 2024 budget request delivers a combat-credible Navy designed to deter and, if necessary, prevail in conflict. To deliver that fleet today, tomorrow, and in the future, we will continue to focus on three priorities: Readiness, Capabilities, and Capacity.

Our central challenge is balancing our investments in the future fleet while sustaining a forward posture that keeps America safe and prosperous. It is increasingly costly to operate and maintain our ships. We appreciate Congress' support with additional funding in fiscal year 2023 to mitigate the effects of inflation. We will continue to need congressional support of the robust budget in fiscal year 2024.

In today's fiscal environment, we face the enormous challenge of simultaneously recapitalizing our strategic nuclear deterrent, century-old dry dock facilities, and strategic sealift capacity, while investing in weapons and platforms we will need in a future fight. Our focus on Readiness, modernizing Capabilities, and building Capacity is a result of the threats facing our Nation today and the challenges we face in the decades to come. To defend our Homeland and protect our national interests, we cannot field a fleet larger than we can sustain. Hollow fleets cannot fight tonight, and sacrificing current readiness for future capabilities or increased ship counts would severely constrain our Navy's ability to respond in crisis or conflict. Our Nation needs a larger, more capable, more lethal fleet—but we must build the future fleet at a sustainable rate; not at the expense of warfighters that must be ready to stand the watch tonight.

READINESS

Readiness remains our top priority. Forward-deployed, combat-credible forces deter conflict and protect the free and open system underpinning American security and prosperity.

Across the Navy, from our shipyards and aviation depots, to our global network of bases and stations, to the steaming and flying hours our sailors need to hone their skills, we are focused on readiness. Our fiscal year 2024 budget request dedicates the resources necessary to train and educate resilient sailors that can outthink, out-decide, and out-fight any potential adversary. Today's security environment demands ships, aircraft, and submarines, as well as expeditionary, information, and special warfare forces that are ready to fight and win.

The Navy is committed to accelerating our warfighting advantage by unleashing our people, and our "Get Real, Get Better" call to action empowers our warfighters to find and fix problems, and to innovate at every level, from the deckplates to our

senior leaders. While our Navy team remains the most capable maritime force in the world, we have identified unacceptable variability in our performance. To address this, we must standardize and incentivize best practices, leadership behaviors, and problem-solving techniques throughout the force to reduce this variability and unleash our full potential. The essential element is fostering a healthy ecosystem—a culture—that assesses, corrects, and innovates better than the opposition, accelerating our warfighting advantage in this critical decade.

This past year, the Navy-Marine Corps team executed more than 22,000 steaming days and nearly one million flying hours. Additionally, the Navy participated in roughly 100 exercises with Allies and partners across the globe, strengthening America's integrated deterrence. We are planning for similarly robust level of exercises and engagement efforts over the next year and in years ahead. As our naval forces remain in high demand, our budget request emphasizes critical aspects of our readiness. Our sailors stand ready all over the world, from Sasebo to San Diego and from Norfolk to Naples, as our Navy keeps the oceans open and free.

Since the invasion of Ukraine, the Navy has had a continuous Carrier Strike Group presence in the Mediterranean, from the extended deployment of the USS *Harry S. Truman* (CVN 75), to the current deployment of the USS *George H. W. Bush* (CVN 77) Carrier Strike Group. Furthermore, the Navy provided early support to European Command operations with surge deployments of additional forces, to include six destroyers, two P–8 aircraft, two submarines, and a destroyer squadron staff. Our sailors have been present where it matters, when it matters. Additionally, America's first-in-class aircraft carrier USS *Gerald R. Ford* (CVN 78) returned to Naval Station Norfolk in November after successfully completing its inaugural deployment in the Atlantic, conducting exercises, strategic engagements, and port visits with Allies and partners.

We have deepened our integration with the U.S. Marine Corps with the establishment of Task Force 61/2 under Naval Forces Europe. This effort streamlined command and control of Navy and Marine Corps forces deployed to act as a deterrent and reinforce Alliance cohesion in the wake of Russia's invasion of Ukraine. We operationalized this cohesion with the deployment of the USS *Kearsarge* (LHD 3) Amphibious Readiness Group (ARG) with the 22d Marine Expeditionary Unit (MEU) embarked. After the USS *Kearsarge* ARG-MEU deployment, the same team provided the core U.S. military command element that quickly established humanitarian support for Türkiye after the recent earthquake, utilizing the USS *Hershel "Woody" Williams* (ESB 4) to deliver disaster relief supplies for those affected by the earthquakes.

Our Navy defends the Homeland and ensures maritime routes remain free and open, fostering compliance with existing rules to assure global peace and prosperity, including in the Arctic Region. Increased competition in the area by both Arctic and non-Arctic nations, as a result of increasingly navigable waters, demands additional attention from America's tri-service maritime forces. With the Marine Corps and the Coast Guard, the U.S. Navy jointly trains for operations in Arctic conditions and, since 1958, our submarines continue to conduct routine operations in the Arctic region. We participated in numerous exercises in 2022—NORTHERN VIKING, COLD RESPONSE 2022, DYNAMIC MONGOOSE, ARCTIC EDGE, and ICEX—with several more planned for 2023 in the high north to ensure we are ready to respond in that region in times of crisis and conflict. As we did this past year, we will continue to work closely with our strong network of Allies & partners from Canada, Iceland, Denmark, Sweden, Finland, Norway, and United Kingdom among many other nations that share a vision of a free, open and stable Arctic. Beyond training and operations, our Navy continues important communications, surveillance, navigation, marine meteorology, and physical oceanography research activities to improve situational awareness in support of future cold weather high-latitude operations, including the Arctic Submarine Lab and Polar Over the Horizon Radar. For example, prototype components of the Arctic Mobile Observing System will be deployed in October 2023 using a variety of autonomous platforms over a year-long deployment to demonstrate under-ice navigation, communication, and environmental sensing. Overall, this budget includes $39 million in fiscal year 2024 and $236 million across the FYDP for Arctic research and operations. Now and in the future, the U.S. Navy stands ready to respond to changing geopolitical and climate conditions in the Arctic.

To deliver forward presence and capability, our Navy continues to make progress improvements. For example, our aircraft depots are reducing the time it takes to conduct maintenance and return aircraft and engines back to the Fleet. Our President' Budget 2024 request improves funding over fiscal year 2023 enactment to sustain gains in our aircraft mission capable rates. Of note, in our aviation depot maintenance account, we increase funding for engines by $25 million, $9 million for com-

ponents, and $1 million for our Depot Readiness Initiative. The President' Budget 2024 request provides for the operation, maintenance and training of nine Active Navy Carrier Air Wings, with the necessary flight hours and maintenance efforts to ensure their carrier and expeditionary strike groups are combat ready. The budget request aligns with our broader focus across Naval Aviation to increase lethality and readiness through process improvement and finding efficiencies at all organizational levels. As aviation costs—across both the private and public sectors—continue to increase, the Navy recognizes the need to maintain a relentless drive to reap the full benefit of every investment dollar.

Better maintenance performance has been a point of emphasis across the Navy. Repeatedly deploying combat-credible forces starts with performing high-quality maintenance on time and in full. Data-driven reforms such as Performance-to-Plan (P2P), the Naval Sustainment System (NSS), and other initiatives continue to improve maintenance processes and increase operational availability. Over the last several years, the aviation community has enhanced readiness as we maintained over the threshold Mission Capable Rate for most Type-Model-Series Aircraft, including the F/A–18E/F, E/A–18G, E–2D, P–8A, MH–60R, and MH–60S. This represents a significant improvement in Navy aircraft readiness, but we are not yet satisfied. We are getting real and getting better at applying what we have learned in aviation to our maintenance processes across the fleet.

We continue to take a data-driven approach to improve surface ship and submarine maintenance, and we have seen positive results. However, unprecedented hiring challenges in a competitive job market, along with sustained, pandemic-induced delays and supply chain issues, have hampered progress for our public and private shipyards. Our budget request funds both private and public sector ship maintenance to 100 percent, with a focus on increasing capacity and retaining highly skilled labor at the public shipyards. On top of those resources, we have invested considerably in other requirements essential to the material condition of our Fleet. Completing maintenance for our *Virginia*-class submarines and returning them to the Fleet on time is a critical warfighting priority. To that end, we added $541 million for *Virginia*-class materiel and spares to build depth and breadth in on-hand inventory to help ensure that the necessary parts are available when required during maintenance availabilities.

We remain committed to driving down costs wherever and whenever possible. In particular, P2P-driven improvements—such as the goal of awarding contracts 120 days before the start of a maintenance availability, level loading ports through better prediction of workload, better availability planning, and improved long-lead-time material acquisition—have provided effective solutions for readiness. Still, just like our industrial partners, our public shipyards face headwinds from workforce constraints, supply chain logjams, and increased costs due to inflation. We recognize the challenges, are not satisfied with current conditions, and will continue to invest in people, processes, and infrastructure to drive maintenance delays down to the only acceptable number—zero.

Today, the average age of U.S. naval shipyard facilities and related infrastructure is 62 years, while the average dry dock age is approaching 100 years. The Shipyard Infrastructure Optimization Program (SIOP) provides a strategic roadmap for necessary investments in our public shipyard dry docks, capital equipment, and facilities. We are committed to taking a holistic, analytic approach to our critical shore infrastructure, making necessary investments to overhaul and optimize our Nation's shipyards through SIOP, and ensuring our shore establishment can support fleet operations. With $2.7 billion requested for SIOP in our budget request, the Navy can continue to upgrade and reconfigure our four public shipyards. This robust investment in the infrastructure and facilities of our four public shipyards is a vital effort to maintain and support upgrades of current and future submarines, aircraft carriers, and surface combatants.

When fully executed, SIOP will deliver required dry dock repairs and system upgrades that will optimize workflow within the shipyards through significant changes to their physical layout. Moreover, the SIOP investments allow the public shipyards to recapitalize industrial plant equipment with modern technology that will substantially increase productivity and worker safety. As a result of previous SIOP investments, we have already completed construction of the Super Flood Basin at Portsmouth Naval Shipyard, construction of the Norfolk Naval Shipyard Production Training Facility, and design of Pearl Harbor Naval Shipyard Dry Dock 3 Replacement. We remain committed to working with Congress, DOD leadership, the shipyard workforce, impacted communities, regulators, and industry leaders as we continue to drive down maintenance delays. We acknowledge that submarines are still experiencing an unacceptable amount of delay days. Still, these investments in our four public shipyards are rebuilding the industrial base we need to maintain, up-

grade, and return our ships, submarines and aircraft carriers back where they belong—deployed at sea.

Maintenance delays and other readiness issues are not solely shipyard problems. To ensure fleet readiness, we must also reinforce and build resiliency into our supply chain, and prevent undue influence by strategic competitors. The Naval Sustainment System-Supply is driving end-to-end naval supply chain integration and reform as it streamlines the Navy's supply chains to increase readiness, decrease turn-around times, increase availability of spares, and reduce costs. The key to sustained success will come from the better use of data as we improve the resilience and responsiveness of the Naval Supply System.

Our sailors—and the civilian workforce that supports the fleet—remain our most important weapon system. We must continue to evaluate and improve our capabilities to achieve our mission of attracting, developing, and managing talent to ensure our advantage at sea while providing exceptional service to our sailors and their families. Notably, our budget request contains a substantial 5.2 percent pay raise for our military and civilians. From education and training to overall health and wellness, our budget invests in our Navy's most important asset—our people.

To ensure the readiness of every operational unit, we are working hard to resolve the manpower problems that exist in the fleet. The solution begins with more robust recruiting and retention efforts. We also need to keep honing and optimizing personnel readiness metrics to include the experience and proficiency of sailors to determine whether operational units are getting personnel with the right skills. The solution demands the continuous effort of leadership as we must continue to prioritize and care for our sailors and civilians.

The Navy continues the Fleet Training Wholeness initiative to integrate live platforms and simulators across our strike groups. This initiative funds Live, Virtual, and Constructive (LVC) training at the unit and strike group levels. In the fleet, LVC continues to be a game-changer in training our combat leaders. To date, fleet exercises like Large Scale Exercise–21 have connected eight Maritime Operations Centers, three Marine Force Operations Centers, eight Carrier and Expeditionary Strike Groups, and 30 ships into a single LVC training environment. As we look ahead to Large Scale Exercise–23, planned for August of this year, our expanding LVC capabilities will only increase the numbers of total participants—training both at-sea and pierside—in an advanced, global scenario. From the pilot in the cockpit to the technician on the radar scope, LVC initiatives allow warfighters in all domains to train together at unprecedented levels of integration and complexity.

Investments in training like the Ready Relevant Learning (RRL) initiative allow the Navy to continue to modernize Navy training and accelerate new delivery methods, supplementing our traditional brick-and-mortar schoolhouses with modern, multi-media, multi-platform solutions. In addition, RRL will develop Career-Long Learning Continuums for Navy ratings to map out technical, professional, and leadership training requirements for apprentice, journeyman, and master level milestones in a sailor's career. Career-Long Learning Continuum efforts will change the paradigms of Navy training by delivering Navy Enlisted Classification refresher training, performance support at the point of need coupled with journeyman and master core training to close not only existing capability gaps, but also enhance fleet readiness.

To maintain a Fleet prepared to fight and win in long-term strategic competition, we continue to evaluate and improve our capability to attract, develop, and manage a talented and diverse workforce. Furthermore, at a time of intense talent competition and a rapidly evolving tactical and technical landscape, we are committed to modernizing and enhancing our entire talent management approach to recruit and retain the best and brightest. We are also reengineering advancement and assignment policies and practices to deliver a positive sailor experience in terms of transparency, flexibility, and career-driven choice, while attempting to balance sailor personal and professional desires with Navy priorities.

As part of this initiative, we released MyNavy Assignment (MNA)—an upgrade to our detailing platform providing visibility of all available billets as part of the Detailing Marketplace Assignment Policy (DMAP). MNA is a modern user interface providing sailors the ability to bookmark billets of interest and provide amplifying information. DMAP continues to expand sailors' options beyond the traditional enlisted career paths. It also rewards sailors in sea-intensive ratings who stay on sea duty by offering assignment-based monetary incentives and early advancement opportunities for many sailors who possess the requisite proficiency and experience. We expanded this practice and policy to supervisor positions through the Senior Enlisted Marketplace (SEM), beginning with Master Chief billets during fiscal year 2024 advancement selection boards. We plan to expand to Senior Chief and Chief

Petty Officer billets in the following 2 years to expand SEM to become the primary means of advancement.

To accelerate those sailors with the highest competence and strongest record, we expanded the Advancement-to-Position (A2P) program to fill priority supervisor and journeyman-level billets in eight additional ratings. A2P assists in filling critical gaps and rewards proven performers willing to take a difficult assignment with a spot promotion. We have also empowered commanding officers and officers-in-charge to reward top performers with both an advancement and geographic stability allowed by a guaranteed follow-on 3-year assignment at the same unit through the Command Advancement-to-Position program. These talent management initiatives support sailor development, increase transparency, and generate Fleet-wide, warfighting readiness.

With great sadness, we recognize that suicide rates increased in 2022. Navy leaders and I have been traveling to ships, squadrons, and bases to listen, learn, and help. Every loss of life is a tragedy. As we continue to destigmatize mental health treatment, we are working to ensure every Member has access to the full continuum of mental health support. Our budget request expands mental health programs like sailor Assistance and Intercept for Life, adds support for the 21st Century Sailor Office, and increases our Warrior Toughness Teams to help foster the mental, physical, and spiritual resilience of our forces. Along with these programs, we are working to ensure the availability of mental health and wellness support worldwide, including at specialty and primary care clinics, Navy installation counseling centers, on the waterfront, embedded within the fleet, and via virtual health platforms. Navy Chaplains and deployed resiliency counselors provide confidential counseling and are essential in ensuring the spiritual readiness and resiliency of the Naval Force. The Navy's budget request continues to resource quality care for our sailors and support services for them and their families.

Though we work in the profession of arms and accept the hazards that come with defending our country, all sailors deserve to be treated with respect and dignity and should feel safe among their fellow shipmates. We are focused on creating a culture intolerant of sexual assault and are actively executing and evaluating the DOD Prevention Plan of Action. This is a comprehensive approach to promote prevention and reduce destructive personnel behaviors that lead to incidents. In addition, we are implementing the 82 Independent Review Commission (IRC) recommendations on accountability, prevention, climate, culture, and victim care. Sexual Assault Prevention and Response (SAPR) personnel remain fully available to sailors worldwide to address victims' physical, mental, and emotional well-being, strengthen resilience, encourage reporting, and support victim recovery.

Moreover, we do not accept any form of sexual harassment in our Navy. To ensure sailors are heard, and to remove actual or perceived bias from the process, Navy Sexual Harassment investigations are now conducted by an independent third party assigned from outside the command. Likewise, the establishment of the Navy's Office of Special Trial Counsel ensures that accountability for sexual assault and sexual harassment, among other serious offenses, will be handled by an independent, specialized, and expert cadre of professionals. We listen, and we continue to learn. Our work to eliminate sexual assaults and remove sexual harassment from our fleet is not done.

When sailors are valued for their diverse talents and are treated with respect and dignity, they feel a sense of belonging to their teams and deliver a higher level of performance. With nearly 50 percent of recruitable talent coming from diverse populations, the Navy must be deliberate in advancing a culture where every person, regardless of their background, has the opportunity to succeed as a sailor and where our Navy, in turn, benefits from our sailors' talents, experiences, and insights. We have built on lessons learned from our findings in Task Force One Navy and have launched 53 Task Force One Navy initiatives, which remain on track for full implementation.

All of our most pressing challenges require strong leadership. However, in the past year, as required to support the Space Force and by the fiscal year 2017 National Defense Authorization Act, the Navy reduced more than 8 percent of its Flag Officer billets. These leadership reductions come at a high cost to maintaining operational readiness, impeding the Navy's efforts in an already challenging operational environment. At present, nearly one-third of the Navy's remaining 149 Flag Officer billets are double-or triple-hatted. These significant additional demands on leadership have ripple effects on readiness that negatively permeate across the fleet. To ensure our Navy can respond in crisis and win in conflict, we need Flag Officers with the focus and bandwidth to respond thoughtfully to the many challenges the Navy must navigate.

In the Navy, we serve as families. To improve the lives of our sailors and their families, we continue to focus on improving the consistency of sailor pay, quality of unaccompanied housing, and other quality of life services. This includes installing broadband internet services and wireless connectivity, improving berthing barge living conditions, improving crew parking and transportation, and ensuring an overall better experience for sailors on the waterfront. Access to high-quality childcare is critical to supporting our warfighters. Our budget request supports increased staff salaries and adds two new Child Development Centers. Funding will also support adding full-day pre-Kindergarten opportunities at overseas locations.

We know that to retain our Force of talented and trained sailors we must continue to invest in ways that benefit them and their families, while providing environments that make them feel valued and enable them to serve honorably. Continued funding to improve the lives of sailors will be our greatest return on investment. Our people form the keel of our fleet's readiness and they will inspire the next generation to answer our Nation's call to serve.

CAPABILITIES

The Navy's budget request makes substantial investments that will modernize our capabilities. The Navy prioritizes delivering capabilities that can achieve lethal and persistent effects inside adversary weapon engagement zones, generate advantages to create off-ramps in crisis, and decisively win should crisis escalate into conflict. As the challenges in this era require the support and unified effort of Allies and partners, it is fundamental to our success that we develop compatible and complementary capabilities. To win now and in the future, we strive not only for interoperability with Allies and partners, but also for interchangeability across the combined force.

As we build and deploy a Navy capable of deterring and, if necessary, defeating a strategic competitor, we must prioritize capabilities for DMO—our Navy's foundational operating concept for maintaining warfighting advantage in contested seas. The Navy's budget request focuses on delivering these critical capabilities. To expand our reach, we are investing in hypersonic weapons, space-based capabilities, unmanned tanking, and long-range precision fires. For increased deception and defense, we are investing in undersea platforms, weapons, and systems, next-generation aircraft and surface platforms, cyber capabilities, counter-surveillance, and integrated weapons systems. Finally, we are investing in smaller, lethal platforms, autonomous systems in all domains, AI, resilient logistics, and integrated combat systems and networks, all of which enable a more distributed fleet, the delivery to sustain it, and expand our decision advantage.

Our adversaries are also heavily investing in emerging technologies. In response, the Navy will adopt a more agile approach to experimentation and force modernization, leveraging partnerships with industry and academia. Working closely with Allies and partners, we will expand our partnerships across the entire technology ecosystem. Maritime dominance has always depended upon the employment of game-changing capabilities in combat.

Rising to meet today's challenges with unmatched capabilities, the Navy-Marine Corps combat team completed its first deployment of F–35C and CMV–22B this past year. The warfighting advantages these platforms bring to the battlespace provide the Joint Force with an undeniable, lethal edge over our adversaries. Both aircraft, though different mission sets, allow our forces to project power deep behind enemy lines. In addition, the USS *Gerald R. Ford* completed its first deployment. This aircraft carrier not only signals the next generation of our fleets' principal weapon of power projection has arrived, but also that our Nation remains poised and committed to maintaining our warfighting advantage for decades to come. Deploying such capabilities and platforms marks the culmination of many years and many people's hard work, showing the capabilities that our Nation can bring to bear.

One of the key areas that is shaping and will continue to shape future warfare is the incorporation of cyber-warfare tools to detect and defeat adversary attempts to infiltrate and disrupt our warfighting systems. The Navy continues to make this a priority focus area to ensure our forces are ready to respond to adversary cyber-attacks. In addition, the Navy is working closely with the Joint Force to develop cyber capabilities that can be used across the entire spectrum of conflict. As such, the Navy will continue moving from its current compliance-based cybersecurity approach to one where the right to operate is earned and managed every day. Teams organized around the Department's recently announced Cyber Ready effort will develop solutions, select tools, and produce methods, policies, guidance, and concepts of operation for instituting this new approach. A critical element to implementing this approach is the need to ensure the Navy has a skilled cyber-workforce com-

prised of both military and civilian cyber experts. To ensure the Navy has the cyber workforce the Nation needs, and in alignment with congressional intent, we are implementing a dedicated cyber designator. We remain committed to growing this capability alongside the Joint Force, as well as with our Allies and partners, collectively building a more robust security outlook.

In response to potential adversaries developing and fielding hypersonic missile systems, the Navy collaborated with the rest of the defense enterprise to make hypersonics one of our highest priority modernization efforts. This past year has been marked with certified successes for our Conventional Prompt Strike capability. In 2022, we conducted one First Stage and one Second Stage Solid Rocket Motor static fires, marking five successful static fire tests of the newly developed missile. In another joint effort, the Navy Strategic Systems Programs and the Army Hypersonic Project Office successfully conducted the second High Operational Tempo for Hypersonics flight campaign in October, 2022. These developments represent significant progress in our hypersonic capabilities, and both programs are on track to support the first fielding of a hypersonic capability to the Army later this year. Both the Army and the Navy programs are on track to support the first fielding of a hypersonic capability to the Army later this year. Stable funding at the requested level will keep this critical capability on track to field on *Zumwalt*-class DDGs, followed by *Virginia*-class SSNs equipped with the *Virginia* Payload Module. The rapid development and demonstration of conventional land and sea-based hypersonic strike weapon systems support our Nation's ability to deter and, if necessary, defeat potential strategic competitors. Modernizing capabilities will remain a priority to ensure our Navy maintains warfighting advantage.

Weapons with range and speed are critical capabilities. Our budget request pursues four multi-year procurement contracts for Advanced Medium Range Air-to-Air Missiles and Standard Missile–6 (SM–6). In addition, our request allows us to continue to work jointly with the Air Force in the procurement and production of Joint Air-to-Surface Standoff Missiles and Long Range Anti-Ship Missiles. We are also increasing our investments in Maritime Strike Tomahawks, as well as refreshing and recertifying existing Tomahawks and MK–48 Heavyweight Torpedoes.

Above the sea, we remain resolute in our commitment to the Joint Force in establishing air superiority in the maritime domain, and sustaining our unique ability to project power from the flight decks of our aircraft carriers. The Navy's President' Budget 2024 request supports procurement of thirty-four aircraft, modification, spares and support equipment. In this budget, our significant aviation investments include 15 F–35C Lightning II's, 14 Multi-Engine Training Systems, 2 MQ–4 Tritons, and 3 MQ–25 Stingray II's. These advanced platforms are helping us drive down risk in our future carrier airwings, which will fully integrate unmanned carrier aviation. This past year, we completed MQ–25A aircraft in-flight refueling of Navy carrier-based aircraft and its first carrier demonstration. This unmanned aerial platform will complement the capability of our combat strike fighters and extend the range of our aircraft carriers.

We continue to make progress on the future technologies we need. This past year, we completed over 4000 hours and 46,000 nautical miles of unmanned surface vehicle operations. These unmanned systems, and others like them, will play a key role in building our capability to conduct DMO. To operationalize the Department's Unmanned Campaign Plan, we established Task Force 59, which has been a game-changer for the fleet. As we prioritize the Indo-Pacific and push warships to patrol those waters, we have leveraged unmanned surface vessels and achieved outstanding maritime domain awareness in a critical region with three major chokepoints—the Suez Canal, the Bab Al-Mandab, and the Strait of Hormuz—spanning a maritime area the size of California. This achievement provides the Navy with scalable solutions to monitor the world's waterways and keep the oceans open and free.

As AI and other disruptive technologies rapidly proliferate, we must proactively work to gain every advantage. Many of these rising technological developments play to our strengths as a Nation. More sensors, providing more information, create more battlespace transparency. Our application of AI solutions will provide our forces with decision superiority as we map, measure, manage, and govern the battle space. We will continuously leverage such technological developments to better the fleet and our sailors. While strengthening our Force, we must remain aware that no nation has a monopoly on innovation—and history has shown us the navy that continues to adapt, learn, and improve the fastest gains a strategic warfighting advantage.

To enhance our current and future hybrid fleet, we are maturing AI-enabled warfighting capabilities and developing an AI-ready workforce. This past year, Task Force 59 led and participated in International Maritime Exercise (IMX) 2022, the

largest maritime AI and autonomous system exercise ever held. Along with this IMX, we executed Digital Horizon, an event exercising 15 advanced unmanned systems, 10 of which operated in the Middle East for the first time. Task Force 59 led industry partners during phased evolutions, both ashore and at sea, to advance fleet efforts to enhance regional maritime awareness with greater effectiveness and reduced cost.

Along with building testing platforms and driving operational concepts for the future fleet, Task Force 59 advances our understanding of commercial technology that has the potential to complement other government-sponsored AI procurement and operations. In support of these efforts, the Unmanned Task Force continues to focus on rapid experimentation and solving operational problems to quickly inform acquisition strategies. We also continued work with partners and Allies in events such as NATO Maritime Unmanned Systems Initiative Exercises.

Strategic sealift investments are returning improved capability for the fleet and Joint Force. Our Navy's commitment to surge sealift requirements continues through procurement and refurbishment of used commercial Roll-On Roll-Off ships to replace aging Ready Reserve Force capacity. In 2022, the U.S. Navy purchased five used sealift vessels and received authorization to buy another two in 2023. President' Budget 2024 requests funds for the purchase of up to two more used vessels in fiscal year 2024 and fiscal year 2025. We will need congressional support to fully execute this cost-effective strategy. The buy-used recapitalization program provides a stable acquisition profile with forecasted maintenance and repair costs to meet strategic mobility requirements at a moderate level of risk. In parallel with recapitalizing strategic sealift, the Navy is researching and developing future joint distribution capabilities and making significant investments to meet fleet and joint refueling requirements.

CAPACITY

Congress's support of the Navy's shipbuilding budget this past year helped us signal our partners in industry—as well as our challengers around the world—that we will remain the world's strongest maritime power. Authorizing and appropriating the procurement of 12 battle force ships displays Congress' continued commitment to the Navy's shipbuilding programs. We appreciate the strong support by Congress for naval shipbuilding during fiscal year 2023 enactment. This year, our budget requests funding for procurement of an additional nine battle force ships.

With sustained funding, the Navy can turn the corner on beginning to build the fleet this Nation needs: a combat-credible, hybrid fleet capable of succeeding across the continuum of day-to-day competition, crisis, and conflict. We also need a fleet with the capacity to distribute assets and deliver larger volumes of kinetic and nonkinetic effects across all domains to meet the strategic and operational demands of the Joint Force.

The Navy's most critical role in support of our national defense and robust nuclear posture continues to be maintaining the most lethal ballistic missile submarines in the world. Thus, our number one acquisition priority remains the on-time delivery of the *Columbia*-class ballistic missile submarine. Originally designed for a 30-year service life, the first of the *Ohio*-class ballistic missile submarines will be retired in 2027 after 42 years of highly effective deterrent patrols. The *Columbia*-class will replace it as the Navy's contribution to the nuclear triad—which remains the most survivable leg of the U.S. strategic nuclear deterrent force. This is a once-in-a-generation investment, and sustaining our Nation's most secure and reliable strategic nuclear deterrent will require considerable resources. When the *Columbia*-class enters full-rate production in fiscal year 2026, delivering the Nation's sea-based nuclear deterrent will consume nearly a quarter of the Navy's entire shipbuilding budget. The Navy's request funds the second *Columbia*-class submarine and delivery of the first vessel in fiscal year 2028. Specifically, the *Columbia*-class program request of $5.8 billion, includes the first of 2 years of incremental full funding for the second submarine, to be awarded in fiscal year 2024. The budget request also includes continuing Integrated Enterprise Plan funding initiatives, material procurement for future boats, and continued funding for Submarine Industrial Base investments. The strategic significance of this platform requires the Navy and the Nation to dedicate the necessary resources to ensure its on-time delivery.

Shipbuilding remains critical to increasing our fleet's capacity, and requires significant investments from both the Government, as included in the fiscal year 2024 request, and the private sector. A combined commitment ensures healthy competition in the shipbuilding industrial base, which is vital to meeting Navy requirements in support of our national interests and defense of the Homeland. With the help of Congress, the Navy and private shipbuilders are identifying opportunities

to generate resiliency and productivity in the shipbuilding workforce. Part of the challenge of growing the fleet is having enough shipyards with the capacity and workforce to build the ships that we are budgeted.

The shipbuilding industrial base faces an increase in demand across the enterprise, particularly in nuclear ship construction. As the Navy ramps up production of the *Columbia*-class, we continue to procure two *Virginia*-class submarines per year. The *Virginia*-class submarine budget requests $10.3 billion, or 32 percent of this appropriation, funding two Block V submarines and Advance Procurement for two fiscal year 2025 and two fiscal year 2026 submarines. These investments are important to meet U.S. requirements, and are critical as we accelerate work to deliver on our commitments under AUKUS. The Navy is working with the Department of Defense, Congress, and industry as analysis of the optimal pathway refines future SSN workload.

Additionally, we continue production of the world's most capable, most lethal surface vessels. The *Ford*-class carrier program requests $1.9 billion, and funds the seventh increment of funding for CVN 80, and the sixth increment of funding for CVN 81. As part of the surface combatant portfolio, our budget requests $4.5 billion for two *Arleigh Burke*-class Destroyers as part of the fiscal year 2023 to fiscal year 2027 multi-year procurement of modern Flight III Destroyers. We plan to award these destroyers this fiscal year. To support the building of our *Constellation*-class Frigates, our request includes $2.2 billion for the fifth and sixth ships of this class. These investments ensure that we field a fleet that sails forward, keeps the oceans open, and ensures our maritime advantage on and below the seas.

To ensure that we can build the future submarines and aircraft carriers, we are taking steps to expand and strengthen the nuclear industrial base by investing in six key areas: shipbuilder infrastructure, supply chain capability/capacity, scaling new technologies, addressing workforce trade skill gaps and constraints, expanding productive capacity via strategic outsourcing of large scale fabrication, and government oversight of expanded industrial base efforts. In the Navy, any time we are splitting atoms, we know the work will be demanding, but these nuclear-powered platforms require our sustained commitment and continued support of the shipbuilders delivering these critical assets to the fleet.

Beyond these nuclear shipbuilding projects, we are working closely with private shipyards to strengthen the Surface Combatant Industrial Base and Frigate Industrial Base. A key focus has been on the Workforce Development investments that address risk in schedules, increase capability to meet future force structure, promote job creation and economic security, and address risk in single or fragile supply chains. Expanding the capabilities of suppliers and shipyard infrastructure in the surface ship industrial base results in greater industrial base stability, cost savings, and improved efficiency as production increases to build greater quantities of surface combatants. These initiatives are paralleled by ongoing private sector investments to expand the Nation's shipbuilding industrial base. We support any efforts to grow our capacity to build more ships annually. This is all part of a long-term commitment and clear signal to industry that the unique work done in our private shipyards is essential to the Nation, and the workforce they provide will be gainfully employed for years to come. The Nation's shipbuilding industrial base remains a strategic asset. It requires continued support to expand its capacity, and to recruit and retain the workforce the Nation needs to deliver the fleet of tomorrow.

A robust munitions industrial base, capable of delivering critical munitions in large quantities and in strategically relevant timeframes, is also an essential component of our Nation's warfighting capacity. The rapid expenditure of munitions in Ukraine has demonstrated the timeless truth that industrial capacity is a key enabler of victory. Our budget request adds over $2 billion in critical munitions investments, including supporting multi-year procurement contracts. We are working closely with our defense partners to make the necessary investments to allow us to rapidly ramp up production of critical munitions right now. We are taking a multi-pronged approach to introduce both stability and competition into the weapons acquisition process in order to accelerate delivery times, increase inventories, and lower costs. This includes use of multi-year contracts and large lot procurements, recertification of existing munitions, new production, and exploration of alternative systems designed to circumvent our adversaries' advantages and play to our strengths. We are also working with our partners and Allies to ensure their requirements are met, as well. Today's weapons are intricate, specialized, and depend on complex supply chains, which challenges our ability to quickly ramp up production. We cannot afford to wait until conflict begins to make these critical munitions capacity investments.

Unmanned systems will play an ever-increasing role in expanding the capacity and distribution of our fleet. We will explore opportunities to scale proven capabili-

ties of unmanned Maritime Domain Awareness systems, such as those demonstrated by Task Force 59. In addition, the AI-enabled software that meshes our network of systems and platforms will provide an array of decision advantage solutions as we track forces, manage the battlespace, and maintain our dominance at sea. Finally, we must focus on accelerating the adoption of technologies and scalable platforms that provide increased capability and capacity, while laying the foundation for our future hybrid fleet.

CONCLUSION

The U.S. Navy's mission has never been more essential for the preservation of American security and prosperity. Facing increasingly aggressive challengers, the Navy's priorities—Readiness, Capabilities, Capacity—will help us maintain our combat credibility in contested seas.

In line with the NDS, the Navy's fiscal year 2024 budget request keeps us on a steady path to modernize U.S. naval power, while maintaining readiness and sustaining a forward posture that keeps America and our Allies safe and prosperous.

Capable ships, submarines, and aircraft are expensive instruments of national power, as are the costs of maintaining and sustaining them. However, without a ready, powerful Navy, the costs we incur in potential conflict could be much higher. The investments we make now will shape the global maritime balance of power for the rest of this century.

This is my final testimony before this Committee. It has been the honor of a lifetime serving as the Chief of Naval Operations these past three-plus years.

On behalf of more than 600,000 Active and Reserve sailors and Navy civilians, thank you for allowing me to testify today. I am grateful to this Committee and to your colleagues in Congress for your steadfast commitment to the Navy. Let us continue our work to deliver the Navy that this Nation deserves—a Navy that will preserve peace, strengthen prosperity, and defend America for many decades to come.

Chairman REED. Thank you, Admiral Gilday.

General Berger, please?

STATEMENT OF GENERAL DAVID H. BERGER, USMC, COMMANDANT OF THE MARINE CORPS

General BERGER. Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, I also thank you for your comments, and my wife, Donna, is here also as is the sergeant major of the Marine Corps and his wife, and it has been the privilege of a lifetime and this is the best team you could ever hope to match up with.

Three years ago I appeared before you and described how change, in my opinion—rapid change—was required to meet our statutory requirements and the mandates of the National Defense Strategy for the future, and with the bipartisan help of this Committee and the civilian leadership in the Pentagon I am here to tell you that Force Design for the Marine Corps is not a future aim point. It is a reality and it is here today.

A couple of examples. In the Pacific, in U.S. Indo-Pacific Command (INDOPACOM) Task Force 76.3, they were built to create advanced information sensing maritime awareness for Admiral Aquilino, which he desperately needs in the Pacific.

They took what they learned during experimentation and they applied it in exercises. They turned kill webs—what they call kill webs into reality and they did it in the Philippines and they did it in Japan, right in China's backyard.

In U.S. European Command (EUCOM) last fall Task Force 61.2, using some new technology and a different way of organizing, created both air and maritime domain awareness for the European commander and Sixth Fleet and they focus their efforts on the Russian air and naval activities, and marines, in fact, are in Estonia

right now doing the same and they will be there for the next 4 months.

In U.S. Central Command (CENTCOM) General Kurilla has our Marine Corps MQ–9s. He needs ISR [intelligence, surveillance and reconnaissance]. He needs persistent ISR and that is what we are giving him in the key maritime terrain, and this month. In fact, while we are sitting here, the new Marine Littoral Regiment (MLR) out of Hawaii is in the Philippines, Third MLR. They are using new sensing capabilities and lethal capabilities in the Philippines and they are demonstrating that right alongside of our Philippine counterparts and other allies and partners in exercise Balikatan, and that is how it should be.

A couple of months ago Japan announced that they would host the second—the next Marine Littoral Regiment forward. It would stay in Japan in the First Island chain, and that is exactly where I think you want Marine Corps presence.

In short, your marines are forward. I think they are where it matters most and that is exactly how it has always been. Three years ago I described how the Marine Corps would not just modernize quickly but we would self-fund that effort. We would get leaner, lighter, more naval, and 3 years later your Marine Corps—your marines—have done just that and the results are in the field now.

We are not waiting for 2027 or 2025. We are not waiting for 2030. Your marines are ready to handle any crisis anywhere on the globe now, today.

Our major divestments, which we had to do, they are done. We are at our fighting weight. Now we have to sustain our modernization efforts while we focus on the quality of life issues most important to marines and sailors and their families.

People—as both the Secretary and the CNO [Chief of Naval Operations] have mentioned, people are the real source of our competitive advantage as a Nation, as the Marine Corps, and I ask for your help now to invest in their quality of life.

We have to focus on where marines live, where they work, where they eat. marines and their families expect that from us. They have earned it and they deserve it and now we have to deliver.

I think restoring, modernizing our infrastructure, which many of you all have spoken about, is directly tied to recruiting, directly tied to retention. That is how we support families. That is how we generate readiness.

So on behalf of all marines, I ask for your support now as we bring our infrastructure up to par with the quality of marines and sailors who operate from those warfighting platforms.

I also ask for your help, your support for the amphibious fleet. That is how we project power. The CNO and I agree on three key principles when it comes to the amphibious fleet.

First, the absolute minimum number of amphibious warships the Nation needs is 31. That is the operational requirement minimum.

Second, both of us agree block buys do two things. They save the taxpayer money and they give the industry what the CNO calls headlights, which they need.

Third, divesting without replacing, I think, is a dangerous approach. That creates unacceptable risk. Amphibious ships are crit-

ical to crisis response. They are critical to deterrence. That is how we evacuated citizens out of Lebanon. That is how the United States made our initial entry into Afghanistan in 2001. All from the sea.

Today, we are asking them to do all that plus deterrence, plus integrated deterrence and campaigning, and my concern here is the first time this Nation cannot respond to a crisis and someone else does is the last time they trust us.

So in my final year of Commandant I will just finish up by saying thank you. Thank you to the individual Members of this Committee. Thank you for your coaching and your mentoring and your guidance.

With that, I look forward to your questions. Thank you.

[The prepared statement of General Berger follows:]

PREPARED STATEMENT BY GENERAL DAVID H. BERGER

INTRODUCTION

Chair, Ranking Member, and distinguished Members of the Committee, I am thankful for the opportunity to report the progress of your Marine Corps over the last year and seek your support in continuing to prepare the Service to face an increasingly uncertain and challenging future. I would be remiss, in my final year as Commandant, if I did not first acknowledge the unwavering support of this Committee over the last 3 years. Simply put, the Marine Corps of today is a better fighting force because of your guidance, commitment, and resourcing decisions. But there is still much work to be done. A brief review of world events over the past few years tells us we are moving in the right direction, but we cannot slow down. In fact, we need to accelerate our efforts so your Marine Corps can effectively deter while remaining ready to immediately respond to any crisis, anywhere on the globe, at any time. The work of this Committee is crucial to the modernization of the Marine Corps into a force that will continue to do just that.

POSTURE

Today, more than 32,000 marines are forward-deployed or stationed across 50 countries. There are also, on average, 102 Marine Corps fixed-wing aircraft (F–35, F/A–18, and KC–130J) forward-deployed or stationed overseas, a 22 percent increase since 2018. This forward posture is a critical requirement for integrated deterrence and reinforces a national source of strategic advantage—our global network of allies and partners.

Most Marine Forces west of the International Date Line are based in Japan. In January, the Government of Japan announced its intention to host the future 12th Marine Littoral Regiment (MLR). This unit will possess advanced intelligence, surveillance, and reconnaissance (ISR) capabilities as well as long range precision fires capabilities, improving both maritime domain awareness and our ability to deter potential adversaries. When combined with the other stand-in force capabilities of III Marine Expeditionary Force (MEF), 12th MLR will provide a major lethality upgrade for the fleet and joint force in the Indo-Pacific.

While our posture has become more robust in the Indo-Pacific, fewer of our forward-deployed marines are serving afloat with the fleet. In 2018, 16,000 marines served aboard ships, but in 2022, just 12,660 did so—a 20 percent decrease. The principal reason for this decline was the lack of amphibious warfare ship availability. As directed by the Fiscal Year 2023 National Defense Authorization Act (NDAA), 10 LHA/LHD and 21 LPDs are the bare minimum necessary for our amphibious fleet. Additionally, in my best military judgment, the Marine Corps needs a minimum of seven Amphibious Ready Group / Marine Expeditionary Units (ARG/MEU), three MLRs, and 35 Medium Landing Ships (LSM) to provide a strong forward posture for building partnerships in the littorals and to contribute to integrated deterrence.

RESOURCES

The fiscal year 2024 budget request for the Marine Corps is $53.2 billion (B). To date, the Marine Corps has taken every possible opportunity to self-fund our modernization. This required hard choices and difficult, unpopular decisions. With the

support of our civilian leadership in the Department of the Navy (DON), Department of Defense (DOD), and Congress, from Presidential Budget 2020 to Presidential Budget 2023 this approach succeeded. Over the last five program objective memorandum (POM) cycles, the Marine Corps divested $18.2 billion across the Future Years Defense Program (FYDP) in structure and legacy platforms and systems and has reinvested $15.8 billion directly into modernization. The success of these divest-to-invest actions would not have been possible without the support of our civilian and congressional leadership.

To be clear, the Marine Corps is now complete with our major divestments. Reducing the approved acquisition objectives (AAO) of major programs like the CH–53K or F–35 at this point would not produce resources for investment elsewhere and would be premature decisions. We approached fiscal year 2024 as a program review year. Limiting the introduction of new programs in fiscal year 2024 allows the Marine Corps to maintain or even accelerate progress on investments from preceding budget cycles that are directly tied to our pacing threat.

The suggestion that we may have to choose between preparing to fight tonight—which your marines are fully prepared to do—and preparing for some distant point in the future presents a false dichotomy. Readiness, lethality, and modernization to meet future challenges are all required today. Our collective challenge is to balance the resource tension between the force we employ today and the development of the force to compete and win in the years to come.

WARFIGHTING READINESS

In many ways, Marine Corps readiness has improved since 2018. Our units have higher levels of persistent manning / staffing, more equipment and supplies, enhanced individualized training, and more collective training—much of it force-on-force. Our combat arms units are equipped with modern capabilities far superior to those of past formations. Yet, while many things have changed, the foundational elements have not. We remain the most elite infantry in the world, with the most proficient combined arms teams on the globe.

While there have been substantive readiness improvements across the force, nowhere have these improvements been more visible than in Marine aviation. Across all type / model / series of aircraft, our mission capable rate has increased from 57 percent in 2018 to 66 percent in 2023—an achievement that would not have been possible without congressional support and the herculean efforts of Marine aviation mechanics and maintenance crews. We anticipate further improvements to aviation readiness as we retire older airframes (e.g., F/A–18 and CH–53E) and accelerate acquisition of newer platforms like the F–35B/C and CH–53K.

In 2018, we employed a lethal, though primarily fourth generation, tactical air (TACAIR) force of 173 F/A–18C/D and 126 AV–8B, with 72 fifth generation F–35B/Cs. Today, our TACAIR force is comprised of 174 F–35B/C and 178 fourth generation aircraft—a major step forward. Despite the challenges associated with transitioning the force from fourth to fifth generation aircraft, the overall readiness of our TACAIR fleet increased from 56 percent in 2018 to 68 percent in 2023.

We have also achieved significant gains in the readiness of our MV–22 fleet, rising from 52 percent in 2018 to 64 percent in 2023. The current challenges surrounding a series of hard clutch engagements caused each of the Services to take immediate action to replace certain transmission components in our V–22 fleets. That action is ongoing, and we expect to see a rebound in readiness this spring and summer.

Amphibious Combat Vehicle (ACV): The introduction of the ACV has the potential to greatly enhance our littoral mobility and expeditionary reach. However, as with all new systems and technologies, there have been a few notable challenges. At present, we are working with BAE Systems to address two major component issues—one with the struts / shock absorbers, and the other with the central tire inflation system. Both issues have caused part failures, resulting in a decrease in reliability and a corresponding decrease in readiness. We have also identified issues related to possible water incursion into the power train and are working with our industry partner to resolve those as well. In addition to these mechanical issues, we have experienced three incidents in the surf zone that resulted in vehicles rolling over. According to BAE Systems and confirmed by our safety investigations, these rollovers were caused by a lever effect generated when the vehicle becomes parallel to the surf-line and is struck by a large wave. These events were, in large part, the product of training shortfalls. We are actively working with BAE Systems to rectify all mechanical concerns and are enhancing the training regimen for our vehicle operators on this new and more sophisticated amphibious vehicle.

F135 Engine: In both President's Budget 2022 and President's Budget 2023, Congress enacted funding to support F135 engine modernization. In addition to this funding, the Office of the Secretary of Defense (OSD) added significant resources for an engine core upgrade and for power and thermal management system (PTMS) modernization. We will continue to monitor the current F135 engine and F–35 PTMS's ability to support Block IV mission systems and will work with the Joint Program Office to ensure our requirements are being met.

Unmanned Aircraft System (UAS) Pilot Training: As an integral part of Force Design, we embarked along a path in late 2019 to double our uncrewed aircraft capacity across the force from three unmanned aerial vehicle squadrons (VMU) to six squadrons, while transitioning from the RQ–21 to the much more capable MQ–9. While our commitment to uncrewed systems is unshakeable, we have concluded the Air Force's capacity to generate trained MQ–9 UAS officers is insufficient to satisfy Marine Corps requirements. At present, half of our total inventory of UAS officers (72 of 148) are not yet trained and qualified to operate the MQ–9. We are working with the Air Force to remedy this throughput issue. However, there is a need to direct the necessary resources in future budgets to establish a Naval UAS School to resolve this larger joint force issue.

Pilot Readiness Concerns: Service Chiefs are routinely asked about how the joint force can effectively compete against the Department's pacing challenge—the People's Republic of China (PRC)—or our acute threat—Russia. But there is a different competition that is more directly and more adversely impacting the joint force than that emanating from either Russia or China, and that is the unhealthy competition between the Services and the airline industry. As the head of personnel for the Air Force stated during testimony in 2017, we cannot compete with the airlines. We could not then and we cannot now. This is an issue that requires your oversight. We are at a competitive disadvantage and risk our reservoir of pilots drying up. As an example, in 2018, the Marine Corps had 88 of the 203 required F–35 pilots (43 percent of the requirement). At the end of 2022, we had 218 of 498 F–35 pilots (44 percent of the requirement). At the end of 2022, we had 200 F–35 pilots in flight school and another 62 at our fleet replacement squadrons with fiscal year 2023 and fiscal year 2024 completion dates. We are making some progress, but not enough—and certainly not quickly enough. We are exploring various options for structuring aviation bonuses and aviation incentive pay under the new authorities granted in the fiscal year 2023 NDAA. But ever-larger monetary incentives are neither sustainable nor the appropriate remedy. This is not just a Marine Corps problem. It is a joint force problem, and we will continue to work with the other services and Congress as our understanding of this issue develops.

FORCE DESIGN AND CURRENT OPERATIONS

There is a misperception by some that Force Design might create a gap in Marine Corps capabilities between divestment and fielding new capabilities. The reality is that fielding new capabilities associated with Force Design is already well underway. Many of these "future" capabilities tied to Force Design 2030 are already being employed by Marine forces today. Six examples from 2022 are illustrative:

TF 61.2 and Reconnaissance and Counter-reconnaissance: In March 2022, U.S. Sixth Fleet partnered with II MEF to create Task Force (TF) 61.2. TF 61.2 was designed as a joint task force crisis response capability to command and control naval forces supporting contingencies in Europe and Africa. This force was delegated tactical control of amphibious forces (ARG/MEU) in theater, allocated Marine forces (Marine Rotational Force—Europe), and a task organized reconnaissance/counter-reconnaissance force. Near simultaneously, II MEF and 2d Marine Division were tasked with "accelerating experimentation with maritime, multi-domain reconnaissance constructs and activities to enhance the ability of the stand-in force to dominate the information environment, sense and make sense of the situation, and win the reconnaissance vs. counter-reconnaissance competition." Commander, Sixth Fleet, immediately volunteered TF 61.2 to support these broader Service experimentation efforts. During the next several weeks, TF 61.2 conducted training aboard both the USS *Woody Williams* (ESB–4) and USS *Georgia* (SSGN–729) and engaged in combined-arms training in both Greece and Turkey. Those initial exercises demonstrated that maritime expeditionary forces could increase surface, subsurface, and aerial domain awareness for the fleet commander—regardless of theater—and allowed us to focus on the information web required to create domain awareness in a contested space. TF 61.2 then transitioned these experimental capabilities to the Baltics, where it participated in bilateral training on maritime domain awareness with the Estonian Navy in the Gulf of Finland. During this period, TF 61.2 participated in an amphibious landing in Estonia and Exercise BALTOPS with 16 North

Atlantic Treaty Organization (NATO) nations, utilizing 47 ships and 7,000 personnel. This new organization has been so successful the previous Commander, U.S. European Command (EUCOM) chose to highlight the value of the task force during his spring 2022 annual testimony. The bottom line is that your marines' ability to conduct reconnaissance and counter-reconnaissance is a current force capability that directly contributes to competition and deterrence today.

TF 76.3: Building upon the success of TF 61.2, in October 2022, the 3d Marine Expeditionary Brigade and Naval Task Force 76 staffs merged into a completely integrated naval task force in the Indo-Pacific. Over the next several months, TF 76.3 experimented with naval concepts at sea and ashore via a broad campaign of learning labeled Noble Fusion 22.2. TF 76.3 also participated in exercises Kamandang in the Philippines and Resolute Dragon in Japan. Once again, marines and sailors demonstrated the ability to create advanced information webs to support maritime domain awareness across the theater. Just as importantly, they demonstrated this capability to potential adversaries.

USS *Tripoli:* The most recent deployment of the USS *Tripoli* (LHA–7) demonstrated the strategic and operational advantage that amphibious warfare ships create today. In early 2022, *Tripoli* set sail as an independent deployment, in part to test our F–35B "Lightning Carrier / Assault Carrier" concept by which 16–24 F–35Bs were embarked and operated in concert with a traditional carrier strike group. During *Tripoli's* time in the Indo-Pacific, embarked marines and sailors trained with and supported the USS *Abraham Lincoln* (CVN–72) and USS *Ronald Reagan* (CVN–76), among other traditional surface combatants. Not only did the deployment illustrate the potency of the Lightning Carrier concept in support of carrier strike group operations, it also demonstrated the versatility and value of the platform for the integrated Navy-Marine Corps team. During Exercise Valiant Shield 2022, the Commander of U.S. Seventh Fleet, Vice Admiral (VADM) Karl Thomas, embarked his staff aboard the Tripoli and used it as his command platform for 15 days—a strong endorsement of the platform's importance within the larger fleet. VADM Thomas noted, "One day you can have F–35Bs on the flight deck, the next day you could have MV–22s and you can be putting marines ashore . . . it just is a very versatile instrument . . . [with] 14 5th-gen fighters on board—it's an incredibly capable sensor."

The LHA's size, which closely mirrors the amphibious warfare ships of our allies, makes it an attractive partnership and learning platform. During their deployment, marines and sailors from Tripoli and the 31st MEU trained with forces from Japan, Australia, the Philippines, and Singapore.

Multifunction Air Operations Center (MAOC): In March 2022, 2d Marine Aircraft Wing (MAW) conducted the Service's first operational deployment of a multi-function air operations center (MAOC). In Lithuania, under the command of U.S. Air Forces Europe, the MAOC conducted air surveillance and multi-domain awareness in support of NATO operations. This is not simply an evolutionary step in fixed aviation command and control (C2) nodes, but rather, a transformational, expeditionary capability that can serve as a hub for Marine Corps, naval, and joint kill chains and webs. The MAOC provides the Marine Corps with the capability to control aircraft and missiles and enables decision superiority. It also offers the ability to gain and maintain custody of adversary targets and hold those targets at risk via fires with its organic TPS–80 Ground/Air Task-Oriented Radar (G/ATOR), Common Aviation Command and Control System (CAC2S), and highly proficient aviation C2 marines. The MAOC is scalable by task-organized units, small enough to support distributed teams or large enough to support a multi-MEF or Corps-level fight. This agency construct is also the model we are using for the development of all-domain C2. 3d MAW is now leading the Service's MAOC experimentation efforts and employed this capability as part of Marine Rotational Force—Darwin (MRF-D), integrating C2 and sensor services for 16 allied and partner nations during Exercise PITCH BLACK. From these initial efforts, 3d MAW has matured the MAOC, creating a persistent hub to enhance the common tactical picture for I and III MEF. Recent experiments in February 2023, which included U.S. Indo-Pacific Command (USINDOPACOM), have further demonstrated the MAOC's ability to integrate additional capabilities from the MEF Information Group and improve the common tactical picture for a carrier strike group, and is visible evidence of Joint All-Domain Command and Control (JADC2) in practice.

Marine Corps Information Command (MCIC): In October 2022, we streamlined and simplified much of the coordination required for space and cyberspace operations at the headquarters level, by realigning current relationships and structure at Headquarters, Marine Corps (HQMC) from a staff officer to an operational commander, to create the MCIC. The MCIC is a service-retained command designed to integrate global Marine Corps capabilities in information, intelligence, cyberspace,

and space to support Fleet Marine Forces (FMF) resulting in decision advantage. This two-star command operates under Marine Forces Command (MARFORCOM) and provides critical linkages across operational level planning. It also provides task organized detachments to support the FMF commander's campaigning objectives. This allows the commander to leverage the authorities needed to synchronize global cyber, space, influence, and intelligence effects and generate multi-domain advantages in support of the commander's objectives. The MCIC achieved initial operational capability (IOC) in January 2023.

VMGR–153 and HMH–461: In January 2023, we activated Marine Aerial Refueler Transport Squadron 153 (VMGR–153) in Kaneohe Bay, Hawaii. By 2026, VMGR–153 will bring 15 KC–130J aircraft to the region, building on the organic mobility available to marines responding to crisis or conflict in the region. We are also approaching 1 year since the CH–53K program achieved IOC and are well underway transitioning Marine Heavy Helicopter Squadron 461 (HMH–461) into our first fully operational CH–53K squadron. Despite their ongoing transition, HMH–461 is already demonstrating the significant impact of this new capability, conducting heavy lift assault support missions previously impossible with legacy aircraft. In parallel, the operational test and evaluation squadron (VMX–1) continues to push the boundaries of heavy lift operations. Last December, they successfully lifted an F–35C, demonstrating the platform's utility in conducting next generation tactical recovery missions.

FORCE DESIGN AND THE GROUND COMBAT ELEMENT (GCE)

Infantry Battalion Experiment (IBX): IBX is an ongoing Service-level initiative designed to evaluate the future infantry battalion's ability to conduct expeditionary, offensive, and defensive operations as an element of a MEU, MLR, or infantry regiment in support of fleet and joint operations. The results of IBX live-force experimentation represent a critical component of our campaign of learning and are one of several inputs informing our ongoing assessment of the future infantry battalion.

After 24 months of experimentations and force-on-force exercises with three infantry battalions, our combat developers, division commanders, and MEF commanders recommended an 811-person infantry battalion. This new battalion demonstrated improved C2, sensing, and lethality. Importantly, this recommendation reflects the value of our campaign of learning. In 2019, we experimented with a 735-person battalion. But force-on-force experimentation made clear our initial assumptions were off. It also demonstrated a need for additional ground ISR and indirect fires capacity. In line with these findings, we right-sized personnel, added back indirect fires capacity, and added organic UAS platforms and personnel to improve surveillance and target acquisition. Future infantry battalions will possess Block IV Javelins at the company-level to increase anti-armor capability and will have loitering munitions (organic precision fires (OPF)) at the squad and platoon levels to increase lethality, enhance maneuver, and facilitate distributed operations. They will have additional communications, logistics, and intelligence capabilities at the company-level, and new signals intelligence and electromagnetic warfare capabilities at both the battalion and company levels. They will possess vehicle-mounted and canister-launched OPF at the company and battalion level to enhance the lethality, multi-domain awareness, and reach of those units, and will have improved C2 systems at the company-level. But our learning never stops. We will build from past efforts and conduct another round of experiments with two additional battalions this year. These experiments will evaluate the new infantry battalion design against a peer adversary, with the aim of further refining its structure and capabilities to the demands of the modern battlefield. We will also begin incorporating our lessons learned into FMF battalions not directly involved in IBX later this year.

Close Combat Lethality: In 2018, former Secretary of Defense James Mattis convened the Close Combat Lethality Task Force (CCLTF). As we approach 5 years since that effort was launched, we should take stock of its significant impact. The CCLTF's insights have been instrumental in informing the ongoing transformation within our infantry formations, the most visible of which being the success of the Multi-purpose Anti-armor Anti-personnel Weapon System (MAAWS). It provides a multiple-effects rocket system to infantry and combat engineer squads to increase firepower and enhance their ability to close with and destroy the enemy. The MAAWS is a medium-range, multi-purpose, man-portable, line-of-sight, reloadable, recoilless, day/night, anti-armor, and anti-personnel weapon system with an available suite of 84mm rockets. MAAWS munitions will be capable of obscuration, illumination, personnel denial, armored vehicle denial and penetration, bunker and hardened facility penetration, and soft target destruction capabilities. Every rifle squad, combat engineer squad, and Marine Special Operations Command

(MARSOC) team will be equipped with one MAAWS. Fielding began in the 3d quarter (3Q) of fiscal year 2021 and will be complete in 3d quarter of fiscal year 2025.

The Marine Corps has also fielded lightweight body armor including a new plate carrier (PC Gen 3), and an enhanced combat helmet—all of which address the significant weight of the individual marine's combat load so well documented from operations in Iraq and Afghanistan. In addition, new night vision devices (AN/PVS–31A) have enhanced night movement and weapons lethality for our infantry, improving their situational awareness and ability to acquire targets. The MAAWS, Squad Common Optic, M27 squad automatic rifle, M17 pistol, and Mk13 and Mk22 precision rifles have all increased organic lethality within our small units. Multi-domain sensing and targeting is being addressed with a new signals intelligence / electromagnetic warfare (SI/EW) program called Marine Electromagnetic Ground Family of Systems (MEGFoS). This SI/EW suite of equipment, crewed by dedicated SI/EW and cyberspace personnel, will be employed in the future infantry battalion, greatly enhancing tactical level target identification and engagement. All these capability enhancements make our squads and platoons more lethal.

3d MLR and 12th MLR: On 3 March 2022, we activated 3d MLR and it is on track to achieve IOC this year. 3d MLR has an established littoral combat team (LCT), combat logistics battalion (CLB), and littoral anti-air battalion (LAAB), all of which have been exercising in operations, activities, and investment events in the Indo-Pacific region. 3d MLR continues to operate in coordination with the Naval Surface Group Middle Pacific (NAVSURFGRU MIDPAC) to further develop its maritime fires capabilities, and most recently, deployed to Marine Air-Ground Task Force—Training Command (MAGTF–TC) to execute the first Service-level MLR training exercise. This exercise focused on the MLR's ability to sense and make sense of the operating environment and rapidly close kill chains. 3d MLR is designed to be a stand-in force, but it is not the Service's sole stand-in force. Rather, it is one part of the larger III MEF system of stand-in forces that includes our forward deployed naval force, as well as other expeditionary capabilities including the F–35B/C.

We are on track to activate 12th MLR by 2025. The Government of Japan and Secretary Austin recently announced that 12th MLR will be forward stationed on Okinawa to create greater maritime domain awareness and enhance our collective ability to deter in the region. As Secretary Austin stated during the announcement, "We will equip this new formation with advanced intelligence, surveillance, and reconnaissance, as well as anti-ship and transportation capabilities that are relevant to the current and future threat environments." 12th MLR's presence and capability suite will augment our existing stand-in force capacity in the first island chain.

These littoral regiments provide the joint force two essential capabilities. First, they serve as eyes and ears of the joint force—meaning their persistent, forward, and distributed posture enables the joint force to reach well inside of weapons engagement zones. Second, they provide decision space and time for the other joint forces to deploy, while maintaining continuous maritime domain awareness.

FORCE DESIGN EMERGING CAPABILITIES

In addition to current operations that demonstrate Force Design in action today, a number of emerging capabilities on the horizon will increase the Marine Corps' ability to enable full-spectrum operations for the Joint Force in contested environments.

Unmanned Logistics System-Aerial (ULS-A): As the ongoing conflict in Ukraine has illustrated, even traditional ground resupply, executed over interior lines and relatively short distances, can be disrupted with operational level effects. Consistent with these lessons, the Marine Corps is developing the ULS-A Small or Tactical Resupply Unmanned Aircraft System (TRUAS). The TRUAS has a 9-mile range and maximum payload of 150 pounds, which is sufficient to fly in ammunition, food, medical supplies, and batteries, among other supplies. This small system only requires two marines to operate and will be a game-changing capability for our distributed forces. The TRUAS is anticipated to achieve IOC in 2023 with fielding completed in 2027. Fielding this capability is critical toward setting conditions for the development of the ULS-A Medium system, which is the required capability for large-scale tactical distribution in a contested space. The emerging ULS-A Medium will be fielded in 2025 and will provide payloads between 300 and 600 pounds with a range of up to 100 miles.

Marine Air Defense Integrated System (MADIS): MADIS is an expeditionary, upgradable, and state-of-the-art capability to protect maneuver forces, installations, and other designated critical assets from fixed / rotary wing (FW/RW) aircraft and Group 1–3 UAS. It uses sensor-integrated C2 to provide beyond line-of-sight cueing,

targeting, and engagement. Current air defense capabilities only defend against FW/RW targets and Group 3 UAS within line of sight. The MADIS is composed of a complementary pair of Joint Light Tactical Vehicles (JLTV). The Mk1 JLTV is designed to kill FW/RW variants with a turret-mounted 30mm cannon, Stinger missiles, and an electromagnetic warfare (EW) jammer. The Mk 2 JLTV provides redundant, non-kinetic and kinetic fires while primarily employing C2 software and sensors to collect, interpret, and pass radar tracks to the Mk 1 via a wireless local network for target engagements. The AAO is 131 systems comprised of 262 vehicles; the fiscal year 2024 budget request provides for 13 MADIS (26 vehicles). We will achieve IOC in 4th quarter fiscal year 2024 with the delivery of 17 systems, and we anticipate reaching full operational capability (FOC) in fiscal year 2031. The fiscal year 2024 budget request for the MADIS family of systems is $265 million (M).

Medium Range Intercept Capability (MRIC): The MRIC defends forward-deployed forces against the threat of cruise missiles and other aerial threats with similar flight profiles. This is accomplished through the integration of already-fielded Marine Corps and Israeli systems that include CAC2S, the TPS–80 G/ATOR, the Iron Dome Battle Management Controller, and the Tamir missile and guidance uplink. Each MEF will be fielded with one MRIC battery. A battery is comprised of a headquarters element and four independently deployable firing platoons. To date, there have been four successful live fire events: August 2019, November to December 2021, April to June 2022, and September 2022. Each live fire successfully demonstrated the destruction of multiple operationally challenging missile threats. The Service's fiscal year 2024 budget request is for $44 million.

Navy-Marine Expeditionary Ship Interdiction System (NMESIS): The Marine Corps is transitioning the majority of its existing lightweight 155mm towed artillery batteries into medium-range missile (MMSL) batteries equipped with NMESIS to conduct anti-surface warfare operations as a component of an integrated naval force. By 2030, the Marine Corps will have 14 MMSL batteries: three batteries forward deployed in support of MLRs and 11 continental U.S. (CONUS)-based batteries supporting the rotational and MEU deployments. The program will enter low-rate initial production (LRIP) in 3d quarter fiscal year 2023. The first six operational launchers will be fielded to MMSL Battery, 3d MLR in 4th quarter fiscal year 2023 to give the Service its first capability to contribute to sea denial and sea control operations with ground based anti-ship missile (GBASM) fires. We anticipate reaching IOC in fiscal year 2025 after fielding five MMSL batteries and a MMSL battalion headquarters. We anticipate reaching FOC in fiscal year 2030 when all 14 MMSL batteries have been fielded. The Service's fiscal year 2024 budget request for $402 million supports procurement of 24 NMESIS launchers and associated equipment, and 90 Naval Strike Missiles (NSM) keeping the program on track to reach 774 NSM. The 774 NSMs provide one combat load plus one combat load resupply per deployed MMSL unit.

Long-Range Fires (LRF): OSD directed the Marine Corps to develop and field a ground-launched Tomahawk Land Attack Missile (TLAM) capability to support joint force long range, precision fires requirements. The LRF weapons system is composed of a Remotely Operated Ground Unit for Expeditionary (ROGUE) Fires leader kit, LRF launcher, LRF C2 System (LC2S), and LRF Reload and Resupply System (LRRS). All four components are required to complete a full mission of loading, transporting, and firing a Tomahawk missile. This capability leverages existing Navy and Marine Corps hardware and software such as the Mk41 Vertical Launch System, Tactical Tomahawk Weapon Control System, Tomahawk cruise missile, and JLTV to reduce risk by accelerating capability delivery to the FMF and combatant commanders. The current plan is to establish three 16-launcher, long range missile (LMSL) batteries to form one LMSL battalion capable of deploying one battery at a time by 2030. The first four operational launchers are scheduled to be fielded during 4th quarter fiscal year 2024. Remaining batteries are planned for activation between fiscal year 2026 and fiscal year 2028. OSD provided $1.2 billion in research, development, testing, and evaluation (RDT&E) and Procurement Marine Corps (PMC) funding through fiscal year 2026 to support the development and procurement of 56 LRF launchers, C2 and support equipment, and 152 Tomahawk (TLAM and MST) missiles. The fiscal year 2024 budget request for LRF is $142 million.

RESEARCH, DEVELOPMENT, TEST & EVALUATION (RDT&E)

This year, we will invest heavily in the next generation of RDT&E efforts. We are placing an emphasis on the future of marine aviation, JADC2, persistent sensing, and contested logistics, while expanding our experimentation efforts. With the support of the Office of the Under Secretary of Defense for Research and Engineering's Joint Capability Technology Demonstration office, we will begin the Long-Range At-

tack Munition (LRAM) project, to rapidly develop and field a low-cost, air launched, family of loitering and swarming munitions. The LRAM can be employed by not just H–1s and F–35s, but also palletized and employed from MV–22s, CH–53Ks, and C–130's, thereby significantly expanding our magazine depth. Likewise, we have moved out in earnest on experimentation with our capstone research and development effort, the family of integrated targeting cells (FITC). FITC accelerates the evolution of combined arms to a new level. It fuses operations, intelligence, and fires functions together in one center and creates the means by which the Marine Corps will be able to participate in and control joint fires, while also gaining and maintaining persistent custody of adversary targets. We will also expand our ground launched loitering munitions capabilities by demonstrating a common launcher for the family of munitions, and we continue testing a low-cost, hypersonic booster that will be in a form factor the Marine Corps can logistically support in a contested environment. For maritime mobility, we are also investing in our first Stern Landing Vessel (SLV) prototypes, which are helping buy down risk and advance the Medium Landing Ship (LSM) program. We will continue efforts to develop a medium-sized, uncrewed logistics aircraft and will begin small boat experimentation to determine the future of our surface reconnaissance capabilities.

FORCE DESIGN EXPERIMENTATION IN SUPPORT OF CONTESTED LOGISTICS

The Marine Corps Warfighting Laboratory, in close collaboration with both the Navy and III MEF, is currently experimenting with more than a dozen new technologies and potential future capabilities focused on enabling logistics in a contested environment. These operational experiments include well-known capabilities such as the SLV and wing-in-ground-effect (WIG) craft, as well as lesser-known, emerging capabilities such as the autonomous low-profile vessel (ALPV). Based on our existing experimentation plans, operational experimentation with these and other capabilities will continue over the next 3 years and inform future capability investment decisions.

FORCE DESIGN EXPERIMENTATION WITH LITTORAL MOBILITY

Mobility is a key characteristic to the dispersion and persistence of stand-in forces. In the case of the Indo-Pacific, littoral mobility will be essential to our ability to maneuver through the complex geography of the region. We recognized this capability gap early in the design process and identified the LSM as a mechanism to transport marines in this unique maritime environment.

Medium Landing Ship (LSM): Distinct, yet complementary to traditional L-Class amphibious warfare ships, the LSM is purpose-built to provide tactical maneuver for regimental sized units, forward-deployed naval forces, and other expeditionary advanced base-enabling forces operating within contested environments. The LSM is a maneuver asset, and as a shore-to-shore connector, is unique and critical to expeditionary littoral mobility. It will facilitate campaigning and support diverse missions such as security cooperation, humanitarian assistance / disaster relief (HA/DR), and logistics support. While not optimized for any one threat or region, we envision the LSM being of particular utility in the maritime gray zone contests omnipresent in the Indo-Pacific. Given its size and characteristics, this vessel could be employed with a lower risk of escalation than larger platforms.

After extensive research and wargaming, we calculated a need for nine LSMs to support a single regimental sized unit. The DON's Amphibious Force Requirements Study over the last 2 years validated this number, articulating a requirement of no fewer than 18 LSMs to support littoral maneuver. Given that current force structure plans call for three MLRs, we require 35 LSMs to account for operational availability and mobility for those units. We anticipate an initial request for 18 of the 35 LSMs we seek will be a step toward enabling us to more effectively counter adversaries' strategies, support and reinforce alliances and partnerships, and do so at a relatively low cost.

Despite focusing our efforts over the past 3 years on deterring, competing, and if necessary, contesting the pacing challenge, the Marine Corps will not fully realize the capabilities of the MLR until we have the littoral mobility assets that enable these forces. The decision to delay LSM procurement from fiscal year 2022 to fiscal year 2025 was a setback in our ability to bring this capability online within an operationally relevant timeframe. As marines do best, we have adapted to this challenge and are developing bridging solutions to experiment with LCU–1700's and leased Expeditionary Fast Transports (T-EPF) and SLVs. While these platforms will inform the eventual employment of the LSM, they will fall short of desired capabilities if called upon in an operational setting. Our modernized expeditionary forces need a

comparably modern mobility platform to bring the full weight of their capability to bear on competitors or adversaries, particularly in littoral regions.

FORCE DESIGN CAMPAIGN OF LEARNING

Marine Corps Wargaming and Analysis Center (MCWAC): Wargames play an essential role in concept development and operational planning and provide the basis for informed decisionmaking. The Marine Corps is undergoing a shift from human-driven to technology-enabled processes that will provide disproportionate benefits—not only to the Service, but the joint force writ large.

Upon completion in 2024, the MCWAC in Quantico will provide a state-of-the-art facility designed to help decisionmakers better visualize the threat environment, gain competitive advantages over adversaries, and simulate future operating environments. It will also provide data that informs force development, force management, and system functionality. Simulations will support existing and developing weapons platforms and capabilities in all regions of the globe.

MCWAC will incorporate elements of artificial intelligence and machine learning to amplify decision accuracy on issues that determine the way we organize, train, and equip for the future fight. This facility will also provide a critical asset to the joint force and senior leadership currently unavailable in the National Capital Region. Its location facilitates participation by joint, interagency, and multinational organizations, in addition to Service-specific analysis.

Lessons Learned: Between July 2019 and December 2022, we executed 25 wargames. This calendar year, we will conduct another 9 wargames and welcome the participation of any Member, or their staff, interested in observing. These wargames will primarily focus on two subjects: (1) reconnaissance and counter-reconnaissance, and (2) III MEF deployment and sustainment during major combat operations.

One of the persistent lessons from our wargames is that our current logistics concepts and capabilities are not optimized for maritime campaigns in a contested environment. Improving joint and combined logistics integration, and streamlining logistics C2, are critical areas for further planning and development. The number and capabilities of current logistics distribution platforms are insufficient to adequately deploy, maneuver, and sustain stand-in forces. Due to geographical distribution of forces, all Services will be challenged to meet their sustainment requirements. This suggests the Marine Corps will have reduced access to connecters under the operational control of the other Services.

Our learning is continuous, and we have already refined some of our initial Force Design decisions based on that learning. For example, when we initially reduced the number of cannon batteries, we assumed that the existing 6-gun per battery model would be sufficient to meet requirements. After additional study, we decided to expand those batteries back to their original, pre-2015, 8-gun structure and added back two batteries. Next, we initially assessed 10-plane fighter-attack squadrons (VMFA) as the operationally suitable and sustainable approach for the future force. After multiple studies, a series of experiments and wargames, and emergent capabilities development, we know the 10-plane model requires redress and are undertaking that effort now. Likewise, initial assessments of our heavy-lift helicopter capacity demonstrated we could cut several squadrons; yet real-world considerations have resulted in a modification to our original plans and restoration of some of that structure and capacity.

AMPHIBIOUS WARFARE SHIPS

Achieving the priorities of the National Defense Strategy requires a Navy that creates advantage for the joint force across the competition continuum. Sustaining and recapitalizing our nuclear deterrent and nuclear command, control, and communications systems; enhancing and expanding our undersea advantage; and creating advanced naval expeditionary forces that consist of all classes of ships and are capable of persisting and prevailing against any threat, are all things we must do now. We cannot create and sustain this force on the time horizons necessary to achieve competition and deterrence objectives without a significant expansion of our defense industrial base, which is currently organized for peacetime efficiency. We are a maritime nation that requires naval forces capable of answering the Nation's call, whenever or wherever that might be. Amphibious warfare ships are, and will continue to be, a critical component of the Nation's fleet. They provide an essential capability to the joint force that cannot be overstated. As the amphibious fleet requirement authority, as designated in the Fiscal Year 2023 NDAA, it is my obligation to ensure this Committee is aware of the current status of your amphibious fleet.

Secretary of the Navy Amphibious Ship Studies: Since 2019, three DON studies have examined amphibious warfare ship force structure requirements. Combining the findings of those studies with amphibious warfare ship readiness trends over the past 10 years and projected ship availability rates, I conclude that the Nation requires no fewer than 31 traditional amphibious warfare ships (10 LHA/LHD and 21 LPDs/LSDs) to ensure the warfighting readiness and responsiveness of amphibious naval forces.

The Importance of Amphibious Warfare Ships and the ARG/MEU: Our Nation's amphibious warfare ships enable marines to execute three essential missions in support of the National Defense Strategy. First, unlike traditional surface combatants whose role is to sink enemy surface combatants and submarines or destroy enemy aircraft and missiles, amphibious warfare ships are meant to project the national power of the United States globally as both a warning to our adversaries and as a visible sign of our commitment to allies and partners. Our defense strategy clearly identifies those allies and partners as a source of our strategic advantage. As Secretary Austin has previously stated, we "need resources matched to strategy, strategy matched to policy, and policy matched to the will of the American people." Our strategic aims are clear: we must deter any act or activity intended to disrupt the rules-based international order. Our strategy is to not fight unless necessary; we seek only to deter conflict. Effective integrated deterrence requires amphibious warfare ships. More so than any other Marine Corps operation, activity, or investment, amphibious warfare ships with embarked marines provide a flexible, scalable, and visible capability for our combatant commanders to employ at the time and place of their choosing in support of integrated deterrence campaigning.

Second, amphibious warfare ships enable marines to immediately respond to crisis or contingency. When the Japanese nuclear reactor in Fukushima was damaged by an earthquake in 2011, an amphibious Task Force responded immediately. Noncombatant evacuations in Lebanon, the response to Hurricane Katrina in New Orleans, the rescue of downed U.S. aircrew in contested areas, and numerous other situations around the world have all required an amphibious response, either due to lack of inland access or a determination that a large U.S. military footprint ashore would exacerbate an already dire situation.

Third, amphibious warfare ships and their embarked marines ensure the President and his Ambassadors, as well as all U.S. citizens living outside the United States, have the on-call crisis response protection required to ensure their safety. Whether in Haiti, Venezuela, South Sudan, Yemen, Eswatini, or anywhere else on the globe, MEUs are ready to respond and protect. We must maintain forward-deployed ARG/MEUs with the operational reach to rapidly respond to our highest threat consulates and embassies globally. Marines forward-deployed aboard ships are the operationally desirable solution.

Lastly, the 31 combined amphibious warfare ships are vital components of our Nation's seven ARG/MEUs. This number of ships allows the Nation to maintain at least two ARG/MEUs at sea, with the option to surge to five. Assuming our present trajectory, we will fall below the congressionally mandated floor of 31 amphibious warfare ships. From my perspective, this is a result of divesting these platforms faster than we are procuring their replacements. The result of not meeting this requirement became most acutely visible when we were unable to provide traditional disaster-relief response following the earthquake in Turkey earlier this year. Our ARG/MEU deployments are a visible sign of commitment to our allies and partners and provide evidence to the PRC of our readiness to contest any malign activities. They also provide a visible sign to Russia about our commitment to NATO. In fact, when the Prime Minister and Minister of Defense for Sweden wanted to send a clear signal to Russia regarding Sweden's intention to join NATO, they did so by making a statement on the flight deck of the USS *Kearsarge*—a Wasp-class amphibious assault ship.

LPD Flight II Program: The PRC is accelerating their production of amphibious warfare ships. We cannot overlook the fact that since 2019, the People's Liberation Army Navy (PLAN) has launched three Type 075 "LHA-like" and three Type 071 "LPD-like" amphibious warfare ships. The PLAN intends to launch an additional five Type 075 "LHA-like" amphibious warfare ships in the next 5 years. It appears that the PLAN sees amphibious warfare ships as highly relevant and a critical instrument in power projection as evidenced by their recent deployments extending beyond the South China Sea. In my opinion, there is also a soft power component to our amphibious warfare ships that cannot be replaced by other platforms. It is obvious the PRC is learning this lesson and is pursuing their own amphibious warfare ship program as a competitive act.

Next, an LPD's or any other amphibious warfare ship's vulnerability to an antiship missile is no more relevant to its value than an aircraft's vulnerability to being

shot down is relevant to its value. Over 5,000 helicopters were destroyed during the Vietnam War, yet we do not hear persistent arguments related to their survivability. In a recent series of wargames held by the Center for Strategic and International Studies, 2 carriers and 10—20 destroyers and cruisers were sunk in the Pacific during each of the 24 iterations. Just as these wargames do not signal the irrelevance of these surface warships, conjecture about the survivability of amphibious warfare ships does not either. Instead of focusing exclusively on the survivability of platforms in a high-end fight, we should instead seek an appropriate balance of capabilities needed to effectively campaign and maintain deterrence with those capabilities optimized for major war. As evidenced by constant year cost, the LPD Flight II is the most effective and affordable answer until a follow-on amphibious warfare ship is developed.

FORCE DESIGN AND MARINE FORCES RESERVE

The Marine Innovation Unit (MIU), manned by Marine Reservists, was recently established aboard Stewart Air National Guard Base in New York. This cutting-edge unit will make considerable contributions by focusing marine talent toward accelerated identification and adoption of advanced capabilities, transforming naval service capacity for technology employment, and retaining and investing in human capital. MIU is expanding Marine Corps reach into the wider innovation ecosystem and developing key partnerships with the Defense Innovation Unit (DIU), NavalX, Army Futures Command, and others to increase tempo and progress toward Force Design objectives.

The MIU is just the beginning. We continue to explore the efficacy of establishing a maritime reconnaissance capability within our Reserve component (RC) as part of our larger multi-domain reconnaissance initiatives across the force. We are currently evaluating the potential to establish a reserve MQ–9 squadron, as well as Reserve augmentation detachments with Active Duty squadrons.

In addition to its role supporting Force Design, Marine Forces Reserve (MARFORRES) continues to function as both an operational and strategic Reserve to augment and reinforce the Active component (AC). In 2022, more than 1,100 marines and sailors activated to support Operation ALLIES WELCOME (OAW), honing their security and humanitarian relief skills. From that activation, 103 marines volunteered to deploy to OAW-Kosovo aboard Camp Bondsteel. Finally, as the Service brought new capabilities online during fiscal year 2022, MARFORRES provided High Mobility Artillery Rocket Systems (HIMARS) and Amphibious Assault Vehicle (AAV) rotations in support of USINDOPACOM requirements. This augmentation enabled the AC to execute Force Design experimentation and unit transitions without an impact on combatant commands. The Marine Corps' continued employment of the RC demonstrates our total force approach and has proven to be a critical component of force modernization efforts.

FORCE DESIGN AND MARINE SPECIAL OPERATIONS FORCES

As part of the larger Force Design effort, our marine special operations forces are modernizing through their Next Generation Raider Force (NGRF) initiative. The NGRF is intended to implement the strategic shaping and reconnaissance (SSR) operating concept, and its two major sub-components—irregular warfare and special reconnaissance, both focused in the littoral regions of the globe. In a manner consistent with other marine forces, MARSOC seeks to provide the joint force with the capability to shape the operating environment; illuminate adversary actions, activities, and intentions; and provide options to impose cost, both kinetically and non-kinetically, from competition to conflict.

TALENT MANAGEMENT

Talent Management 2030 (TM2030) directed accelerated personnel reforms and oriented the Service toward retaining more experienced marines. In February 2022, I directed the Assistant Commandant of the Marine Corps to form a Talent Management Strategy Group to align and harmonize Service-wide talent management efforts. This group focuses on future demographics, economic, and human capital trends, while working with academia, research organizations, pertinent departments in HQMC, and commanders in the FMF to identify initiatives that will better align individual abilities, skills, and desires with the warfighting needs of the Service. Since the release of TM2030, we have better aligned departments and organizations involved in talent management, assessed, and mapped out interdependencies of total force personnel policies, and begun to generate momentum with a sense of urgency. Leveraging authorities previously enabled by Congress, we enacted nine initiatives in 2022, which we will expand and accelerate in 2023:

Commandant's Retention Program (CRP): During fiscal year 2023, the CRP offered pre-approved reenlistments to top-performing marines by streamlining the process and giving priority access to primary military occupational specialty (MOS) monitors for duty station and assignment options. The CRP resulted in a 72 percent increase of first-term reenlistment submissions by top-performing marines with the average reenlistment approval accomplished in 24 to 48 hours, much quicker than the previous norm. Going forward we will expand the program to more first-term marines as well as our career force.

Staff Non-Commissioned Officer (SNCO) Promotion Board Realignment: Beginning in fiscal year 2024, we are realigning SNCO promotion boards to sequence more effectively with the assignments and reenlistment processes. This initiative will reduce SNCO billet gaps in the FMF and decrease the processing time of reenlistment packages. The realignment will provide greater predictability for SNCOs and their families while dramatically reducing the number of permanent change of station (PCS) moves across the force.

Recruiting Station Commanding Officer Selection Board: We implemented two initiatives for the fiscal year 2023 Recruiting Station Commanding Officer (RSCO) selection board. First, officers now have the opportunity to volunteer for command, including officers otherwise not scheduled for consideration. Second, officers may also request removal from RSCO consideration for 1 year, without penalty, should they prefer to complete a deployment or other professional obligation, or due to a personal life circumstance.

Special Duty Assignment (SDA) Volunteer Program: Prior to 2022, we screened and selected marines for Special Duty Assignments en masse. But last year, we launched a pilot SDA volunteer program, expanding incentives to provide duty station preference for volunteer recruiters, drill instructors, and combat instructors. As a result, volunteers increased by 62 percent, reducing the number of involuntarily screened marines by 38 percent. This minimized disruption to our marines, their families, and FMF units while also reducing SDA school attrition. We will improve and expand this program in 2023.

MarineView 360-Degree Leadership Review: MarineView360 is a development tool for leaders that helps marines identify their strengths, personal blind spots, and areas for focused improvement through the polling of their supervisors, peers, and subordinates. Leaders receive feedback and advice through a dedicated mentor and coach. The MarineView360 pilot began with a group of 150 sitting commanders and is now leveraging the experience of 200 additional selected commanders and senior enlisted advisors. The final phase of the pilot will expand to 1,000 marines of varying rank from gunnery sergeant to colonel.

Officer Promotion Opt-Out: Starting in 2022, both the AC and RC offered certain officer populations the ability to opt-out of consideration for promotion once without penalty. This allowed officers increased flexibility in their career paths to pursue unconventional career experiences or formal education that would otherwise take them off track for key developmental assignments. We are currently exploring the expansion of this initiative to enlisted marines to afford them the same flexibility in their careers.

Digital Boardroom 2.0 (DBR 2.0): DBR 2.0 increases the functionality and accuracy of information presented to board members, enhances the conduct of virtual boards, safeguards data, and improves this critical talent management process. The Enlisted Career Retention and Reserve Aviation boards successfully used DBR 2.0 in 2022. With the availability of cloud-based data, we will expand use of DBR 2.0 while simultaneously assessing the outcomes, cost and time savings, and professional depth and breadth of board members to benchmark with our legacy process.

Separate Competitive Promotion Categories: To meet the demands of the future, the Marine Corps must retain the highest quality officers with the necessary skill sets at all ranks. To that end, we are exploring options to reorganize the unrestricted officer population into separate competitive categories to better meet the Marine Corps' needs for diverse expertise and experience at all ranks by competing for promotion with peers having similar skill sets, training, and education. We will conduct a pilot program to evaluate the merits of this reorganization during the 2025 field grade officer promotion boards.

Career Intermission Program (CIP): Many marines desire to pursue specialized education, or to focus on family for a significant life event. The CIP is an initial step toward allowing marines an option to temporarily pause their Active Duty service and later resume their careers without penalty. This program enables career flexibility, and in doing so, also encourages retention of experienced, talented marines.

TALENT MANAGEMENT WAY-AHEAD

Manpower Information Technology System Modernization (MITSM): In February 2022, Deputy Commandant, Manpower and Reserve Affairs (DC, M&RA), created a business capability requirements document that outlines the capabilities required to begin the MITSM acquisition process. MITSM will aggregate legacy systems and capabilities into a device-agnostic, data-driven, and dynamic human resources information technology solution that meets the evolving needs of the Marine Corps' talent-based workforce. One aspect of the MITSM will be a web-based "talent marketplace," which will enable a collaborative and transparent assignment process and increase the role of both commanders and individual marines. This capability will help us better align the talent of individuals with the needs of the Service to maximize the performance of both. Despite its criticality to modernizing our talent management systems and processes, MITSM is currently challenged by the acquisition process.

Potential Implementation of "Indefinite End of Active Service" Policy for Enlisted Personnel: As we seek to mature the force, we also seek to eliminate antiquated processes and policies that induce both friction within the personnel system as well as personal and familial stress. There is little reason why those who have served honorably for 16+ years need to worry about re-enlistment before completing 20-years of service. This year, we will explore the feasibility of senior SNCO career designation to establish an indefinite expiration of Active service. This shift will align senior SNCO retention practices with those of officers, increase flexibility in assignments, reduce administrative burden and needless paperwork, and minimize uncertainty for SNCOs and their families.

Small Unit Leader Initiative: Under the current policy, first-term marines are ineligible for promotion to sergeant. While the spirit of that policy is reasonable, it creates a disincentive to the highest performing marines across the force by establishing an administrative obstacle they cannot overcome regardless of individual talent. Going forward, if one of our talented marines with at least 36-months of service wishes to re-enlist, then that marine will become eligible for promotion to sergeant upon their re-enlistment. This program will incentivize the most talented who desire to stay for another enlistment and should help mitigate the persistent need for sergeants across the FMF.

Active and Reserve Permeability: During the next year, we will explore options to increase the permeability between the AC and RC. The aim is to better match the diverse—and often immediate—operational needs of AC commanders with the specialized skills of individual marines in the RC. Due to statutory limitations on reserve employment, we will work with the administration to identify potential opportunities for improvement to AC-RCg permeability.

Orders Issuance: In an attempt to give individuals and their families as much time as possible when executing a PCS move, we will increasingly attempt to issue orders up to 12 months before the execution date. We will also assess the feasibility of issuing follow-on assignment orders to those individuals selected for resident professional military education. This should do two things. First, it should provide greater clarity to servicemembers and their families to facilitate proper planning for any school transitions, childcare needs, and special healthcare needs, and will provide spouses more time to secure desirable employment. Second, earlier issuance of orders would allow the Service to clarify a unit's incoming personnel picture to increase long-term planning, effectiveness, and risk management.

Five-Year Orders: The importance of unit cohesion cannot be overstated. To achieve that cohesion, we need to shift from a 3-year tour model toward a 5-year tour model—with notable exceptions for some of locations such as Okinawa, Japan and Twentynine Palms, California. In addition to creating greater unit cohesion and, as a result, greater readiness, a 5-year model would facilitate improvements to family stability and family readiness. Using the standard twenty-year career timeline, the new assignment length would only require a family to relocate three times after the initial assignment. This suggested tour length should enable children to finish elementary or secondary school in one location, and would enable extended periods of spouse employment—minimizing the impacts on dual-income households.

Assignment Incentive Pay / Hardship Duty Pay: Congress and the Department have provided us with the authorities necessary to incentivize service at some of the more challenging duty stations and we have a plan to use them. We will increasingly utilize Assignment Incentive Pay (AIP)—consistent with the other services—to increase the attractiveness of hard-to-fill duty stations. Notably, Army soldiers stationed at Fort Irwin, California or in Korea, have many of the same concerns as our marines at Twentynine Palms and Okinawa. In addition to AIP, we are explor-

ing other authorities provided by Congress, to incentivize duty by our most talented marines in our hardest-to-place locations.

Weapons Systems Officers (WSO) & Electronic Countermeasures Officers (ECMO): As we transition from the F/A–18D and EA–6B to the F–35, we will have the opportunity to transition some of our most talented Naval Flight Officers (NFOs) currently serving as WSOs and ECMOs into our expanded uncrewed aircraft squadrons (VMUs). At present, we have 95 WSOs and 32 ECMOs. While the legacy aircraft these officers were previously associated with are being retired, their individual skills remain critical to the future force.

Attracting, developing, incentivizing, and retaining dedicated professionals that increase our readiness and lethality is a priority and necessary to improve our efficacy as a force. The initiatives undertaken since the publication of TM2030 demonstrate our commitment to our expeditionary warfighting legacy and our drive to fight and win in 2030 and beyond. Our performance in future battles will be defined by the investments we make in our Marine Corps today. All actions to evolve our talent management system are aimed squarely at supporting our warfighting requirements. They will incentivize and optimize our talent and sustain our ability to serve as the Nation's premier expeditionary force in readiness within the rapidly evolving world we face.

RECRUITING AND RETENTION

The Marine Corps is not insulated from the challenging recruiting and retention environment impacting the entire DOD. The fiscal year 2024 budget supports an Active Duty end strength of 172,300 marines, an achievable target. The Marine Corps will monitor and reevaluate end strength, even as we continue to increase retention as part of our Talent Management strategy. We appreciate the support and flexibility that Congress provides us on retirement, retention, and end strength.

In 2022, we achieved our annual recruiting mission and exceeded both our first-term re-enlistment goal (101 percent) and our subsequent-term re-enlistment goal (107 percent). To put this in perspective, 5,063 first-term marines re-enlisted in 2018, while 5,820 re-enlisted in 2022. Further, we are re-enlisting those marines earlier. In fiscal year 2022, the Service met its First Term Alignment Program (FTAP) mission on 8 July 2022, which at the time was considered a major accomplishment. In fiscal year 2023, we met our FTAP mission of 6,225 marines on 6 February 2023—a full 6 months earlier—and retained higher quality marines than we have in the last few years.

The Marine Corps met or exceeded both our FTAP and Subsequent Term Alignment Program (STAP) goals across the force for the first time in 13 years. In fiscal year 2023, we expanded early re-enlistment authorizations for marines with at least 24 months' time in service from 200 to 600. We reached 150 in the first weekend, and then reached 200 (last year's total) within 3 weeks. We then expanded this program to accommodate the 700+ submissions we had received by 1 February this year. Completing these early re-enlistments will help mitigate any recruiting challenges across a 2-year period (fiscal years 2025 to 2027). In fiscal year 2023, we satisfied our retention goal of infantry marines before December for the first time in over a decade. As a result of these retention efforts, we are gradually maturing the force. This will result in more mature non-commissioned officers leading our youngest marines and will generate better operational outcomes on the modern battlefield.

As noted by RAND economist Dr. Beth Asch, we should never forget that we do not have an All-Volunteer Force; but rather, a predominantly all-recruited force. To overcome current challenges in recruiting, we have challenged all assumptions. We have also resurrected and reviewed ideas and options previously generated over the years, but never actioned or implemented. The results have been very promising.

While some assumed 5 year "infantry-only" contracts would not be well received, that assumption has been invalidated. During the past year, we conducted a limited experiment in which we offered recruits a 60-month infantry-only contract. This 400-spot program "sold out" immediately and was subsequently expanded to accommodate the demand. Infantry-only contracts ensure unit cohesion and almost guarantee marines two deployments in a single contract, mitigating unit turnover between deployments. Since the completion of that pilot program, we continue to find that our young marines prefer the stability afforded by these 60-month contracts and are choosing this option over 48-month contract options.

Some assumptions related to the utility of monetary incentives have also been invalidated. Big sums of money are not required to incentivize potential marine recruits. This past year, we implemented a $5,000 shipping bonus program for new enlistees with great success. In exchange for this one-time payment, we direct shipping at a date of our choosing, which gives us greater predictability and flexibility.

This experiment was very successful. We also]implemented a $9,000 shipping bonus program with similar success. In exchange for this one-time payment, the individual's contract time does not officially begin until they arrive at their first unit. As a result, those in this program that become infantry marines will average 2 deployments during their first contract, because their initial 7 months of entry-level training will not count toward their obligated service.

Finally, we want to make the statement, "there is always boat-space for talent," a truism across the Marine Corps. In the past, talented individuals were denied reenlistment due to "closed" MOSs or other administrative obstacles beyond their control, such as an inability to transition from an MOS they didn't choose or perhaps never wanted. These talented marines want to re-enlist, but they also want a new (primary MOS) PMOS. The ability to "laterally move" talent into a new PMOS is an obstacle at present, but we are working on this issue. This is a training issue, not a personnel issue. Regardless, we are not going to let 8 to 12 weeks of retraining costs prevent us from benefiting from the talents and leadership of these proven marines for another 4 years or more of service. If we must choose between proven leadership and MOS credibility, we will prioritize proven leadership for a greater return-on-investment. Retraining costs less than the $42,000 cost to recruit a marine. While recruiting will remain challenging for the foreseeable future, the Marine Corps is up to the challenge. But there is one option that we will not exercise: we will not lower our standards. This is non-negotiable. Despite the well-known recruiting challenges in recent years, from 2018 and 2022, the average Armed Forces Qualification Test (AFQT) and average General Technical (GT) scores of our infantry marines (0311s) have actually increased across the force.

CHILDCARE

Addressing the availability of childcare remains a top priority for the Service. Unfortunately, persistent supply and demand imbalances have resulted in unacceptable wait times for our marine families. At present, there are notable waitlists for full-time childcare at Marine Corps Base (MCB) Quantico, MCB Camp Lejeune, MCB Camp Pendleton, and MCB Hawaii. These locations still maintain approximately 77 percent of the Service's unmet waitlist for ages 6 weeks to 5 years. This is primarily due to a shortage of qualified workers, high turnover due to less competitive pay, lengthy hiring and background check processes, seasonal PCS fluctuations, and facility renovations. While we have capacity to serve 6,523 children at present, we only have sufficient staff to serve 5,880 children. To provide a variety of options that fit families' needs and to mitigate lengthy Child Development Center (CDC) waitlists, we also offer fee assistance for eligible marines who are geographically remote, reside more than 15 miles from an installation, or are assigned to an installation with a lengthy CDC waitlist.

In 2022, with the support of OSD Office of Military Family Readiness Policy, we established the Child Care in Your Home (CCYH) Pilot Program. CCYH is a DOD fee assistance pilot program that helps military families cover the cost of full-time childcare (30–60 hours per week) provided in their homes. Designed to support families with non-traditional work schedules, care can be provided every day of the week and during non-traditional hours, such as evenings and weekends, or on rotating schedules.

At present, we maintain 58 childcare facilities (32 CDCs and 26 school-aged care facilities). Renovations are currently in-progress aboard MCB Quantico and Marine Corps Air Station (MCAS) Beaufort. We recently completed a $37.7 million construction project aboard MCAS Miramar, which will provide 412 new childcare spaces to our families. In addition, we have construction planned aboard MCB Butler in Okinawa for a new school-aged care facility, aboard Camp Pendleton for a new CDC that will add 250 additional spaces, and aboard MCB Camp Blaz in Guam to satisfy the needs of 276 children in the future.

SUBSTANCE ABUSE PREVENTION

The Marine Corps' Substance Abuse Program focuses on three distinct areas: drug demand reduction, alcohol misuse prevention, and substance misuse non-medical counseling services. As part of our continued vigilance, we have expanded our urinalysis testing to include both illicit and prescription drugs, including the most misused and abused opiates. One hundred percent of urine samples are now tested for fentanyl. Additionally, due to a regrettable resurgence in lysergic acid diethylamide (LSD) in some of the communities surrounding our major bases and stations, we added LSD testing back to the standard drug testing panel. Delta–8 tetrahydrocannabinol (THC) was also added to the standard drug testing panel in July 2021, expanding testing for THC products. THC remains the most prevalent

drug detected during our testing. While expansion in testing did result in an increase in positive test results, the Marine Corps remains below the DOD benchmark for positive test results and current data indicates that prescription drug misuse is low.

SEXUAL ASSAULT PREVENTION AND RESPONSE

As a Service, we have focused on countering sexual assault within our ranks by professionalizing the prevention workforce, improving training for marines at all levels, professionalizing the sexual assault response workforce, and strengthening an environment of accountability by establishing an Office Special Trial Counsel. As of January, our newly established Office of Special Trial Counsel reached IOC and is on track to reach FOC by December 2023, putting prosecutorial discretion for these offenses in the hands of trained attorneys. In addition to these efforts, the Marine Corps continues to implement the recommendations of the Independent Review Commission on Sexual Assault in the Military, as approved by the Secretary of Defense. These efforts include developing organizational structure, hiring qualified professionals, and ensuring our prevention workforce is trained and postured to provide this crucial support to commanders. We are also investing in education to enable prevention, focusing on leadership responsibilities to both prevent and respond to sexual assault and sexual harassment, and providing training for trauma-informed leadership. While this larger societal problem persists, we are actively pursuing solutions to improve prevention and ensure offender accountability when prevention efforts fail.

SUICIDE PREVENTION

As part of our larger human performance management efforts, we continue to examine our mental health programs and suicide prevention efforts. Every life lost to suicide is one too many. As an organization known for our camaraderie, we take every loss of life seriously and continue to pursue all opportunities to reduce the incidence of suicide amongst our marines, sailors, and their family members.

The Secretary of Defense recently released a report from the Suicide Prevention and Response Independent Review Committee. The Committee concluded that the most important preventative measure is engaged quality leadership, and we agree. This has long been a focus of ours, as have many of the recommended personnel reforms, which mirror our on-going talent management initiatives. We also embrace the Committee's conclusions about the criticality of access to mental healthcare professionals and services, and their recommendations related to TRICARE reform to enable such access.

HEALTHCARE

Developmental Pediatricians: Generating ready forces requires building and sustaining readiness at-home among our military families. Military service is demanding. Extended training, frequent military moves, and routine deployments—scheduled and unscheduled—strain marriages and stress families, regardless of a marine's rank or time-in-service. That stress is magnified in cases where children have special medical needs, such as Autism Spectrum Disorder (ASD). Regrettably, we are currently unable to provide sufficient developmental pediatric care across the force, even in areas where we enjoy highly developed military healthcare infrastructure, such as San Diego or the National Capital Region. Parents are often forced to wait 6 months or longer for an appointment. This is not acceptable. The scholarship is clear and undisputed: early intervention is the key to better outcomes for children with ASD. Today, we have four Active Duty and three civilian developmental-behavioral pediatricians to support the force, which is insufficient to meet the needs of our families. The force requires at least two developmental-behavioral pediatricians per medical treatment facility to meet the needs of our families. If providing these additional developmental pediatricians is considered unsupportable, then we would ask for Congress' support in creating legislation to make it easier for families requiring this care to obtain it from the civilian market. Parents should not be forced to choose between their profession and calling to serve, and their need to provide for their families.

Defense Health Agency (DHA): The DHA has undertaken the largest transformation in the history of the military health system. From the lens of providing support to servicemembers and families, this undertaking has failed to satisfy expectations, and has resulted in both unsustainable costs and degraded services. While the DHA is maturing in its role as a combat support agency (CSA), the lack of agreement between the DHA and military departments regarding DHA's roles and responsibilities as a CSA, as well as business rules governing employment of

uniformed personnel inside the medical treatment facilities (MTFs), has created significant challenges. This problem is compounded by a recent exodus of military and civilian healthcare professionals due to "burn out" from the COVID–19 pandemic and operational tempo, the ability to double or even triple salaries in the civilian sector, and uncertainty and frustration over the DHA transition. Due to the nationwide shortage, the DOD is competing for the same finite resources when attempting to hire contract healthcare professionals. Unfortunately, the DOD contract pay rate is near the lowest, if not the lowest, in the industry, making recruitment particularly challenging.

In terms of improving the affordability of healthcare as promised, these cost savings have not been realized. In fact, the transition has come with higher costs. An additional undesired outcome of the movement away from Service authority, direction, and control of healthcare delivery is the lack of consideration for Service-specific requirements and the impact to healthcare operations. Specifically, in remote locations such as Okinawa and Iwakuni, decisions to reduce access to care inside MTFs has negatively impacted dependents and civilian personnel, which impacts operational readiness.

I ask for your continued oversight of the DHA and help in addressing the overwhelming gap between DOD contract healthcare labor rates and the civilian market. The success of the military health system (MHS) requires the ability to hire qualified, civilian healthcare labor. The MHS must have contract rates that can compete in a highly competitive market for a finite and highly valuable resource. Failure to remedy this issue will have catastrophic consequences on the readiness of the force.

TRAINING AND EDUCATION

The Marine Corps enjoys a hard-earned reputation as a learning organization. The previous 3 years of Service-level training exercises, along with other large and small exercises, wargames, and live force experiments, established a sound foundation for organizational learning. Collectively, they provided clear evidence that change is required. We have learned that today's training and education system must rapidly evolve to prepare individual marines and units to succeed on an all-domain battlefield. Those changes are articulated in the recently published Training and Education 2030 report.

Training and Education and the Russo-Ukraine Conflict: While the future remains uncertain, clear trends are emerging from the conflict in Ukraine that are consistent with much of what we have seen in other recent conflicts, evidencing the need for accelerated modernization across the joint force. However, we should not lose sight of the fact that the Ukrainians succeeded in the early phases of the conflict not because of superior equipment, but because they were adaptable—especially at the tactical level—and rapidly innovated new concepts of employment to address specific areas where the Russians had achieved advantage. In fact, their bias for action, unit cohesion, and emphasis on decentralized C2 had a significant impact on the readiness of Ukraine's infantry and maneuver forces. These factors allowed Ukrainian battalions to effectively operate in and control battlespace we would normally associate with an Army Brigade or Marine Regimental Combat Team—units 3 or more times larger than a traditional battalion. The operational requirements associated with these expanded areas of responsibility are placing more and more demands upon junior leaders that can only be addressed through greater investment in the training and education of our marines. The conflict is demonstrating that advanced capabilities will be available and employed at much lower tactical levels than we have witnessed in our own recent past. In future conflicts, we are going to ask junior leaders at the company level and below to do things battalion commanders may not have had the authority to do in recent years. It is clear this will require an increasing investment in the training and education of our leaders at all levels and across the entire joint force.

DOCTRINE

Doctrine establishes the basis for developing operational concepts and requirements. It also describes our understanding of how those capabilities are to be employed and ultimately, details training and associated resource requirements. Marine Corps Doctrinal Publication (MCDP) 1, Warfighting, tells us that doctrine "establishes a particular way of thinking about war and a way of fighting. It also provides . . . a mandate for professionalism, and a common language." Our doctrine, including its bedrock in Warfighting, has given us a solid grounding in the essential elements of maneuver warfare, upon which we expect our philosophy of warfare to remain anchored for the foreseeable future. This is not enough. The character of warfare has always been subject to the constant and uneven pressures of techno-

logical advance and social and geopolitical change. Warfare's changing character means we must constantly review and revise our assumptions; they will change, and we must change with them. Doctrine, in turn, must evolve, adapt, and keep pace. For example, in June 2022 we published MCDP 8, Information, describing how the Marine Corps gains and exploits information advantages in all warfighting domains across the competition continuum. We also recently revised MCDP 4, Logistics, updating our doctrinal foundation of this critical warfighting function to meet the challenges of the future.

Changes to our warfighting ideas, theories, and concepts must be expressed clearly and quickly. This leads to greater emphasis on the rapid creation and dissemination of doctrine at a level of specificity below that of our capstone publications and tied tightly to our campaign of learning, including feedback from the FMF. Most importantly, we must hold ourselves accountable for training and operating in accordance with our refined doctrine.

ENHANCED INFANTRY AND LEADER TRAINING

Fourteen-week Infantry Marine Course (IMC): Before our IMC pilot effort began, the Marine Corps underwent a deliberate process to identify the infantry skills necessary to win in a fight against a peer adversary. During this process, Training and Education Command developed 39 behaviors required for all infantry marines. These required behaviors range from traditional skills like employing the service rifle, patrolling, and land navigation to skills such as "embodying the Marine Corps' warfighting philosophy" or "manag[ing] signature." Based on feedback from our division commanders, a subset of 20 of the original 39 infantry behaviors were prioritized as a requirement for entry-level training. Those 20 infantry behaviors became the foundation for a new program of instruction (POI) and the first pilot of the 14-week IMC.

IMC marines are held to a much higher physical standard to both enter training and to graduate than previously required. Marines earning the infantry MOS are now challenged to achieve first class scores on the Physical Fitness Test (PFT) and Combat Fitness Test (CFT), achieve a minimum swim qualification of Water Survival Intermediate (WSI), and pass an evaluation on the Shallow Water Egress Trainer (SWET), which simulates procedures for evacuating a sinking aircraft. Student physical graduation requirements also include a 10-kilometer (km) Combat Endurance Assessment (CEA) and completion of a 20km hike with a 75-pound fighting load.

In addition to better physical fitness, IMC marines develop better decisionmaking skills. By the end of the course, students make thousands of decisions, receiving constant feedback from both combat instructors and peers, significantly increasing the experiential foundation for sound decisionmaking. As IMC builds a better decisionmaker, it also produces a significantly more lethal marine. IMC graduates are trained to a markedly higher standard in rifle marksmanship and are combat capable in all environments with the M27 Infantry Automatic Rifle (IAR). They are further trained in the employment of medium machine guns, grenade launchers, antiarmor systems, and light mortars—all of which are new weapons skills for basic riflemen.

Better-trained marines generate operational tempo—a key to success in maneuver warfare. The outcomes thus far are remarkable. IMC graduates are trained to be quicker-thinking and better decisionmakers, more physically fit, and much more lethal at earlier points in their careers than their predecessors. All these things should increase the readiness of their units and the overall force. To date, 3,524 marines have graduated from this program. While it is too early to make any definitive conclusions, initial findings suggest IMC graduates may have lower non-EAS attrition rates.

THE MODERNIZED MARINE CORPS TRAINING ENVIRONMENT (PROJECT TRIPOLI)

We train how we fight. But we are limited by the number of ranges and training areas available, environmental limitations, airspace restrictions, and several other factors that ensure marines can employ the full range of capabilities they will have at their disposal. One solution to this challenge is to expand and modernize the Marine Corps training environment (MCTE) through an effort called Project Tripoli, which seeks the integration of the live, virtual, and constructive training domains. The MCTE is our combined arms training concept for the future that will enable us to realistically train and exercise with our advanced capabilities both internally and as part of the joint force. Importantly, it permits training with capabilities in a manner concealed from our adversaries and in ways that would otherwise be resource prohibitive in terms of materiel, ordnance expenditure, and personnel. The

MCTE will enable combined arms training in the broadest sense and will allow new and expanded dimensions in force-on-force (FoF) exercise capabilities. Conceptually, a modernized MCTE integrates all training enablers—from high-fidelity flight simulators, to ranges and training areas, to FoF training systems—into C2 architectures and networks supporting training events. MCTE is not a single acquisition program, but a system comprised of multiple training programs. To further improve the MCTE network, we will continue to build interoperability among existing training systems as we bring new systems online, pre-designed with enabling technologies to support increasingly dynamic training environments.

Our next big step will be to field our Force-on-Force Training System (FoF-TS) Next Program across the force to equip units with the training tools necessary to conduct realistic and challenging FoF training. This system is designed specifically to accommodate rapid changes and refinements in the training continuum. Additionally, it will process the tremendous amounts of sensor data needed for our FoF-TS, UAS, cyber, electronic warfare, and loitering munition capabilities to facilitate readiness. The fiscal year 2024 budget request for training and education modernization is $581 million.

TRAINING AREAS AND RANGES

At present, ensuring sufficient range access and training in the Western Pacific region is challenged a by a lengthy supply chain, environmental constraints, infrastructure challenges, and access restraints. To ensure the persistent readiness of marines in the region, the Marine Corps has a number of planned investments across the Commonwealth of the Northern Mariana Islands. Investments planned for Guam include: a live-fire training range complex, a multi-purpose machine gun range, and urban combat training facility, and a training support center. On Tinian, the Marine Corps is pursuing a platoon level live-fire and maneuver range and an explosive ordnance disposal range. These efforts are pending a positive determination of ongoing environmental impact studies. The Marine Corps is also involved in the Pacific Multi-Domain Training and Experimentation Capability (PMTEC) initiative. PMTEC will better integrate existing capabilities and expand the ranges and training areas available to marines, to include the Joint Pacific Alaska Range Complex and the Pacific Missile Range Facility.

Training areas and ranges in Alaska continue to grow in importance to overall Marine Corps readiness. The sophistication, instrumentation, infrastructure support, and sheer size of Alaska ranges make them indispensable for the development of 5th generation fighter aircraft tactics. During 2022, marines participated in four joint exercises in Alaska, to include the high-end rehearsal exercise RED FLAG. The Marine Corps provided 38 F–35Bs across different phases of the exercise as well as leading edge air C2 capabilities. In 2023, we will expand our participation in exercises in Alaska to include Exercises NORTHERN EDGE and ARCTIC EDGE.

While our efforts to prevent encroachment have focused on protecting the ranges and training areas we have, modernized training requirements are going to push us to expand training areas in multiple domains to ensure we have trained and ready forces to meet our Nation's needs into the future. MCAS Yuma makes an outsized contribution to the training readiness of marine aviation due, in part, to the presence of Marine Aviation Weapons and Tactics Squadron One (MAWTS–1) and the conduct of the biannual Weapons and Tactics Instructor (WTI) courses. In addition to the decades long challenges associated with the location of the Yuma Fairgrounds, the continued use of Marine Corps Air Station (MCAS) Yuma's Barry M. Goldwater Range (BMGR) in support of modernized aviation training is at risk due to the loss of Flat Tailed Horned Lizard (FTHL) habitat associated with border wall construction. By risk we mean, the loss of habitat increases the likelihood that the FTHL would be listed under the Endangered Species Act. Listing the FTHL could result significant restrictions to our ability to train and experiment to meet force design objectives. To prevent this from occurring, we need to act now to secure necessary FTHL habitat and are leveraging the Readiness and Environmental Protection Integration Program as one tool to support habitat protection efforts.

In addition to physical ranges, we will also leverage a variety of virtual ranges like the Persistent Cyber Training Environment (PCTE) for joint qualification requirements and rehearsals. The PCTE integrates capabilities that support continuous evolution of cyber training and exercises, enabling force readiness and driving decisions on tactical, operational, and strategic levels. Over the past year, the PCTE has expanded access to cyber operating forces in the FMF. We are confident that access to these modern training environments will significantly enable the all-domain nature of our marine forces.

INSTALLATIONS AND LOGISTICS

In recent years, we have identified logistics as the "pacing function" for warfighting. Among the seven warfighting functions, logistics most dictates the tempo of operations and the operational reach of a unit. No other warfighting function more profoundly affects our ability to persist in contested spaces. Moreover, logistics and sustainment capability and capacity have a deterrent effect. Persuading an adversary that a quick win is not possible by demonstrating an ability to generate, re-generate, and sustain combat power is, in itself, a deterrent.

An uncertain future, the threat of peer and near-peer competitors, and developing challenges in all warfighting domains create wide-ranging implications for sustaining the current and future force. To support emerging and future operational requirements against peer and near-peer adversaries, we will have to transform our approach to logistics. Simply put, we must transition from a force optimized for supporting sustained operations ashore to a maritime force capable of supporting operations in austere, expeditionary, and littoral environments that are contested across all domains. This process of change and adaption began with the release of our Installations and Logistics 2030 report and our revised foundational doctrinal publication on logistics, MCDP 4.

While our current approach worked well in the past, it is insufficient to meet the demands of the future operating environment, particularly when contested across all domains. The magnitude of change required to prepare the Marine Corps installations and logistics enterprise to support the future force mandates a fundamental reevaluation of our approach to logistics.

INSTALLATIONS ASSESSMENT AND RESOURCES

Ready and resilient bases and stations are a critical requirement today and into the future. Years of under-funding the installations portfolio has resulted in a funding shortfall across the FYDP in the tens of billions of dollars. Earlier decisions to take near-term risk in these accounts and shift resources to support readiness-related accounts resulted in longer-term systemic risks to the Service that we must address.

Beginning in 2023, we will engage in a comprehensive and informed infrastructure recapitalization that directly contributes to the requirements of the future force. This will require additional funding, and while it will take more than one FYDP to accomplish, the foundation must be laid today.

FACILITIES SUSTAINMENT, RESTORATION AND MODERNIZATION (FSRM)

Fiscal year 2024 will be the second year using our pilot Readiness Maximization Tool. This pilot program prioritizes restoration, modernization, and demolition in order to achieve a better facility readiness outcome as opposed to the traditional emphasis of focusing on sustainment metrics. The Marine Corps' fiscal year 2024 FSRM budget request for the Active and Reserve forces totals $1.3 billion.

INSTALLATIONS PLAN 2023 (IPLAN)

In the near future, we will publish our first ever Installations Plan (IPLAN), modeled after the Aviation Plan (AVPLAN), to create a shared understanding of the Marine Corps Installations Command (MCICOM) enterprise. We intend to produce this reference document annually to show military construction (MILCON) and FSRM funding framed across time by region, base, and station. The report will further identify the five priority MILCON projects (funded or unfunded) by base and station for the next 1 to 10 years. Finally, future versions of the IPLAN will include a threat-based resiliency assessment by base and station regarding resiliency of force protection; airfield operations; range support; and command, control, and communications. It will also describe the scope, cost, and schedule to achieve resilience.

MILCON PRIORITIES IN SUPPORT OF FORCE DESIGN

The fiscal year 2024 budget includes $1.3 billion to support a total of 16 projects, which includes both planning and design. This funding includes seven projects totaling $457 million to continue our efforts to relocate marines from Japan to Guam.

INFRASTRUCTURE

Water Infrastructure: Aging drinking water and wastewater systems were not designed to meet increasingly stringent environmental requirements. These old systems also require significant maintenance to continue operation. Since fiscal year 2016, the Marine Corps has invested approximately $400 million to upgrade or re-

place drinking water and wastewater infrastructure, improving environmental compliance and reducing risk to personnel and the environment. We are currently evaluating the need for future support.

Energy Infrastructure: The vast majority of our installations are dependent on a commercial electrical grid vulnerable to disruption due to a variety of threats such as aging infrastructure, severe weather, and both physical and cyber-attacks. While procedures and infrastructure are in place to respond to short-term power outages, there is a growing need to ensure we can maintain essential functions and critical services during a prolonged outage. As part of our renewed focus on installations, we will produce energy resilience plans by base and station in 2023.

Fuel Storage Tanks: In April 2022, in response to an inquiry by the Assistant Secretary of the Navy for Energy, Installations, and Environment, MCICOM conducted a risk assessment of significant (>10,000 gallon) fuel storage tanks located on Marine Corps installations, and the risk to drinking water sources and systems. This assessment included tank condition, tank location relative to systems and sources, and condition and adequacy of containment systems. The assessment concluded no immediate threat for this population of storage tanks. However, the assessment did identify two >10,000-gallon tanks with a high-risk for release due to condition, but due to their locations, concluded any release from either tank would not impact water sources or systems. Since the completion of this assessment, the high-risk tank located aboard Camp Fuji has been replaced, and the other tank, located aboard MCB Quantico, is scheduled to be replaced this fiscal year. As an additional risk mitigation, the tank aboard MCB Quantico has been drained pending replacement.

Barracks: The Marine Corps possesses 672 barracks with 155,329 bed spaces. On average, those barracks are 32 years old and in need of renovation. In fiscal year 2022, we renovated 14 barracks for a total cost of $118 million, and in fiscal year 2023, we plan to renovate another 16 at a cost of $262 million. The barracks renovations completed in fiscal year 2022 to fiscal year 2023 will positively impact 8,116 marines living in them. The per barracks renovation costs over the past 2 years have risen from $8.4 million to $16.4 million. At present, 16 percent or 108 Marine Corps barracks are in poor (Q3 on the facilities conditions index ratings) or failing (Q4) condition. Current estimates to recapitalize, sustain, or demolish require an additional $3 billion to return all assets to Q2 (>80 facility condition index) by 2031. Clearly Q2 is not our goal; Q1 is and will be. In fiscal year 2024, we plan to use approximately $270 million to renovate 25 barracks including some renovations previously deferred.

GUAM AND H2B VISAS

Earlier this year the Marine Corps reactivated Camp Blaz—a facility that secures a geographically distributed and operationally resilient posture for the Marine Corps in the Indo-Pacific. It also strengthens DOD's ability to deter, defend, and support allies and partners in the region. The continued build-out of Guam projects will require a reassessment of the H–2B visa issue, based on available qualified workforce.

CLIMATE CHANGE RESILIENCE

Currently, the Marine Corps is undergoing a review of installation master plans to build resilience against all hazards such as wildfires, water scarcity, rising sea levels, and hurricanes. Marine Corps Recruit Depot (MCRD) Parris Island (PI) has already completed a master plan (2021) and a Climate Change Resiliency and Adaptation Plan (2020), which are being used to develop MILCON and FSRM investment projects to reduce existing and projected localized flooding. The Military Installation Resilience Review of the low country community surrounding MCAS Beaufort and MCRD PI developed a toolkit for structural interventions and nonstructural planning approaches to enable the low country communities to adapt to climate change. The toolkit has been applied to three pilot projects: St. Helena Island wastewater treatment plant, Lady's Island neighborhood, and the Shell Point Interchange. MCRD PI's efforts to address sea-level rise and climate change with regional conservation groups and the local community is growing stronger. MCRD PI currently has five initiatives in process with our regional partners: Lowcountry Sentinel Landscape Application, National Fish and Wildlife National Coastal Resiliency Fund (carbon sequestration $550,000), South Carolina Department of Natural Resources, Readiness and Environmental Protection Integration Program, and U.S. Army Corps of Engineers.

CONCLUSION

On-going conflicts across the continent in Africa, along the line-of-actual-control between India and China, along the Turkish-Syrian border, and in Ukraine remind us that despite our best efforts, we can never know with certainty when, where, or how an adversary might precipitate conflict—especially against an ally or partner. We must be ready—not simply available—to respond tonight, tomorrow, and every night into the future. We are. As a Service, we must ensure that your crisis response force is globally deployable. We are. But we don't have the luxury of building a force for only one threat, one region, or one form of warfare. The Marine Corps must be organized, trained, equipped, and postured for the full range of operations in places we might not expect, and on timelines we did not anticipate. We are. In these times of increasing complexity and uncertainty, the Nation needs one force, maintained at the highest levels of readiness, that can respond to the crises that few saw coming. We are that force.

This Committee's support to our modernization efforts—anchored on Force Design 2030, Talent Management 2030, Training & Education 2030, and Installations and Logistics 2030—has been crucial to our success thus far. Today is an opportunity to re-recommit to our modernization program and help facilitate its acceleration, while at the same time addressing issues often mistakenly deemed secondary to readiness such as barracks, housing, childcare, and healthcare. Which are equally essential to the readiness of the force.

Based on your continued support, 2022 and 2023 will be known as the years Force Design transitioned from ideas to operational capabilities. Force Design is now; it is here today. But with updates to organization and equipment well underway, we must turn both our attention and our resources to manning, training, and retaining. We must never lose sight that our most critical warfighting advantage is our people, and that they deserve the best quality-of-life that we can provide them given the anticipated stress associated with military service. I look forward to working with the Committee Members and staff over my final months as Commandant, and thank each of you and your staff for the tireless efforts in support of the Marine Corps.

Chairman REED. Thank you very much, General Berger.

Mr. Secretary, submarines are critical, in fact, I would argue the most critical aspect of our Navy, and looking at the contract right now they are beginning to work on Block V.

But going back to Block IV we are seeing already delays, which will translate into the next block—the multiyear acquisition of these submarines. Block IV has been running about 12 to 18 months behind, costs have been increasing, and we are trying to bring the *Columbia* in on course and on schedule. But when you see these reverberating cascading effects you wonder if that is possible, too.

What are you doing and what is the Navy doing to get these course and schedule issues on track?

Mr. DEL TORO. Thank you, Mr. Chairman. There is numerous steps that we are taking, first and foremost, obviously, providing proper oversight over the construction contracts themselves.

We believe by several estimates that they are at about 1.2 to 1.4 submarines a year when they need to be at 2.0 submarines a year. No one ignores the fact that we have been living in COVID and COVID has actually had a significant impact on our supply chains and our providers and so this takes all hands on deck basically to get to a better place and I hope, and I am actually optimistic that we can get to a better place in the next 5 years.

But it is going to demand a lot of incremental progress and a lot of continued investment in the submarine industrial base. So last year, for example, there was approximately $700 million that was invested alone in projects like the regional training centers or systems that are so critical to getting to a better place.

Those regional training systems have been implemented in the Northeast. They have also been implemented in Virginia as well, and out in San Diego working with the community colleges. Working with numerous suppliers and vendors throughout the area so that then we can make the CAPEX [Capital Expenditure]-like investments in those companies to help them get to a better place with their own capital investments as well.

Fundamentally, we also have a challenge, obviously, with regards to workforce training and recruitment, and so I believe, as I have visited all the shipyards and met with all the senior leaders of the shipyards, that they are committed now to actually increasing benefits at the shipyards themselves. Making the shipyards more amenable to workers coming and working there. Looking for housing solutions in the local communities as well in places where housing is a real problem.

I am hopeful that over the course of the next few years we are actually going to see some significant increased improvements and getting us to the right place closer to two boats per year on the *Virginia*-class.

Chairman REED. I hope we can because it is essential to the Navy. It is one of our greatest assets, particularly in the Pacific if there is any conflict there.

Admiral Gilday, I recently received a briefing from Secretary Raven about the suicides on the *George Washington.* The first phase was focused on the individual sailors who were involved.

This new phase is more about collective causal conditions, environmental conditions. But with respect to the first phase, I think not only myself but some of my colleagues were interested about accountability for commanders.

Was there a thorough investigation of commanders' responsibilities and was it formally concluded that there was no command or leadership gaps or, in fact, is that still pending?

Admiral GILDAY. Sir, in the first investigation we did not take action against the commander of the *George Washington.* The Secretary and I have both been to that ship. We have walked those deck plates. We have met with those sailors before and after that investigation was completed.

The investigation found that those suicides, tragic as they are, were independent and there were no common causal factors across those three.

With respect to improvements, although the second investigation has not yet been signed out, there are many improvements that we have made across the force. They include investments in things that we learned from the *George Washington.*

As an example, parking was a problem at the shipyard so we are investing in two parking lots, two multipurpose fitness facilities. We brought minimarts, if you will, closer to the ships. We improved WiFi. We moved sailors off the ship. We invested in new berthing barges. Yes, sir.

Chairman REED. I appreciate that. But, very succinctly, was there an investigation of the chain of command? Was it completed with a conclusion by the Secretary that there was no leadership failings?

Admiral GILDAY. Yes. That was a rigorous investigation, sir. There were things that went wrong. But tying those specific failures to the specific death by suicide were not clear.

Chairman REED. Let me make one other comment, no questions. But as we went through the reports on the *George Washington* we noticed that one factor was sleep deprivation. That was also a factor in the investigation regarding the *McCain* and *Fitzgerald* collisions.

I would presume that you are now relooking at policies and procedures so that that is not a factor and I will——

Admiral GILDAY. Sir, for ships that are underway we absolutely have and we have sleeping policies in effect now based on what we learned from the collisions in 2017.

The particular issue that you spoke to with respect to the *George Washington* is the fact that one sailor in particular was having trouble sleeping on the ship. As I mentioned a moment ago, we have tried to move everybody but the duty sections off the ship into new berthing barges and other facilities to get after that problem.

Chairman REED. Thank you very much.

Senator Wicker, please?

Senator WICKER. Thank you very much, Mr. Chairman.

General Berger, let us talk about LPDs. I think you said that there is a minimum—absolute minimum requirement of 31 amphibs. Also, you have asked for $1.7 billion as your number-one unfunded requirement to fully fund the LPD 33. Why have you done that and why is this so important? What if we do not do it?

General BERGER. Sir, the study that the Secretary of the Navy directed us to do last year determined the operational requirement. Pretty rigorous study. Thirty-one is the minimum and that made some assumptions on readiness but 31 is the minimum of 10 big decks and 21 medium and smalls.

So 31 is both the operational requirement and now the statutory law minimum. That is where the minimum came from. In the shipbuilding plan and the budget submitted there is no plan to get to that number and that is why I put it as the top of the unfunded list. I understand it—I know it to be the operational requirement and the law and I saw no plan to get there.

Senator WICKER. Where will that disadvantage us the most if we do not do that?

General BERGER. It may be a paraphrase, but in the Chairman's opening statement he said that the Navy and the Marine Corps are the Nation's first line of deterrence, first line of defense. I agree with that.

If we do not have enough amphibious ships or other naval vessels, then you put at risk both deterrence and defense and the ability to respond to a crisis. So the short answer is my concern is if something happens around the world we will not have the right capability nearby where the combatant commander needs it.

Senator WICKER. In particular, how would that help us in the Pacific?

General BERGER. If something happened in Taiwan or any of the regions of the Pacific where there was an aggressive action and we did not have a naval expeditionary force nearby, then time—if you

are a combatant commander, if you are an operational commander, as you know, sir, time matters.

I think the same you could say in Central Command, same in European Command. There are times when you can fly in and land a force, but not always. In fact, most of the cases you need a seaborne force, and you need marines that can project power ashore when you need to.

Senator WICKER. Let us also talk about production line. Now, we are building LPDs now but if this current budget is not changed what will happen to that production line? What will be the consequences of it?

General BERGER. That line would stop, sir.

Senator WICKER. In the future when we decide we finally want another amphib, how will that disadvantage us? You got to go find the workers again, do you not?

General BERGER. That is correct.

Senator WICKER. Okay.

General BERGER. You got to retrain them, hire them. You got to start from scratch.

Senator WICKER. Also, with regard to cost savings I understand the LPD has already gone through cost saving programs and someone has suggested a dramatic reduction in flight decks and you view that as unacceptable. Would you explain that to us?

General BERGER. In 2014 the Navy and the Marine Corps, directed by the Secretary of the Navy, undertook a study for about 18 months looking at the LPD–17 and what could be an affordable but capable replacement for the LSD and that became the LPD Flight II.

Reduction of what was an LPD–17 version into a Flight II status, every bit of efficiency squeezed out of that. I think the input from Huntington Ingalls was really important. So now if there is another effort to reduce that further I know that we went to the minimums in 2014. Nothing less will do.

Senator WICKER. Okay. Good. Let us leave it there and, Secretary Del Toro, let us talk briefly about frigates. Now, we are building those in Wisconsin now?

Mr. DEL TORO. That is correct, sir.

Senator WICKER. The decision has been made to build the frigates there and at another shipyard. Is that correct?

Mr. DEL TORO. No, sir, not as of right now. The decision——

Senator WICKER. That has not been made?

Mr. DEL TORO. No, sir. That decision has not been made.

Senator WICKER. Okay. Well, where are we on that?

Mr. DEL TORO. We are actually waiting for the completion of the technical design package, which is expected by the end of this year.

Once that technical design package is fully mature and submitted for review, we will review it and at that point we will make a decision on whether we have the ability to actually take that technical data package, and make sure that it is mature enough to actually compete—perhaps, compete with another shipyard so that we could have two shipyards building the *Constellation*-class frigate.

Senator WICKER. Well, we are going to need four a year. Is that right?

Mr. DEL TORO. I am sorry, sir?

Senator WICKER. We are going to need four frigates a year and that that concept is a way to get that. Is that correct?

Mr. DEL TORO. No, sir. Right now the President's Budget recommends a saw tooth pattern of two one two one, moving forward. So it is two frigates a year that we will initially need.

Senator WICKER. Admiral Gilday, how important would it be to move to four?

Admiral GILDAY. I think very important, based on the comments of both you and the Chairman at the opening of the Committee. If we could get a second shipyard and two a year from each shipyard—two destroyers, two to three destroyers a year, we would be in a much better place. We are catching up and you cannot buy back time, sir, with the seven shipyards that we have, relative to the 30 that we had years ago.

Senator WICKER. It is going to be hard to get to four a year without designating two shipyards. Do you agree?

Admiral GILDAY. I agree. I also agree with the Secretary's comments. I think two shipyards is in the plan. We want to make sure that we are measuring twice and cutting once before that decision is made.

Senator WICKER. Thank you, gentlemen.

Admiral GILDAY. Yes, sir.

Chairman REED. Thank you, Senator Wicker.

Senator Hirono, please?

Senator HIRONO. Thank you, Mr. Chairman. Thank you very much for your service and especially for Mr. Secretary and General Berger. This will be your last, I guess, year of service, so I thank you.

I note, Mr. Secretary, that recently the DOD [Department of Defense] opened up its Red Hill Clinic to people who were not in the service and that is very much appreciated by a community that has been rocked by the disaster at Red Hill and continue to raise many questions about what the military is doing and how they are doing it.

There were a number of recommended changes to the—based on what happened at Red Hill and characterizing what happened at Red Hill as having had a culture of procedural noncompliance, a lack of ownership, and poor training.

These were among the descriptions of what led to the disaster at Red Hill, and there were a number of recommendations made, Mr. Secretary. Among the changes that were recommended can you describe a specific major change that you have implemented or that is being implemented?

Mr. DEL TORO. Yes, ma'am, and currently out of the 253 repairs that were identified in order to defuel Red Hill approximately just over half have now been completed.

But the one major change that I would say that I have personally implemented is to ensure that anyone who actually enters Red Hill is actually being supervised properly. So out of the many subcontractors that do work at Red Hill at any given day they have Government oversight.

There is a plan in place that they have to demonstrate for exactly what they are going to do, how it was verified, and oversight

over the individual actions that they are going to take with regards to any maintenance that actually gets conducted in Red Hill.

Senator HIRONO. So it is not just at Red Hill. There are other installations where this kind of review needs to take place. It is stunning to note that the lack of ownership, poor training, lack of oversight that characterize what happened at Red Hill may be going on in other facilities and that needs to be changed. That kind of culture of lack of oversight is really very stunning and totally unacceptable.

Mr. DEL TORO. Senator, if I can just add that that degree of oversight actually has been enforced now at all other fuel facilities as well, too.

Immediately after the incident at Red Hill we made sure that we looked at every other fuel farm that we own and operate to try to ensure that we up the standards of how those fuel farms are actually operated.

Senator HIRONO. That is reassuring.

Mr. DEL TORO. So those measures are in place.

Senator HIRONO. That is reassuring, Mr. Secretary, because as you know the community is still very much questioning the—basically the military's capacity to do the right thing and complete the work that needs to be done at Red Hill.

General Berger, many field grade officers who are actually on the ground and closest to the problem have come on and publicly said the changes made by Force Design 2030 have made their units more capable, and you mentioned the Hawaii-based Third Marine Littoral Regiment's successes against a more standard Air-Ground Task Force in recent exercises.

These young men are the future leaders of the Marine Corps and are currently tasked with ensuring the marines are prepared. So their support for the changes made by Force Design 2030 is instructive. I just wanted to make that statement, General, because I do support the changes that you have made.

One thing that does concern me, General Berger, is you noted that infrastructure is very important. The modernization and maintenance of infrastructure that has to do with the quality of life of our people, and, yet, the Marine Corps only funded 54 percent of the facilities' sustainment and restoration funds that it needs.

So why is this, General? Because for other funding needs it is a much higher percentage of the items that are being funded and yet for the Marine Corps it is only 54 percent. Why is that?

General BERGER. The approach of 80 percent funding for FSRM [Facilities, Sustainment, Restoration and Modernization], which has been the model that we have used for as long as I have been a marine, has not always allowed us the flexibility to put money where we should have put it because we are tied to a fixed percentage across FSRM. The model that we are using now supported by OSD [Office of the Secretary of Defense] allows us the flexibility to move money within, to not waste money where it is not going to do any good.

Senator HIRONO. There is a question as to what you consider will not do any good because there are a lot of infrastructure needs. I think, throughout the DOD and, as you know, to me, Red Hill and some of the other events that have occurred with regard to the

Army and the other services says to me that we need to pay a lot more attention to our infrastructure needs.

The kind of deferred maintenance that is exemplified, I would say, throughout DOD is an area that I personally—well, I will be focused on as Chair of the Readiness Subcommittee.

I just want to note that to you that I will be paying attention to the needs of all of our services with regard to repair and maintenance of infrastructure. I want to know that what is going through our lines, our pipes, our electrical lines are—that those infrastructure needs are being met.

Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Hirono.

Senator Fischer, please?

Senator FISCHER. Thank you, Mr. Chairman. Good morning.

Mr. Secretary, earlier this morning I attended a classified briefing on the modernization of our triad platforms, and I would say since the *Columbia* program is on a tight timeline to deliver the first submarine to the Navy in 2027, can you provide us an update in this public setting on whether the Navy will be able to meet this timeline given workforce and supply chain challenges?

Mr. DEL TORO. Thank you, Senator. Thank you for that question and for your commitment to the nuclear triad as well.

As you know, currently approximately 50 percent of our ship construction funds are devoted to submarines of which *Columbia* is the highest acquisition priority. When I came in as Secretary approximately 19 months ago or so. I also foresaw that there always could exist, perhaps, a gap between the decommissioning of the *Ohio*-class and the oncoming of the *Columbia*-class.

One of the measures that I did take last year was to start analysis associated with how long it would take, and how much resources would be needed to actually look at each one of our *Ohio* sub hulls and see if we could extend some of those hulls to close the potential gap between *Columbia* and *Ohio*. That process is now underway and we should have better estimates, hopefully, by the end of this year that we can invest in the President's 2025 Budget.

In addition to that, all the oversight functions that I mentioned earlier to the Chairman with regards to keeping *Columbia* on track and, again, I thank the Congress for their investments in the industrial base.

Senator FISCHER. Can you give us a timeframe that we are currently seeing for the *Columbia?* Is it on track? Is it maintaining?

Mr. DEL TORO. Yes.

Senator FISCHER. Is it dropping back?

Mr. DEL TORO. So *Columbia* is on track in accordance with her contract requirements. There was an expedited schedule that was created by Electric Boat, approximately 6 months advanced. It is about approximately 10 percent behind the 6 month advance schedule that we would like to adhere to as well, too.

But rest assured that we are working very closely with the industrial base to keep it on its contract schedule.

Senator FISCHER. Admiral, do you have anything to add to that?

Admiral GILDAY. I was just up in Connecticut last week at the shipyard. The Secretary is absolutely right. We are about 10 per-

cent behind in the advanced schedule. We are watching that very closely.

So that advanced schedule, 78 months versus the 84 months contracted, is intended to give us margin for first-of-a-class ship. We are going to have to do weapon systems testing and we are going to have to do testing of a first-of-a-kind integrated propulsion system, and so we are trying to factor that in, watching it very closely.

I would say that the shipbuilders are making really great strides—in terms of hiring 4,000 additional workers last year, another 6,000 planned for this year.

So we remain confident and keep a close eye on it, ma'am.

Senator FISCHER. In working with the industry on this, can you give us some specifics that you are looking at to help them continue on that expedited schedule?

Admiral GILDAY. So, as you know, the Congress has been very generous in terms of infrastructure investments that we have made in those two shipyards down in Newport News and also up at Electric Boat to the tune of billions over the Future Years Defense Program (FYDP).

Separately, I think that the money that we are applying for advanced procurement materiel, particularly given the supply chain challenges we have seen post COVID, are also going a long way to get that materiel well in advance so that we have no work stoppages.

Senator FISCHER. Okay. Thank you.

What do you assess the role of the unmanned platforms? What are they going to play in future Navy operations? You mentioned those in your opening statement. How do you think the architecture of the fleet should be structured so that you can achieve that balance between manned and unmanned?

Admiral GILDAY. So whether it is under, on, or above the sea we are looking at manned/unmanned teaming. So this will be a phased approach. Initially, you would have unmanned teamed with manned aircraft, as an example, where the manned aircraft would be the quarterback and the unmanned would be the wingman.

We are doing the same thing under the sea. We are doing the same thing on the sea. Under the sea, we have our first extra large UUV [Unmanned Undersea Vehicle] prototype in the water now for testing off the coast of California, with more to follow. This brings a clandestine mine-laying capability to the combatant commanders.

On the surface we have been doing a lot of work with drones in the Middle East. We will have a hundred this year operating along with six other countries. We are only paying 20 percent of that bill. The other countries are chipping in and paying most of it.

That allows us to have more persistent coverage in an area where—in the Middle East that is still a maritime domain. But we do not have the numbers of ships that we have had in the past.

In the air we have our drone and MQ–25 that is operating off our carriers now and testing. We will go IOC [Initial Operational Capability] in a couple of years and so that frees up—that is our first instantiation of an airborne UAV [Unmanned Aerial Vehicle] that allows us to refuel aircraft in the air, give them another 500 miles of range.

So we are making all of these progressive advancements and trying to do it very deliberately but at speed.

Senator FISCHER. The lessons you are learning in the Middle East are those transferable to the Pacific?

Admiral GILDAY. Absolutely. The Secretary just announced that we are going to scale our unmanned operations from the Middle East to Southern Command. So it is taking a closer look at illicit drugs and illicit persons that are coming up the northern approaches by the maritime. Also, our intent is to put an unblinking eye on illicit Chinese fishing on both coasts of South America.

Senator FISCHER. Thank you. Thank you, Mr. Chair.

Chairman REED. Thank you, Senator Fischer.

Senator Kaine, please?

Senator KAINE. Thank you, Mr. Chair, and to Admiral Gilday and General Berger, my congratulations and gratitude to both of you for wonderful service.

General Berger, I just want to pick up one point and make sure I get the punch line version of one aspect of your testimony. The Nation needs 31 amphibs. The statutory requirement is 31 amphibs. The budget we have before us has no path to get to 31 amphibs. Am I reading you right?

General BERGER. Yes, sir.

Senator KAINE. All right. Thank you.

Secretary Del Toro, I want to thank you for your attention to an issue that has been very challenging for us in Virginia and that is military suicides, particularly connected with the *George Washington* and also the Mid-Atlantic Regional Maintenance Center (MARMC).

You and I went together down to MARMC and I could tell in your interaction with the command and with the rank and file, both the sailors and the civilians in that unit of 2,500 people, that this is something you take very, very seriously and you are focused on trying to figure out a way to improve this set of tragedies.

If I could ask you a set of questions about that. Could you first tell me what is the status of Brandon Act implementation?

Mr. DEL TORO. Yes, sir. The fine details of how best to implement the Brandon Act are being reviewed by the Under Secretary of Defense for Personnel and Readiness. I hope that over the course of the next several months we will actually have a path forward on how best to execute it.

It is extremely important to bring every tool in the toolkit in order to solve this or try to help solve this very, very tragic situation with regard to not just suicides in the Navy, but suicides in the Nation, and there is no greater responsibility the Secretary has than the safety of their personnel both in the Navy and Marine Corps and the civilian personnel. As you suggested, we take this responsibility very seriously.

Senator KAINE. I would love to stay in touch with you about this because what I would not like to happen would be for there to be a report about implementation after the NDAA is done that we do not find satisfactory.

I would like to stay in dialog with you about the implementation, so that if we feel like we want to offer some additional muscle to

implementation we have a chance to do that before the Committee finishes its work on this. So I will continue with you on that.

I also had the chance to talk to Admiral Franchetti and Secretary Raven about the phase two analysis of the *George Washington* suicides, and I know that it is not yet done.

I was heartened by some of the initial discussion about the depth of recommendations that are going to be made. But I am interested in one particular issue and I am not sure that it is covered in the phase two, based upon my questions.

Last year's House Report to the NDAA directed a briefing on personnel assignments to carriers undergoing refueling. Do we need to maintain the entire ship's fleet with a ship during an extended refueling? In the *George Washington* case it is 6 years. Senator Scott has raised some similar questions in hearings before.

As I asked Secretary Raven and Admiral Franchetti about, does phase two get into challenging assumptions about whether we have to keep the entire ship personnel component intact during the entire refuel, which can be a very extended one as the *George Washington*, I got an answer that made me think that was not part of the analysis. So and yet that was a suggestion in the NDAA language from the House side last year that we analyze ship personnel assignments during extended refuels.

Tell me if you are doing anything to sort of challenge your own assumptions about what personnel component is needed during a refuel, or particularly for first tour sailors, are there other assignments that they could take on that would more closely match the MOSes [Military Occupational Specialties] they have trained for.

Mr. DEL TORO. Absolutely so, Senator, and in fact, the summary report may not have highlighted that as a fact. But we are taking a close look at this because it is extremely important, and while the entire crew may not be needed throughout the course of the entire RCOH [Refueling and Complex Overhaul], especially when the ship first comes into port and to its following stages, toward the end of the RCOH you do have to build that crew back up.

In fact, one of the things that we discovered on the *George Washington,* for example, is that there was a lack of mid level leadership in the chief petty officer corps. They were not providing the necessary oversight for junior personnel, for example.

So although it is complicated, I do not think the entire crew is needed throughout the entire period. But there are stages where we actually need that mid level management overseeing our most junior sailors who could be challenged with living in a shipyard environment.

Senator KAINE. Just one final thing as I conclude. When we visited the Mid Atlantic Regional Maintenance Center following the suicide of four sailors there within 2 months it was, I think, fairly clear that a contributing factor was a manning policy that allowed for a 60 percent increase in the assignment of personnel who were either on limited duty or pregnancy postpartum, with no additional assignment of medical resources to help them deal with, for example, a med board process or other needs they might have.

What are you doing to try to deal with that issue to provide more in-unit resources in billets like this where there is a high percent-

age of people who are assigned on either a limited duty or a pregnancy postpartum status?

Mr. DEL TORO. Yes, sir. I will let the CNO address the specific actions that are being taken, but we actually have channeled back on that policy. We have way too many LIMDUs [Limited Duty Personnel] going to other places where they cannot be cared for in the manner that they deserve to be cared for.

So we are actually looking at withholding the ones that we can back on ship where they have better care and more resources available to them. But, perhaps, the CNO can go into a little bit more detail on the specific action.

Senator KAINE. I am over time. But if you could do it briefly.

Admiral GILDAY. Yes, sir. I will make three quick points.

The first thing that we are doing is making a faster determination of what path they ought to be on. Are they just on light duty for a period of 2 weeks because they have a sprained ankle or do we need to move them off the ship on a more permanent basis. Getting them the help that they need at an accelerated rate so that we prevent them from going into a limited duty status. The point is to keep sailors at work.

The third, for those on limited duty to get them those medical evaluations at a much faster pace. We are also reducing the ratio of those in limited duty at commands so that we do not have another MARMC, so that people are properly supervised, sir.

Chairman REED. Thank you, Senator Kaine.

Senator Cotton, please?

Senator COTTON. Thank you, Mr. Chairman.

Admiral Gilday and General Berger, thank you for your latest and presumptively your last appearance at the Committee as Chief and Commandant. We congratulate you for a lifetime of service and appreciate everything you have done for this country.

Mr. Secretary, I want to be the latest Senator to ask about this issue of the 31 amphibs. The budget this year does not include any fiscal year 2024 money for the seventeenth *San Antonio*-class ship.

That sets you on a path to fall below the legislatively mandated 31-ship amphib floor, as Senator Kaine pointed out, and, General Berger, you testified that you think that is in the needs of the Marine Corps.

I just want to ask what is up with this discrepancy between that legislative mandate and General Berger's stated needs for the Marine Corps, and the budget request? Can you explain it to us?

Mr. DEL TORO. Thank you, Senator. First, let me unequivocally State that I do not dismiss anything that the Commandant of the Marine Corps said with the need for our Nation to have the heavy lift that is necessary to provide our expeditionary forces in the Pacific. In particular, the ships that they need to be able to carry equipment and personnel around the Pacific.

The concern that developed over the course of the last year or so has been the increasing costs of the platforms themselves. There were two studies that were done to address this issue.

One is a cost study that was initiated by the Office of Security Defense to look at the—and compare the costs, essentially, between the different designs of the LPD and see if we could actually bring down those costs. The second is the BFSAR [Battle Force Slip As-

sessment and Requirement] which is mandated by the 2023 NDAA as well, and to take a look at the overall requirements for the amphibious ships, both large and medium, in order to make the right decisions necessary in the 2025 budget to invest in the required platforms.

I think that there is also general recognition that moving toward a multi-ship multiyear procurement is an effective way to bring the cost of those ships down in the future.

Senator COTTON. So at bottom it is a cost issue?

Mr. DEL TORO. Yes, sir. The cost per ship issue.

Senator COTTON. Yes.

General Berger, any further thoughts on this matter?

General BERGER. You, the Senate—the Congress gave the service chiefs the authority, the responsibility to determine the operational requirement. Which I did, which is 31.

But the Secretary, obviously, has a lot of things he has to fund as does the Secretary of Defense. I am not in their position to weigh it against all the other things that they must fund. I can just tell you that the operational requirement, the minimum, is 31 and that assumes a level of maintenance that provides the availability to the combatant commanders.

Senator COTTON. Okay, Thank you both. Obviously, this matter has a high degree of interest on the Committee and I suspect we will be addressing it in the months ahead.

Mr. Secretary, I also want to speak about the State of our industrial base, especially what it means for submarines, the Navy's inability to build ships and the fleet on time and on budget for many years. Well before you came along, to be fair——

Mr. DEL TORO. Trying to make it better, Senator.

Senator COTTON. Yes.

[Laughter.]

Senator COTTON. We all are, but it has been a source of growing concern. There are press reports that it is now going to take 5 years for the *Virginia*-class submarine production to reach its target of two boats per year.

Admiral Gilday earlier this year spoke to industry and he told them that they needed to prove it. That is a direct quote. I think that is an apt quote to industry regarding the ability to ramp up production. Our submarines, obviously, provide us an unmatched strategic advantage, especially in the Western Pacific against Communist China.

So could you give us some thoughts about what we can do in this Committee and in Congress to help assist with the ramp up of the industrial base especially as it relates to submarines?

Mr. DEL TORO. Yes, sir. Again, it is an all hands on deck approach. Everything from trying to improve the manpower issue and trying to get the shipyards to be able to recruit more effectively.

I mean, we face across the entire country, a national shortage when it comes to blue collar workers. I think increasing legal immigration to this country and work visa programs actually may very well help to better and support that blue collar workforce that is needed in places like the shipyards, for example.

But, again, the investments that you have made in 2023 and 2024 are in the right direction in terms of the investments in the industrial base itself.

One thing that I have been trying to do, Senator, is trying to expand the marketplace with regards to smaller shipyards. Getting them involved in Department of Defense construction and having them actually support the big primes.

I have been having conversation with the primes, for example, to try to include more smaller shipyards to feed the primes, and a perfect example of that actually is being executed now at Austal, where even before I got here the CNO encouraged the development of steel hulls at Austal.

They are now building steel hulls and they are actually contributing to Electric Boat up in Connecticut and providing the necessary modules necessary. I think HII [Huntington Ingalls Industries] is doing the same thing as is Ingalls down in Pensacola as well, too.

I think continued investment in CAPEX makes a lot of sense where the Government invests in these capital improvement programs at the shipyards so that the shipyards can also make an equal investment and help get us to the right place.

It is all hands on deck across the entire spectrum of improvements that have to be made.

Senator COTTON. Thank you.

Chairman REED. Thank you, Senator Cotton.

Senator Rosen, please?

Senator ROSEN. Thank you, Chairman Reed, Ranking Member Wicker, for holding this very important hearing and I want to thank all of you for being here today and thank you for your service and for your support for things in Nevada, of course, across the country as well.

I want to talk a little bit about Nevada and the Fallon Range Training Complex modernization. Secretary Del Toro, as you know, we are so proud in Nevada to host Naval Air Station Fallon, home to "Top Gun" and the Nation's premier carrier air wing and the SEAL training centers. I want to offer you and your staff again my personal gratitude for working with me and the Nevada delegation on a consensus proposal to modernize the Fallon Range Training Complex, which was included in the Fiscal Year 2023 NDAA.

I appreciate that Under Secretary Raven and other senior leaders will be traveling to Fallon just later this week to meet with the Tribal Nations because this agreement included key mitigations for local and tribal governments that require future appropriations.

Specifically, the Navy is responsible for compensating for the timely reconstruction and, of course, relocation of impacted roads and infrastructure, the displaced grazing permittees, our cultural resource surveys and environmental assessments. Funding and completion of these requirements is not just important for my constituents, it is also necessary to ensure that expanding the training complex can become operational for the future of the Navy.

Given that Fallon modernization was the top Navy's legislative priority the Nevada delegation was expecting that in the fiscal year 2024 budget the request would include funding for those various

commitments. However, fiscal year 2024 budget was silent, silent on Fallon modernization.

Secretary Del Toro, can you speak to the Navy's implementation plan for modernization of the Fallon Range Training Complex, given the urgency to modernize? I am curious why this implementation is not included in the Navy's fiscal year 2024 budget request.

Mr. DEL TORO. Senator, let me first, again, thank you for your leadership on this issue. I was so proud to have been—played a small role by your side, basically, to bring this across the finish line. But it is about execution now.

I am unaware that we actually do not have the necessary funds to execute on the plans that were already baked into the agreement in fiscal year 2024. As far as I know, and I have reviewed the actual next steps that are required to execute the plan, I know that there is going to be moneys that get put into the President's Budget 2025 to continue those efforts.

But as far as I am aware there are no delays in actually us being able to meet the requirements necessary that were laid out in that plan, in accordance with agreements that were made between the tribes and us and the community and us as well, too.

It is my understanding that all the funds that we currently have are enough to fulfill the existing requirements that we currently have. More will come, obviously. But let me get back to you with more specifics because I do not want to misspeak on that.

Senator ROSEN. Perfect. I will have my team circle back and we can find out about that.

Mr. DEL TORO. Yes, ma'am.

[The information referred to follows:]

Mr. DEL TORO. Thanks to strong support from Congress, the Department of Interior, Tribal, and State and local stakeholders, the Navy continues to make significant progress on Fallon Modernization, and our fiscal year 2024 budget request aligns with our overall schedule. While our current efforts are not listed as distinct budget line items, the Department of the Navy's fiscal year 2024 budget request includes several key actions within our Operations and Maintenance funding. In fiscal year 2023 and fiscal year 2024, the Navy will execute numerous planning studies and surveys that are needed to support our military construction projects. We are conducting the environmental planning needed for the relocation of Sand Canyon/Red Mountain Road and the relocation of the gas pipeline at B–17 and State Route 361. We have also initiated the process to update the Integrated Natural Resource Management Plan and Wildland Fire Management Plan at Fallon.

The first of five military construction projects needed to support modernization, P442 Range Training Complex Land Acquisition, was authorized and appropriated in fiscal year 2021, and with the passage of the fiscal year 2023 National Defense Authorization Act can now move forward on that project. The remaining four military construction projects will be included in future budget requests aligned with execution timelines and mission-need dates.

Senator ROSEN. I also want to ask you this, that I understand the Navy has yet to finalize an agreement with the local tribes regarding access to important sites. So can you give me an update on the Navy's engagement with the tribes and the timeline for finalizing access?

Mr. DEL TORO. Ma'am, allow me to get back to you with specifics because I do not want to misspeak in any way. My understanding was that everything is on track and actually Secretary Berger and Secretary Raven are traveling out there to actually celebrate, in many ways, the progress that we have made in the path forward

and review what lays ahead, basically, on the POA&M [Plan of Action and Milestones].

[The information referred to follows:]

Mr. DEL TORO. The Department of the Navy deeply values our relationships with the Tribes, and Naval Air Station Fallon has existing procedures established to support public access, including Tribal access requests.

In fiscal year 2022, the Navy and the Northern Nevada Tribes collaborated to produce a draft Memorandum of Agreement (MOA) to streamline Tribal access requests. Based on new requirements included as part of the Fallon Range Training Complex modernization in the fiscal year 2023 NDAA, the Navy updated the draft Tribal Access MOA, and shared it with the Tribes on February 27, 2023. The Fallon Paiute Shoshone Tribe (FPST) has been convening the Northern Nevada Tribes for discussions and to collect feedback on the updated draft Tribal Access MOA, and has offered to consolidate any additional Tribal comments and return them to the Navy. The Navy is in regular communication with our Tribal leaders at the local and Secretariat level, and we understand that their process should finish soon. Once we receive the consolidated comments from the Tribes, we will finalize the agreement.

Senator ROSEN. I am going to stay a little bit on Naval Air Station Fallon because the personnel stationed there they do conduct critical training missions. The fleet is deployable and operationally ready every day.

These operations [are] incredibly demanding and so reducing external stressors is important not only to the sailors but also to the mission. I know 172 new housing units are on track to be built at Naval Air Station Fallon. It is going to help ease a little bit of that housing strain.

But more needs to be done, and Fallon is still considered a remote duty installation and I want to ensure that other things for quality of life are also addressed. I can take this off the record if you would be brief—can you speak to the quality of life at Fallon, mental health resources that might be available for our sailors and folks that train there and work there. What are you doing to support those on remote duty in the NDAA?

Mr. DEL TORO. We recognize that Fallon is a remote site and we recognize the challenges that go along with that, in general.

The CNO, the Commandant, and I are hyper focused on actually the remote sites across the entire country more so than the major concentration areas as well, too, because they undergo a lot more stressors than other locations.

I have actually specifically spoken to the Under Secretary of Defense for Personnel and Readiness on the hospital issues associated with Fallon, Nevada, for example. Because it is so important to get the right mental health providers necessary to fill those billets in Nevada and we are struggling to fill those billets in Nevada, obviously, as well as in Yokosuka, Japan and Rota, Spain as well, too.

But allow me to get back with a long list of actions that we are specifically taking with regards to Nevada on the quality of life issues on the bases.

[The information referred to follows:]

Mr. DEL TORO. Taking care of sailors and their families remains one of my top concerns, and this is especially important in more remote areas where certain services may not be as readily available. To your point, we need these outstanding sailors to be able to focus on their mission, so ensuring that they and their families have the resources they need is extremely important. To that end, the Navy provides mental health resources, child and youth programs, and an array of morale, welfare and recreation programs for those assigned to NAS Fallon.

Mental Health Resources:

The Fleet and Family Support Center at NAS Fallon is staffed with independently licensed mental health professionals to provide in-person, short-term, non-medical clinical counseling for commonly occurring life situations and adjustment issues, thereby intervening prior to the development of more serious problems or diagnosable mental disorders.

Additionally, Sailor Assistance and Intercept for Life (SAIL) is a voluntary program that quickly provides rapid assistance, ongoing clinical case management, care coordination, and reintegration assistance during the stressful period following suicide-related behavior by a sailor. SAIL is delivered virtually and to increase access to services in remote duty locations like NAS Fallon, Navy recently expanded virtual access to both SAIL and non-medical, clinical counseling services.

The Navy's Integrated Primary Prevention Program is dedicated to the prevention of interpersonal violence and self-harm. The Navy Integrated Primary Prevention Workforce will total more than 300 personnel over the next 5 years. NAS Fallon will be assigned three Integrated Primary Prevention billets, and Navy Region Southwest assigned another 50 billets.

Child and Youth Programs (CYP):

NAS Fallon Child Development Center is the only accredited childcare provider in Churchill County and supports children ages 6 weeks to 5 years. CYP also provides a School-Age Care (SAC) Program for elementary school-aged children (before/after school and summer programs/camps) and a Youth/Teen Program. Finally, a School Liaison Officer is assigned to NAS Fallon to connect military families with area schools and to support schools in responding to military and family needs.

Morale, Welfare, and Recreation (MWR):

NAS Fallon MWR offers an array of quality of life services, activities and events, and delivers high-quality, innovative, recreation programs. Navy MWR provides a variety of free and low/competitively priced options for sailors and their families, including dining, fitness, recreation, gear rental, an RV park, and a variety of other amenities on the installation. The revenue generated from these programs is reinvested in sailor and family programs. NAS Fallon actively engages with sailors and families, both those permanently assigned and those visiting for temporary additional duty, training, or other mission reasons to ensure quality of life programs are relevant, accessible, convenient, and well-marketed.

The Navy supplies similar quality of life resources at other remote locations. These services are critical as they directly benefit the well-being of sailors and families. The Navy is also engaged with the Suicide Prevention and Response Independent Review Committee Implementation Working Group to target QOL support to Remote and Isolated locations.

Senator ROSEN. Perfect. Thank you very much. I will be submitting some more questions for the record. Thank you.

Mr. DEL TORO. Yes, ma'am.

Chairman REED. Thank you, Senator Rosen.

Senator Rounds, please?

Senator ROUNDS. Thank you, Mr. Chairman. First of all, to all three of you thank you very much for your service to our country.

Admiral Gilday, 38 years is a long time. Cannot do it without family. I appreciate you and your family. Very, very special.

General Berger, thank you very much for your 42 years of service and, once again, without what you do, the Services here in the United States simply are not what they are today. So thank you to both of you.

Admiral Gilday and General Berger, there have been efforts to share or take parts of the spectrum away from DOD activities and to use them for 5G, recognizing that 5G is an important aspect in this country and it is something that we need to be able to utilize.

But in doing so there is a particular part of the spectrum which is, I believe, very critical to a number of our defensive systems. Specifically, the 3.1 to 3.45 gigahertz band, or the S band, of the electromagnetic spectrum is used specifically by a number of your platforms.

Admiral Gilday, General Berger, could you share with us in this unclassified meeting the types of systems that would be impacted if this transfer of spectrum capability or limitation of spectrum capability were actually enacted before this September study is completed? Can you share with us how serious this could be to your ability to do your mission?

Admiral GILDAY. Senator, I would like to talk about three specific threat areas that I think come to mind when it comes to the very powerful capabilities that we have in that part of the spectrum.

The first is air defense. We just saw what happened when a balloon flew over the United States. We cannot have that happen with a more serious threat, and so that band affects the ship-borne radars that specifically would provide that type of early warning.

The second point I would make is about countering unmanned and so these are drones that are increasing in capability and size and lethality. I do not mean to be dramatic but we have to look around the bend to the future, the possibility of having to defend ourselves against threats like that and we cannot be blind to them. Taking away the capability in that band would do so.

The last area that I would speak to is missile defense and so we need warning there as well. These radars in that band bring that to bear. We know that we are in the age of hypersonics. It is not a place where we think that we want to accept risk.

If we do lose access to that band, if it is either vacated or shared and we cannot do that job on a continual basis, then I think we have to look at what modifications that we would need to make to probably 188 ships in terms of their systems to provide the American people with a degree of confidence that those three areas that I mentioned are properly defended.

Senator ROUNDS. Thank you.

General Berger?

General BERGER. I think what seems lost in that conversation, Senator, is those systems, those radar, electronic warfare systems were designed to optimize that spectrum for a weapon system.

We had access to that when the requirements were developed. That is why we went with that weapon system. So if that access is lost then the very reason you pick that part of the band of the spectrum for a radar, for electronic warfare, for a training system, all that is lost to us.

We have to be able to train realistically. So, for us, I think the same as CNO, the radar systems primarily but also other sensing systems and electronic warfare. That is why we chose that portion of the band.

Mr. DEL TORO. Senator, if I can just add, the cost of actually relocating these systems would be enormous, I mean, upwards of $250 billion, probably. So I am really fearful of the secondary consequences that some of these decisions could actually lead us to.

Senator ROUNDS. Thank you, sir. Would it be fair to say that the State of Hawaii is protected by those systems today, Admiral Gilday?

Admiral GILDAY. Yes, sir, to some degree.

Senator ROUNDS. How about the capital of our country, Washington, DC?

Admiral GILDAY. Yes, sir.

Senator ROUNDS. How about the West Coast of the United States today?

Admiral GILDAY. Absolutely. Yes, sir.

Senator ROUNDS. All of those are utilizing weapon systems or radars that are specific to this particular part of the spectrum that they are talking about trying to either share or sell, correct?

Admiral GILDAY. Yes, sir, and importantly also it would affect our ability to train to a high degree of proficiency to use those weapon systems.

Senator ROUNDS. Thank you. My time is expiring. I would not want to disappoint the Committee. I will ask a question for the record with regard to the USS *Boise* and your plans for not only the USS *Boise* to actually get it through dry dock, but those other *Los Angeles*-class attack subs that are behind it in line. Right now we do not have the shipbuilding capacity to be able to get those back in operation in less time than what it took to build them in the first place.

Admiral GILDAY. Yes, sir.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rounds.

Senator King, please?

Senator KING. Thank you, Mr. Chairman.

First, I would like to associate myself with Senator Rounds' questions on spectrum and the answers that you have provided. This is a critical issue. There is no reason to move forward with a spectrum auction before this study is completed. I think there is a significant national security risk.

Second, before beginning my questions I want to compliment General Berger. A friend of mine once said everybody is for progress, nobody is for change. You have managed both progress and change in a remarkable way, I think, during your 3 years as Commandant and I want to compliment you on that because it is not easy to move a large institution. You have done it with a very forward thinking way of looking at the future demands on the Marine Corps and you have done that very effectively.

Mr. Secretary, we have talked about this before. I am concerned about the transition from the DDG Flight III to the DDG(x), which is currently in design. Number one, are you supportive of the joint work that is being done by Bath Iron Works and Huntington Ingalls to be sure that the design is buildable and will be most effective for the Navy and for the taxpayers?

Mr. DEL TORO. Yes, Senator. Not only am I supportive but it is actually critical to success for the DDG(X) and it is part of the reason why we actually have moved the schedule 2 years to allow for a far more mature design and allow the shipyards to actually work closely with us to determine exactly not just the propulsion plant and what it should look like but to actually build out a land-based engineering site that we could actually test the propulsion plant at. As well as the many other technologies—advanced technologies—like Helios and others that it will actually provide in the future.

Senator KING. You used the right word, maturity of design, because as I have sat through 10 years of hearings on weapon systems, maturity of design is one of the key factors to prevent a debacle in terms of acquisition, both in terms of time and cost.

Also we need to be thinking now about the transition from the Flight IIIs to the new ship, that there not be a lag. You have seen me draw the graph of the trough in employment if we do not have a smooth transition. I hope that is in your plan.

Mr. DEL TORO. I could not agree with you more, Senator. I think continuing to build DDG–51 Flight IIIs is critical to ensuring that we do not have a gap like we are trying to prevent between the *Ohio* and the *Columbia*-class.

Senator KING. The issue of suicide has come up several times. There is an aspect of it that has not been discussed today. That is the relationship between the transition from Active Duty to veteran status and suicide.

Unfortunately, there is a correlation. Many suicides of veterans take place in the first 1 or 2 or 3 years after the transition.

I hope that we can work together and perhaps discuss offline how we can improve that transition—the handoff, if you will—so that a sailor does not walk out the door 1 day in the warm embrace of the Navy, and then suddenly into the cold world without the handoff to the veteran status. So will you commit to working with me on that?

Mr. DEL TORO. Absolutely, Senator, and continuity of care is essential to that transition.

Senator KING. Admiral Gilday, I think I asked you a similar question when you were first up for confirmation about hypersonics and we will take this in a classified setting.

But a general question is are you satisfied with where we area in terms of naval defense to a hypersonic attack? It seems to me that is one of the most serious strategic challenges that we face today, particularly in the Indo-Pacific?

Admiral GILDAY. Sir, no, I am not. We are working to close some known gaps that we have with respect to layered defense. Some of the biggest obstacles are technology, including mature technology, that would be—that we would be able to apply to the—to that problem set.

I think another aspect of it is being able to confuse and disrupt the adversary's ability to accurately target and use those weapons effectively. In a classified setting, sir, I think we can talk about that in a little bit more detail.

Senator KING. Well, I am glad you started with the question—the answer was no because that implies we have work to do.

Admiral GILDAY. We do.

Senator KING. I will look forward to working with you and your successor. I hope you will pass that sense of urgency on to your successor.

Admiral GILDAY. Yes, sir. I shall.

Senator KING. I will have another couple of questions for the record on some manpower issues.

Mr. Secretary, I commend you for the work you have done in terms of helping our shipyards with their workforce challenges. It sounds mundane but things like parking and childcare availability is important to having the workers that we need to build the next generation of ships, whether they be submarines or destroyers or frigates or amphibs.

Please keep that work in mind. Workforce, in my view, is maybe one of the most significant challenges that we have today.

Thank you, Mr. Secretary.

Chairman REED. Thank you, Senator King.

Senator Ernst, please?

Senator ERNST. Thank you, Mr. Chair, and thank you, gentlemen, very much for being here today. Admiral and General, thank you so much for your service and dedication to our great United States of America and to your families and your teammates as well. Truly appreciate them for their support.

China's military has raised the risk of great power war and our combat credibility, especially as we look at the Indo-Pacific, is increasingly in question and that is why Congress has really called on the Department to build our lethal capabilities to deter China.

General Berger, I would like to start with you. The late Chairman, John McCain, had declared that, quote, "The Marine Corps must modernize itself for the deterrence of great power competitors," end quote. We all know there has been a lot of debate surrounding modernization efforts within the Marine Corps. How did this Committee's intent inform your vision for the future force?

General BERGER. Probably, first, I would start with when Senator McCain said that and 4 years ago the Marine Corps very ready to handle the problem sets of today, right now.

In fact, if we had the capacity we would have a Marine Expeditionary Unit—an Amphibious Ready Group off the coast of Africa right now so that if Sudan got worse that General Langley would have a number of options.

I think readiness in terms of handling the problem sets of today was not the issue. But the National Defense Strategy, the indicators in the intelligence community, the developments in technology were a clear indicator to General Neller before me that we had to change. Holding on to what we had that was successful in the past was not going to help us in the future.

To your point, I think the indicators from this Committee, the support from individual Members and collectively, that has allowed us in 3½-years to get to where we are. We are very ready today but we cannot slow down.

We have to move quickly to stay in front. We have a pacing threat. We have a pacing challenge.

Senator ERNST. Yes, we do, and, General, you shared your predecessor's assessment that the marines were not organized, trained, equipped, or postured to meet the demands of the rapidly evolving future operating environment and you just referenced that.

How do your investments meet operating requirements in the Indo-Pacific specifically?

General BERGER. Some of it is the weapon systems themselves, the capabilities. Everything from the MV–22, which this Committee and others saved from death 25 years ago and thank God we have it right now. The 53K [CH–53K], the anti-ship missile capability that we're developing and all this were years in the making.

I think in the Pacific the challenges that Admiral Aquilino and his commanders face are range and it is a home game for the

PLAN [People's Liberation Army-Navy]. So we have a couple of challenges out there.

We have to be present. We have to be the stand-in force there from the beginning, because fighting your way in from the outside not a good plan. We have to work on the logistics so that that forward stand-in force is sustainable, is ready. You have to be there with allies and partners because they have to believe that the United States is not running away from them, is going to be there even when things get tough, and that is where the Marine Corps-Navy [team]—I mean, this is where we make our money. Right alongside the allies and partners forward where it matters. If we back off, if we pull out of there, we are sending a message strategically, which is not the message we are going to send.

Senator ERNST. You have outlined a number of gaps that exist logistically, support and working with other nations. Are there other gaps that you can address specifically within the Marine Corps?

General BERGER. The biggest one is what most of the Members brought up, which is the capacity to get us there, to have that presence forward all the time.

If we do not have the vessels, if we are not forward and we are in the United States and we are fighting our way to get in, bad place to be. I think if you still believe, in other words, that 3 ships—amphibious ships loaded up with 2,300 marines. If they have a deterrent value, and I think they do, then you want them right in the adversary's grill, right in their face where they can see them all the time.

Senator Cotton asked basically can we afford conventional deterrence. Absolutely, yes, because the alternative is a lot worse.

Senator ERNST. Are you managing that near-term risk as you divest from some of the legacy programs that you have?

General BERGER. Absolutely, yes. Absolutely, yes, ma'am.

Senator ERNST. Okay. Thank you very much, gentlemen. Thank you, Mr. Chair.

Chairman REED. Thank you, Senator Ernst.

Senator Kelly, please?

Senator KELLY. Thank you. Thank you, Mr. Chairman. Thank you for being here.

My first question is to General Berger. First of all, thank you for all the incredible work that is happening in southern Arizona at the Marine Corps Air Station in Yuma. It is home to the, as you know, the largest F–35 command in the Marine Corps.

It is also the home of the weapons and tactics instructor corps so it is helping train F–35 pilots in the Marine Corps across the country, essentially.

But also across our entire State we have got other flying missions. We have got Luke Air Force Base, Davis-Monthan. We are training F–16 pilots and operational squadrons and A–10's, Air Force F–35s. We have got the Compass Call mission at Davis-Monthan with C–130's, soon to be getting a new airframe.

Helicopters, UAVs, we got all this—a lot of stuff and it is the greatest place in the country to train. I am not being parochial here on it being Arizona. I mean, it really has good weather to train these missions.

What we are struggling with right now a little bit is airspace. We have got a lot of airspace. We got the Barry Goldwater Range. We have got Military Operations Areas (MOAs), Outlaw, Jackal, other MOAs. We have got a restricted area over Fort Huachuca.

General, I am interested from your perspective, the perspective of the Marine Corps, how would expanded airspace in the Southwest improve DOD's ability to support fifth-generation fighter aircraft training?

General BERGER. Senator, sitting behind me is my wife and she is probably smiling because we took our family to Yuma, Arizona. We lived there for 3 years, raised our kids there. So everything that you describe we lived when we had kids that were younger. It was a great place to raise a family.

It is also a fantastic place to train. You mentioned the weapons and tactics instructor course. That is what my assignment was. I am an infantry guy so, first of all, getting invited to teach at an aviation school I thought they had made a mistake.

But off I went to Yuma and learned more about combined arms, Marine Air-Ground Task Force, how we fight, than any other assignment I have ever been in. Airspace is critical. Without that you cannot put all the pieces together, and it was a box that we operated in in the 1990's when I was an instructor there but we did not have the range of the weapon systems we have now.

We did not have the speed and range of the aircraft we have now. If we cannot stretch the legs of the F–35, of the Multiple Launch Rocket System (MLRS), if we cannot use the airspace to the maximum degree of the weapon system, then the first time the marines are going to employ it is in combat and that is not what we want.

So absolutely critical, both altitude and depth of the Barry Goldwater ranges and the rest, as you mentioned. If we do not have that then we are putting our air crews, our ground marines, in a risk because the first time they are going to really put all the pieces together is when the fighting starts.

Senator KELLY. Yes. As you mentioned, as the stick gets bigger the airplane is going faster, the Advanced Medium Range Air to Air Missile (AMRAAM) is going further. We need more space. We can stitch together some of this space, by the way. That is something we have talked about in Arizona is we have an opportunity here with the Federal Aviation Administration (FAA) reauthorization bill. Talk to the FAA, come up with a plan that works for commercial aviation, works for the airline industry, but also helps us train better.

Now, I think Senator Sullivan, if he goes next, he is probably going to jump in here and talk about the airspace in Alaska. But this is really important and the weather is ideal for this training.

General BERGER. Just one quick plug for the FAA. They have been fantastic partners for 35 years, handing off airspace between LAX [Los Angeles International Airport] and Twentynine Palms and Yuma. Great partners.

Senator KELLY. Thank you. Thank you, General.

Secretary Del Toro, just real quick. I know Senator Kaine talked about the Brandon Act. I really appreciate all the hard work you have done on this.

We need to get it implemented. We discussed a little bit about this from a more personal side this morning. Can you just give me a really quick—and I do not have a lot of time—but a status update. How is the Navy working with DOD to make this a reality and what specific actions have you taken to support implementation?

Mr. DEL TORO. Thank you, Senator.

Well, for starters, I have personally met with the Caserta family to understand the challenges that they have undergone, and what they would like to see moving forward in terms of the Department of Navy and the Department of Defense being able to work with families like the Caserta family as they struggle with this tragic incident.

I believe it has to be with—we have to get to a better place with regards to executing the right of individuals to be able to seek out help from the private sector privately but at the same time with the checks and balances necessary so that the military also understands the struggles that this individual may be facing because if we do not understand the struggles that they are facing then that presents even greater threats as well, too, to operations and also to the individuals themselves.

We have to find that right balance between those two needs in order to get to a better place and those are the discussions that I have had with the Department of Defense.

Admiral GILDAY. Sir, I know we are over. Can I make just one quick comment?

Senator KELLY. Yes. Yes.

Admiral GILDAY. The Department issued a mental health playbook and so for sailors and marines one of the things it does is it helps them. It raises their awareness of what options are available and there are already self-referral and confidential options that are available.

We still have work to do as the Secretary is working on to make this more holistic across the Force. But we have made investments and we are trying to head in the right direction in order to make that available.

Senator KELLY. Thank you, Admiral. Thank you, Mr. Secretary, and thank you, General.

Chairman REED. Thank you, Senator Kelly.

Senator Sullivan, please?

Senator SULLIVAN. Thank you, Mr. Chairman.

I would like to thank the witnesses, in particular Admiral Gilday, General Berger. Thank you for your incredible service and to your families over decades. It is very appreciated. I have enjoyed working with both of you.

I am going to dig into this 31 amphib ship issue a lot more harshly because I just do not think what is happening right now is remotely appropriate.

Mr. Chairman, I would like to submit for the record a Defense One news article "Navy on the path to violate 31 amphib ship requirement in 2024" for the record.

Chairman REED. Without objection.

[The information referred to follows:]

Defense One
March 13, 2023

Navy On Path To Violate 31-Amphibious-Ship Requirement in 2024

By Caitlin Kenney

The Navy is proposing to drop its amphibious fleet below 31 ships, despite an agreement with the Marine Corps and a potential violation of last year's defense policy law.

Sent to Congress on Monday, the Navy's proposed $255.8 billion 2024 budget aims to retire eight warships before the end of their intended service life, including three *Whidbey Island*-class dock landing ships, or LSDs, that it proposed to scrap last year but which were saved by the 2023 National Defense Authorization Act.

The Navy's $32.8 billion shipbuilding request buys nine battle force ships but no amphibs, including the *San Antonio*-class amphibious transport dock ships, or LPDs, that are meant to replace the LSDs.

The LSDs chosen for early retirement were found to be in "poor material condition," according to Defense Department budget slides.

"We've gone through, not only on LSDs but the other divestments proposed in this budget, did a ship-by-ship review, to understand the material State of each of the ships. What we found on the LSDs is that they are challenged in terms of readiness. We want to make sure that the capabilities that we field are the right capabilities, and are able to perform the mission to the standards that we expect," Navy Undersecretary Erik Raven told reporters ahead of the proposed budget's release.

"And so we're proposing those divestments because we think the return on investment, on further investments on those particular ships, as judged hull by hull, that return on investment is not there," Raven said. "Additionally, say that we have sailors and marines who are serving on these ships, we think that getting them matched up to the right platforms is the way to go."

Marine Corps Commandant General David Berger last week rejected any plans that would cut these aging LSDs before their replacements were delivered.

Despite the delivery of one LPD in 2024, the early retirement of the three LSDs would mean the total number of amphibs that year would drop below the legally required 31 ships minimum laid out in the 2023 NDAA, according to the budget documents. Raven told reporters that the Navy is not seeking a waiver at this time.

It was a surprise that the Navy "has thumbed its nose that defiantly to the Congress" after lawmakers supported the ship minimum last year, said a congressional staffer who spoke to *Defense One* on condition of anonymity. "So what the Navy has done with this budget is they took all of those signals and all those indications and warnings, if you will, from the Congress and—said you know, 'Thanks, but no thanks, we're going to do what we think what we ought to be doing, and we don't really care what the Congress has to say on this subject.'"

Berger on Monday reiterated the reasoning behind the 31-ship requirement for amphibs.

"Anything less incurs risk to national defense by limiting the options for our combatant commanders," he said in a statement to Defense One. "Per strategic guidance, the Marine Corps must be able to provide the Nation with crisis response capabilities and build partnerships with allies and partners in support of integrated deterrence—difficult to achieve without the requisite number of amphibious warships."

The requirement is linked to the Nation's defense, said Sen. Roger Wicker, R-Miss., and ranking member of the Senate Armed Services Committee, at the March 9 Amphibious Warship Industrial Base Coalition event on Capitol Hill.

"We cannot defend this Nation, we cannot do what we need to do to prevent war, to prevent war, without the 31 ships," Wicker said. "And so the National Defense Authorization Act—makes it clear that the Commandant of the Marine Corps is the one we're finally going to listen to in terms of our ship requirement."

This year's 30-year shipbuilding plan, and what it may say about the long-term future of these ships, will be released "very soon," Raven told reporters ahead of the budget roll out.

Procurement

The Navy budget documents also chart out the ship procurements from 2024 to 2028, and there are a lot of zeros in the amphibious fleet's future. The Navy plans to buy its next America-class amphibious assault ship or LHA in 2027 and does not plan to buy any San Antonio-class LPD 17 Flight IIs in any of the years listed.

The shipbuilding topline includes new ship construction as well as funds for other vessels like the Landing Craft, Air Cushion (LCAC) Service Life Extension Program and the Landing Craft Utility LCU 1700 class.

The future Landing Ship Medium or LSM, is still planned for 2025. However, that is already 2 years past the original plan to buy the first ship in 2023. The Marine Corps just started to experiment with a commercially leased ship to inform the LSM's future capabilities.

Last month, Navy Secretary Carlos Del Toro said the service is taking a "strategic pause" on buying more LPDs until additional studies are completed, Defense News reported. Afterward, the Navy would "probably" start buying them again, according to the report.

On Monday, Raven told reporters at the Pentagon that the office of the Secretary of Defense had directed the pause and a capabilities-based assessment, and that there is an "integrated team" to assess the ships.

"What we are making sure that we are doing as we move forward with our budget plans, is making sure that we have the right capabilities at the right price aligned to not only meeting military requirements, but working with industry," Raven said. "And for LPD, we're taking a look at the acquisition strategy moving forward, again, to make sure that we would have the right capabilities at the right price and working with industry partners to put together that plan moving forward."

The Navy has "time to get this right" with the LPD, and that the Navy and Marine Corps are "fundamentally aligned" on the 31-ship requirement, Rear Adm. John Gumbleton, the deputy assistant secretary of the Navy for budget, said Monday.

"Both service chiefs like 31 [ships] as a requirement. Both service chiefs like multiyear procurements. Both service chiefs want to buy in a predictable future. And so if we can do a study and actually lower the costs of this, that's all to the good of the Department of the Navy and Marine Corps," Gumbleton said.

Buying amphibious ships tends to be the last priority for the Navy after spending shipbuilding funds on aircraft carriers, submarines, and destroyers, Hudson Institute Senior Fellow Bryan Clark said March 9 during Defense One's State of the Navy event.

"Whatever gets left over is what can go toward the amphibious ships and the support ships. And when you do all the numbers for that, you always end up with you know maybe not quite enough for the amphibious ships, because if you're building one LHA every four or 5 years that you can incrementally fund, that's a chunk of money that's on the scale of you know, $500 million a year. And then you've got maybe $500 million or a billion dollars leftover for one more amphibious ship, which isn't quite an LPD," Clark said.

Senator SULLIVAN. The 30-year plan makes it clear that the Navy has no intention of meeting this statutory requirement. Last year the Congress of the United States, there was an amendment that I worked on personally with the Commandant. Got this in the law. It is the law. Let me read the law.

"The naval combat forces of the Navy shall include not less than 11 operational aircraft carriers and not less than 31 operational amphibious warfare ships of which not less than 10 shall be amphibious assault ships."

That is the law. We passed that. I want to compliment the Commandant. It is not easy to be sitting next to your boss saying we need this, we need this, we need this. Your boss, obviously, does not agree, General.

But here is the thing. There has been these discussions of balancing costs, another CAPE [Cost Assessment and Program Evaluation] study that is going to come out in June 2023 for the fiscal year 2025 budget on amphib requirements. That is irrelevant.

The Congress of the United States did the balancing, Mr. Secretary, working with the Marine Corps. It was unanimous, by the way, in this Committee. You are violating the law.

Would you come before this Committee and say, sorry, we are not going to do 11 carriers? No way. You would get your you know what handed to you. You cannot do it, sir. I find it simply unac-

ceptable that we are all just letting you say maybe that was a suggestion by the Congress. It was not a suggestion. It was a mandate.

Mr. Secretary, I would like to just ask you right off the bat. Why are you violating the law? Why does your shipbuilding plan have no remote interest, for the next 30 years, as far as I can tell, of hitting the statutory mandate that we told you to hit? I have no idea what your answer is going to be. But you need to follow the law, sir. What is the answer?

Mr. DEL TORO. Senator, as a member of the executive, it is my responsibility to follow the law.

Senator SULLIVAN. Yes.

Mr. DEL TORO. It is also my responsibility to ensure that we just do not waste taxpayer money on vessels, for example, that will never see the light of day——

Senator SULLIVAN. Okay. Let me ask you on that one. This Congress has given you multi-ship procurement authorities, past three NDAAs. This is the third year in a row that amphibs are not being procured with this cost-saving authority.

So it is a little rich when you tell me about taxpayer savings when you are not using the ability to save money that we gave you on amphibs. You use it for every other ship but not amphibs.

So I am not really buying the taxpayer argument because you are not using that authority. What is your answer to the issue that you are not following the law? What I am going to ask for a request on, because I am running out of time. I am requesting you come back to this Committee soon and tell us how you are going to follow the law.

That is your only option, Mr. Secretary. Another CAPE study? We did the study. We told you what to do and you need to do it. The Commandant agrees with us. This Committee agrees with us.

So what is your answer to this question? You are violating the law right now, and your shipbuilding plan looks to say, hey, we are going to violate the law for the next 30 years. That is totally unacceptable.

In my view, you have not been hit hard enough by Members of this Committee. You are ignoring us. Worse, you are ignoring the law. What is your answer to that? I do want your commitment to come back here with a statement on how you are going to fix this.

Mr. DEL TORO. Senator, you have my commitment that I will come back to you with a statement on how we can fix this. I think——

[The information referred to follows:]

Mr. DEL TORO. Admiral Gilday, General Berger and I agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come. On June 19, 2023, I committed to implementing the law requiring 31 amphibious ships, and I commit to providing an updated shipbuilding plan in support of the President's Fiscal Year 2025 Budget, which explains this strategy.

Senator SULLIVAN. And follow the law.

Mr. DEL TORO. Yes, sir. It is my intent to follow the law and I hope that, hopefully, by the President's Budget 2025 submission we will be able to be back in place with a multiyear procurement that actually looks at——

Senator SULLIVAN. Not looks at. That is not your option. We looked at it.

Mr. DEL TORO. Like I said, sir, as we develop the President's Budget 2025 I will look at that as an option that we can pursue to get us back on track with multi-ship procurements for LPDs.

Senator SULLIVAN. It is not an option for you, Mr. Secretary. The Committee, the Congress, the President have spoken.

Thank you, Mr. Chairman. This is a big issue and right now with the Secretary of the Navy ignoring the Congress of the United States is unacceptable.

Chairman REED. Thank you, Senator Sullivan.

Senator Shaheen, please?

Senator SHAHEEN. Thank you, Mr. Chairman, and thank you all for being here this morning. I am sorry I missed much of the questioning. We have multiple hearings at the same time.

I would like to also echo the Chairman and Ranking Member's comments about you, Admiral Gilday and General Berger, and the service that we all very much appreciate.

Secretary Del Toro, I was really pleased to see that the Navy included several new funding options for childcare centers. I think each one of you talked about the quality of life and the importance of ensuring that we can maintain those people who join our military and childcare is one of those areas where it is absolutely critical.

In New Hampshire we were able to have a joint effort between the Portsmouth Naval Shipyard and the New Hampshire National Guard to put a joint childcare center on, but one of the big challenge just has been recruiting teachers.

Can you speak, Secretary Del Toro, to what more the Navy is looking at in terms of recruitment for teachers within our childcare facilities? Or Admiral Gilday, either one.

Mr. DEL TORO. Yes, ma'am. I will just be brief and then pass it to the admiral.

One of the initiatives that we are looking actually is to be able to provide those childcare providers the ability to save costs on the children if they have children themselves.

We allow up to 50 percent reduction, for example, in childcare costs so that they can actually have their own children at the childcare center as well, too, in addition to trying to increase the pay for those childcare providers as well.

Admiral GILDAY. Exactly. On the pay piece we are paying above minimum—above the—I am sorry, above the average national wage for childcare center workers, about $5 above the median.

Second, we have reached out to a couple of schools in Texas and Utah, particularly during peak months where they are having students come in and help us in those childcare centers as well, and they are being adequately compensated for that help.

Senator SHAHEEN. Well, I applaud any efforts that you can undertake that will improve our ability to provide childcare for the men and women in the military.

One of the things I learned as Governor when we were trying to address childcare in New Hampshire was that the military was the role model for the private sector on this issue and we need to see that continue.

Secretary Del Toro, I think you mentioned AUKUS in your opening comments and I wonder if—it is my understanding one of the challenges that we have had is the challenging framework that exists for sharing information and technology about our capabilities.

Can you speak to whether we are able to do that through AUKUS right now. What changes do we need to make in order to provide that sharing that is really going to make that compact work as it should?

Mr. DEL TORO. Senator, when it actually comes to sharing of the nuclear-powered technology for the submarine itself there have—it has not been a challenge necessarily. It is actually in the other areas in terms of AI [artificial intelligence] and machine learning and other technologies where we actually have to get to a better place with regards to being able to share that technology with our international partners.

CNO, would you comment a little bit more on that, too?

Admiral GILDAY. On the second pillar?

Mr. DEL TORO. Yes.

Admiral GILDAY. One of the things that AUKUS has done is it has really opened up the blinders in terms of our collaboration with both the U.K. and Australia and their industry in areas like quantum computing, AI capabilities.

We are already doing a lot of that with both of those countries in the submarine force but this will accelerate it in terms of investment by private individuals as well, by equity firms that are seeing the progress that we are making in those specific areas.

Senator SHAHEEN. Well, I would encourage us to continue that. Obviously, if we cannot make something like AUKUS work with our closest partners we are going to have challenges across the board.

General Berger, I think several times when you have been before this Committee I have asked you about the ability of the Marine Corps to recruit women—recruit and retain women, and I understand that in fiscal year 2022 the Marine Corps was able to recruit a slightly higher percentage of women than in the past.

But can you talk about what the biggest obstacles are to that recruitment and also to retention of women once they get into the Marine Corps?

General BERGER. The first obstacle, I think, was not having any role models in most of the fields in the Marine Corps where they got promoted to colonel and general. In other words, they could not go into combat arms until 2015, so they did not see anybody at the top that was representing them except in administrative sort of staff fields.

But the Marine Corps is a warfighting organization. I think now they are seeing role models in aviation and infantry that were not there 6, 7 years ago.

That is a huge plus. Right now we have an infantry officer school just like the Army does. We have three female lieutenants in the course right now. Five years ago there were none.

We have female enlisted marines that are in the infantry course in both coasts—in the East Coast and West Coast. We have them in infantry battalions now that are mortarmen. These were not even thinkable things 5, 6, 7 years ago.

So, first of all, I think it has produced—make sure that we advance the ones who can serve as role models. I think the initiatives that Congress has given us in the last few years have helped a lot, being able to opt out of promotion.

If it is not the right time in my family career can I just step out of promotion and then come back in without a penalty? Yes, you can. Can I ask to step out of command, not be considered for command? Sure. Can I take an intermission from my career? I want to do something for a couple of years and come back in without any penalties.

All these are provisions that Congress has given us, which are now, I think, becoming more and more useful. We changed a policy last year, where dual military people—which are more prevalent now, I think, than they were a decade ago—for us to assign them to different duty stations, it takes a general officer to approve that now. So we are making it better for females to stay, and raise a family, and have it all instead of making a choice, and I think over the next 10 or 15 years if recruiting continues like it is right now. I mean, in a decade we have 85 percent more female aviators now than we did 10 years ago—85 percent.

Last month, Colonel Nicole Mann, she came back from the International Space Station. She is a jet pilot, test pilot, astronaut, mission commander. These are the kind of role models that we need.

Senator SHAHEEN. Thank you very much.

Chairman REED. Thank you, Senator Shaheen.

Senator Tuberville, please?

Senator TUBERVILLE. Thank you, Mr. Chairman. Gentlemen, thanks for being here today and your sacrifice and your families' sacrifice. We know how tough that is.

You know, guys, I am proud of our Navy and I want to talk a little bit about team building and recruiting. Americans are proud of their Navy. Outside of ports like Norfolk and San Diego many Americans do not see the work that your sailors do. They do not see it.

The Navy's work is often unseen, it is far from our shores. Even the Navy's history like the Midway and Manila Bay it is hard to see. So to recruit new sailors you must tell the Navy's story to both internal and external audiences. It has got to be told.

Today we have more ships named for politicians and activists than we do for great Navy battles and heroes of our past. We have a USS *Carl Vinson* but no USS *Enterprise.*

We have the USS *John P. Murtha* but where is the *Yorktown?* New sailors should be on USS ships like the *Wasp,* the *Midway,* the *Vengeance,* or the *Intrepid.*

Mr. Secretary, you were the commander of the DDG–84 who was named after who, sir?

Mr. DEL TORO. John Duncan Bulkeley, Senator.

Senator TUBERVILLE. Yes, sir, and he was a Medal of Honor winner, and I know you were proud to serve on that ship. When he was asked about charging two German ships when he had only one working gun, Admiral Bulkeley said, quote, "What else could I do? You engage, you fight, you win. That is the reputation of our great Navy."

Mr. Secretary, in your capacity to name ships I hope in the future that we get back to naming ships after heroes, people that has actually done something. Now, we have had politicians that has been in the military before and I understand that. But our history is told through our battleships and the things that we put names on.

Our sailors need to hear and see all these stories instead of divide us. Sometimes they do divide us. This week many of us watched the video that has gone viral online of a young Navy lieutenant JG. I have a lot of problems with this video. This nonbinary officer said the highlight of her deployment on the USS *Gerald Ford* was reading a poem to the entire ship.

Admiral Gilday, have you seen this video?

Admiral GILDAY. I have.

Senator TUBERVILLE. I hope we train our officers to prioritize their sailors, not themselves. Did it surprise you that a junior officer says the highlight of her deployment, her first and the ship's first, was about herself and her own achievement?

Admiral GILDAY. I will tell you why I am particularly proud of this sailor. Her grandfather served during World War II and he was gay and he was ostracized in the very institution that she not only joined and is proud to be a part of, but she volunteered to deploy on *Ford* and she will likely deploy again next month when *Ford* goes back to sea.

Sir, we ask people from all over the country, from all walks of life, from all different backgrounds to join us and then it is the job of a commanding officer to build a cohesive warfighting team that is going to follow the law and the law requires that we be able to conduct prompt sustained operations at sea.

That level of trust that a commanding officer develops across that unit has to be grounded on dignity and respect, and so if that officer can lawfully join the United States Navy, is willing to serve and willing to take the same oath that you and I took to put their life on the line, then I am proud to serve aside them.

Senator TUBERVILLE. Admiral, I agree with that. I do not care who you are as long as you join our military to fight for the freedom of our country and protect our country.

The problem that I am having is the obsession with race, gender, sex. It is focused on self. It is not focused on team, and if we do not start building a team, we have no chance to win individually in this country. We have no chance.

Everybody else is building, and to do a poem with all the 8,000 other people on this ship and to focus on herself—and do not get me wrong. Her uncle or whoever that fought—hey, my dad died in the military. Okay. I am all for that.

But I am all for building a machine. We do not—our recruiting is suffering. We do not need to have another Bud Lite moment. I mean, we do not need to have a Bud Lite moment in the Navy.

I mean, we have to build a killing and fighting machine, and it just concerns me that we do all these things and we focus on one thing, one person. We are all Americans. That is what we are and I hope as admirals and generals and people, secretaries, that we start pushing Americans first. Not a gender, not a race, not nationality.

We all got to come together. If we do not we have zero chance, because this is not the country we used to have. This is not the military we used to have and we have got to get out of that rut of saying we are individuals.

We are not individuals. We are the best country on the face of the earth and the best military, the United States of America.

Thank you. Thank you, gentlemen. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Tuberville.

Senator Blumenthal, please?

Senator BLUMENTHAL. Thanks, Mr. Chairman. Thank you all for being here and for your service to our Nation.

Admiral Gilday and Commandant Berger, thank you particularly and your families for your extraordinary service over many years.

I want to just take a moment to tell my colleagues about a bill that I introduced along with Senator Sullivan to commemorate the United States Marine Corps' 250 years in a commemorative coin to mark this important milestone.

I am really grateful to my colleague, Senator Sullivan, to join with me in this tangible reminder of the Marine Corps' contributions to our Nation and I hope all my colleagues on the Committee will join us in this legislation.

It may seem symbolic but symbols often tell an important story, particularly, Commandant, in a time when the Force Design 2030 has created issues within the Corps. This kind of point of solidarity, I think, can be important.

Admiral Gilday, I want to come back to the questions raised by the Chairman about accountability on the USS *George Washington.* I was in the briefing that we received and I have no question that you and the briefers and our top command in the Navy are deeply concerned about those three suicides.

But what I heard in that briefing was that phase one did not address accountability. Phase two did not have it as a specific topic, but that accountability might emerge somehow from phase two.

I would like your assurance that accountability, that is, holding responsible anyone in command who knew or should have known about the desperate straits of those three sailors will be at least named and held accountable in some way.

Admiral GILDAY. Yes, sir. I know that you understand—everybody does—how complicated death by suicide can be and the number of factors that can be involved, and I am in no way trying to be evasive on this issue. I take personal ownership for some of the failures that we saw in Norfolk and other places that we are currently correcting.

That said, in any specific investigation and the Navy has relieved 15 commanding officers over the past 12 months for various reasons. We have to connect those actions directly to the findings, to the facts, of those investigations.

I commit to you, sir, that we will look very closely to that and come back to you.

Senator BLUMENTHAL. Thank you.

Admiral GILDAY. Yes, sir.

Senator BLUMENTHAL. We are at the 1-year anniversary of the death of one of those sailors. Master of Arms Seaman recruit Xavier Mitchell-Sandor, and I want to suggest that one way to allevi-

ate—and I know you are taking steps on the USS *Stennis* to alleviate some of those issues that were involved in those suicides, maybe to procure housing on the open market when ships are in maintenance for many years using the BAH [Base Allowance for Housing], a bigger topic for further consideration.

Secretary Del Toro, we all have seen the recent leaks of classified documents that are so deeply alarming, appalling, and that show Americans how many members of our military have such wide access to top secret documents.

I wonder if you are considering measures that might restrict access, particularly on the part of junior members of the military in the Navy, for example, to classified documents.

I have been a longtime advocate of declassifying documents that do not need to be kept secret. But at the same time maybe we ought to be looking at who has access to those documents that truly have to be kept secret to protect vital information and sources and methods.

Mr. DEL TORO. Well, thank you, Senator. We very much are and the Department of the Navy and throughout the Department of Defense. The Secretary of Defense just this morning actually has requested a 45-day review of security clearances and accesses across the Department and so we will be looking at this issue very, very carefully.

As you know, on the one hand you have the desire to be able to share more intelligence information with our allies and partners and that presents risks, obviously. On the other hand there is a need to actually protect the secrets that we do have and so it is a bit of a dual-edged sword.

But we have to do better across the Department to ensure that we keep it to only those that really need the intelligence in order to be able to fulfill their responsibilities and their duties, both substantively and administratively as well.

Senator BLUMENTHAL. Thank you. Thank you all. Thanks, Mr. Chairman.

Chairman REED. Thank you very much, Senator Blumenthal.

Senator Budd, please?

Senator BUDD. Thank you, Mr. Chairman, and again, thank you all for being here. Thank you, each of you, for your service.

General Berger, a common criticism of Force Design 2030 is that the Marine Corps has depleted its combat power, for example, by divesting of its main battle tanks and a significant portion of its aviation assets.

To the extent that you can talk about it in this setting, can you talk about the underlying analysis and your logic to these divestment decisions?

General BERGER. Yes, Senator. First, the underlying analysis was derived from a series of wargames 5, 6 years ago, 7 years ago, where each individual wargame was testing the force against the pacing challenge—pacing threat.

In every case it was not a good outcome. So the conclusion there was if you do not change, the outcome is not going to change. That drove us toward devising, first of all, if that is the case, keeping our original equipment and our formations, everything, the same, is not going to keep up with the pacing challenge then what do we

need to do differently and we started with how we are going to operate. Not equipment, but how we are going to fight.

So the first step was, as the Chairman said, a more distributed way of operating in an expeditionary naval manner that fits right into the joint concept for the future concepts drive everything in the Marine Corps. So, first, get the concept right.

Second, if that is an underlying concept that the Navy and Marine Corps joint force is going to operate upon, then test it in a series of wargames and then go out into the field and experiment with it, and that is exactly what has happened for the past 4 years.

Senator BUDD. Thank you for that. So those that are criticizing Force Design 2030 the simple answer, and I will let you fill in the blank for that, is it divestment? Is it a change? How would you approach the critics of Force Design 2030?

General BERGER. This July—this summer when the president sends me home, that will be the last day that I get a morning intel report. It will be the last access I have to every bit of technological development that the CNO and I and the other services chiefs have.

We will not have access to all of the information we need to develop the force anymore. My answer to the critics is beginning on the next day I will be the biggest supporter of whoever the next Commandant is because I will know he has information I do not and I will trust that the marines who are doing the experimentation out in the fleet, as long as we have a mechanism for feeding that back in to the headquarters of the Marine Corps and we make the changes, we will be fine.

I trust that this current Commandant, past ones, future ones, have access to the best information available. We have the best process for developing the Marine Corps that fits into a naval construct, complements the joint force. All that I am very confident in.

Senator BUDD. Thank you, General.

Admiral Gilday, much has been made about the growth of the Chinese navy and the need to grow the number of the United States ships in the fleet to meet that growing threat. I would like to hear from you not about the quantity of ships in their fleet or in our fleet but about the relative qualitative advantage of Navy power.

What kind of technological advancements are we seeing from the Chinese and how should we be viewing this issue?

Admiral GILDAY. Sir, we are watching the Chinese very closely, and to the Commandant's point, what we are going to fight with is being informed by how we are going to fight and that is what we are out there doing with our strike groups, with our amphibious ready groups, in our fleet exercises, in our war games, to try and refine that based on how we are watching China.

There is no question our biggest asymmetric advantage is people. The investments we are making in live, virtual, constructive training, as an example, allow us to train as a Fleet Marine Force and as a Navy at a scope and scale that we could never do by getting individual ships underway, first.

Second is we are completely revolutionizing the way we are training individual sailors through a framework called ready relevant learning where it is beyond brick and mortar classrooms or

school houses. We are getting information to young sailors at the right time and the right quantity.

With respect to—you mentioned capacity, and if I could for a second, sir, for the last 2 decades the Nation has been focused on ground wars. That has been the priority and understandably so.

The investments that we are making now and, largely, due to the support of this Committee, we have 56 ships in construction across 7 shipyards with another 77 on contract. That rudder turns the ship of the United States Navy very slowly but we are really trying to get after that capacity issue as well.

In the modernization investments that we are making we have increased—if you take a look at our operations and modernization accounts we are up 5 percent from where we were last year, a total of $11 billion, and much of that is going into readiness.

I mentioned in my opening statement we are funding maintenance at 100 percent. We are investing in new submarines, expanding the amount of missile tubes. We are improving torpedoes that they fire. With surface ships we are giving them longer range weapons, both Tomahawks and defensive weapons.

We are investing in the electronic warfare capabilities. We are investing in the weapons, doing multiyear buys of weapons, that our aviators fire from their F–35s and their Super Hornets. We are trying to wherever we can buy down risk and close on vulnerabilities so that we can pace China instead of trying to follow them.

Senator BUDD. Very good. Thank you all.

Chairman REED. Thank you, Senator Budd.

For the information of my colleagues, the vote has started and, of course, at the conclusion of this open hearing we will go into a closed hearing in SVC 217.

With that, Senator Duckworth, you are recognized.

Senator DUCKWORTH. Thank you, Mr. Chairman, and I want to say thank you—a deep and profound thank you to both Admiral Gilday and General Berger, to you and your families for your extraordinary lifetime of service to our country.

I do want to associate myself with Senator Sullivan's concerns that the current Navy budget proposal significantly undercuts Marine Corps amphibious capabilities. In fact, I think it undermines Marine Corps doctrine.

At a time when we need to be looking at the Indo-Pacific region and a shift toward a forward deployed island-based force, to cut back on LPDs in particular, I think, is a misjudgment. That said, I do want to talk about logistics in the Indo-Pacific.

General Berger, I have appreciated your leadership among the Service Chiefs and recognizing the challenges posed by sustaining forward deployed troops in a contested logistics environment, particularly in the Indo-Pacific region, which is characterized by island formations and huge swaths of open sea. I have been ringing alarm bells about this problem, especially in a contested logistic environment, for years, not just because of my own experiences or because U.S. Transportation Command is in Illinois, but also because I truly believe that for the sake of our servicemembers and for the credibility of our deterrent we have to get this right.

General Berger, in what ways does this year's Marine Corps budget request support contested logistics and how does this benefit the Marine Corps and how does it benefit the joint force?

General BERGER. We have had some long discussions on contested logistics. I am going to miss them.

First of all, the structure—the laydown of where we have prepositioned supplies and parts and munitions and equipment across the Pacific, across the world, we have to relook now, quickly.

It was built for a different timeframe, under a different set of circumstances. So where we have afloat and ashore prepositioning has to be revisited, has to be changed, and there is funding to do that. But that is going to take a fundamental—it is going to take a different look and some tough decisions in the next few years.

A second is, I think, the platforms that we use to move that equipment, those supplies around. Here, the good news is everything from the 53K [CH–53K] to the medium landing ship to every other conveyance that is unmanned that the CNO is working on and we are working on that is going to move that around, we are going to need it all. It is going to be planes, trains, and automobiles.

We also have to educate, train our logisticians in a different way, which you have talked to me about before. It is not business as usual for them, because it is not an administrative move of materials. Even the way that we contract has to change, because this peacetime exercise approach is not going to work in a conflict in a contested environment.

Last, I would say the resilience part. If it comes to a conflict we are both going to—there is going to be some degradation across the board. How fast can we come back? That gets into applying the same methodology for kill webs into, as you pointed out before to me, logistics webs. How do we create logistics webs that look like kill webs?

Senator DUCKWORTH. I think LPDs are going to be an important part of that and this budget does not support the number of LPDs that I think that we need.

A critical vulnerability for any military is the logistics tail associated with delivering operational energy to its fielded forces. Both our readiness and our allies' and partners' readiness will be bolstered by reducing our reliance on fossil fuels and employing more diverse and renewable operational energy sources, as well as seeking more creative and cooperative ways of supplying operational energy to U.S. troops and to our overseas partners.

Secretary Del Toro, General Berger, how much could we gain from cooperating with our allies and partners in Europe and in the Indo-Pacific to improve our logistics availability and distribution? What efforts in your budget request work toward operational energy security and resilience?

Mr. DEL TORO. Thank you, Senator. It is an incredibly important topic.

We have significantly improved, I would say, our alliances across the Indo-Pacific for this very nature. We are kicking off with Balikatan, for example, 2023 with 17,500 marines right now working side by side with our allies and partners.

The ability to actually move our forces forward and provide the logistical bases that they need. As you know, the Secretary of Defense just came from the Philippines and negotiated four additional bases as logistics bases in the Philippines, as well in the north as close to Taiwan as one can possibly get.

Providing operational energy investments to those bases is always critical. We have—and the Marine Corps is another example in Albany, Georgia, for example, where we have become zero dependent on outside sources for energy, for example. The same thing applies to Miramar in California, for example, where we actually have provided energy out to the local communities.

These are all investments that are necessary. They are also necessary at sea as well, too. For many years biofuels have been very, very expensive, and it has been hard to get the price point of biofuels down to the point where it actually makes sense to be able to invest in that.

So we have in the President's Budget commitment to continue in the R&D [research and development] effort that is necessary to try to discover that biofuel that will provide the biggest return on investment to our forces.

Senator DUCKWORTH. General Berger?

General BERGER. For us it is not as much of a money issue as it is an operational-tactical imperative. We cannot fly in batteries, fuel the way we used to. It is not going to be possible. It is not going to be practical.

We have got to find other ways to power our equipment, vehicles, everything. There is money in the budget to do that but it is going to take time and your support.

Senator DUCKWORTH. According to DOD's own reports 50 percent of all casualties during the war in Iraq occurred during convoy operations and 80 percent of all convoys were conducted to move fuel. We need to do better.

Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Duckworth.

Let me recognize Senator Cramer and also give the gavel to Senator Warren while I go vote and return quickly.

Senator Cramer, please?

Senator CRAMER. Thank you. Thank you, Mr. Chairman. Thank you, General and Admiral, for your decades of service and congratulations on another good solid year ahead.

Mr. Secretary, I am going to get right to the point with you. I worked with the Navy for a little better than a year and a half to this point, on behalf of a Navy SEAL and an officer who wanted to get out of his service a few months early so that he could pursue his next level of service—his next area of service in political office.

It is pretty much over—the case—but I wanted to highlight it in this forum because it is really a horrible vignette of how the Navy, I think, far too often treats its people. I brought it up with you once quite a while back, with Admiral Gilday as well, and I will make it as brief as I can.

Lieutenant Adam Schwarze asked in July 2021 for permission to run for office while serving his final few months in the Navy. The paperwork got lost and it took me getting involved for the paper-

work to find its way back into the process. Then the CNO endorsed his request and then it was denied by you.

Meanwhile, Lieutenant Schwarze also tried to get out using an old but still authorized early retirement authority. Again, process stopped unexplainably. But I weighed in and the process then continued with the commander of naval personnel endorsing the package, only again to be denied at your level.

Then, from my vantage point, Mr. Secretary, began what I think was a witch hunt. He was called back from his SkillBridge assignment in Minnesota to his last assignment in Hawaii where he could then be punished.

The Naval Special Warfare Group lawyers proceeded to rip apart his history, his dedication, and question his integrity with statements that literally, quote, "call into question his sincerity and trustworthiness." I am happy to provide all of this for you in case your team has lost it.

In fact, you went after this decorated hero with a veracity that made my staff, including a commander in the military, reach out to him to check his well being and reached out to the Navy to make sure that they were looking out for his well being.

You pulled his trident and then prevented him from retiring on time. You did an investigation that included false statements about me and my connection with Lieutenant Schwarze, statements that seemed quite political for what is supposed to be an apolitical organization.

The whole time that my office was trying to get information from the Navy it faced roadblocks, barriers. It was like pulling teeth. Then after all of that, a board of inquiry was held and on all counts the board voted three to zero that the preponderance of the evidence did not support any basis of misconduct. Three-zero, seven times.

In summary, you screwed the sailor's paperwork up constantly, repeatedly. You made a political decision on his future. You tarred and feathered him out of revenge.

A board of inquiry unanimously absolved him of all charges. You held him past his retirement date until the law actually required you to let him out, and you left a patriot feeling like the Navy does not care about him or worse at the end of his service, and you kept his trident.

I just—after hearing all this stuff about how important the people are, Mr. Secretary, I am perplexed and I hope it is not too late for some corrective measure to replace this person's integrity and dignity.

With that, I will just let you respond.

Mr. DEL TORO. Thank you, Senator. I would be happy to continue to work with you on this situation.

However, first, I would like to make a statement that I personally did not make any statements against you or Lieutenant Adam Schwarze myself. But I will add that we have a responsibility in the Department of Defense that all servicemembers actually act in accordance with the Hatch Act, and Lieutenant Adam Schwarze knew exactly what the rules and requirements of the Hatch Act were.

We cannot allow uniformed service personnel, even if they are 1 day from retirement, to participate in political activities, especially election-related activities.

That is a standard that must be met. It has been adhered to since the beginning of the founding of our Nation and we have to actually meet that standard.

Senator CRAMER. So is there a standard where Navy lawyers are allowed to just absolutely trash a guy's reputation, create misstatements—factually untrue statements about his career and his claims so that they can somehow prove their point? Is that a standard?

Mr. DEL TORO. Senator, I would be happy to look into the case further to see if those statements are accurate. I do not know the details of the——

Senator CRAMER. I do. I do. I know them.

Mr. DEL TORO.—statements that were made by lawyers and I would be happy to work with you on that.

Senator CRAMER. I know them including the statements about me that are in your lawyer's records. So——

Mr. DEL TORO. I would be happy to collaborate with you and your office, Senator.

Senator CRAMER. I look forward to that. I would rather not have to do it so publicly but after a year and a half of being stonewalled I am glad you are here today. Thank you.

Senator WARREN. [Presiding.] Thank you. So I recognize myself now.

Last year the White House released a report telling agencies to prioritize union shops with pro-worker employers when awarding government contracts. This includes the Department of Defense. Workers are central to the United States' national security and the strength of our Defense Industrial Base.

I am concerned that the Navy is not following through on the President's commitment to unions and workers. For example, I have heard reports that the Navy is consistently passing over union shipyards for contracts and giving them to nonunion shipyards instead. Some of these nonunion shipyards are already at capacity, working on multiple contracts at the same time, while the docks at the union shipyards are sitting empty.

It sounds like even though there is plenty of work to go around, the Navy is actively choosing to ignore union shipyards where workers generally have better wages and better protections in favor of nonunion ship yards that are already overburdened with contracts.

Secretary Del Toro, do you agree that the Navy contract should prioritize union workers when their shipyard is ready and able to do the job?

Mr. DEL TORO. I do, Senator, in accordance with all the other regulations that drive the issuance of contracts under the FAR [Federal Acquisition Regulations].

Senator WARREN. Good. Thank you. I agree with you on this.

This has serious consequences. Missing out on contracts can mean closing the doors for these shipyards and laying off hundreds of workers, especially for smaller shipyards, and it means the next time that the Navy needs a ship repaired it will have to go to a

nonunion shipyard that is likely already over extended, resulting in delays and threatening our ability to protect our coastline and to support our allies.

The implications of this are huge as ongoing conflicts like the war in Ukraine and the threat of future conflicts fuel demand for weapons and other equipment. Delays in completing crucial projects could leave us vulnerable when we most need security.

Secretary Del Toro, do you agree that the closure of union shipyards is a threat to the Defense Industrial Base?

Mr. DEL TORO. Senator, the closure of any shipyard in the United States can present a threat to the United States in terms of our ability to build our ships and maintain our national security. I would be most interested in actually getting the details of those reports that you mentioned so I could validate whether they are true or there is other issues at play that I am just not familiar with.

Senator WARREN. That is good but we also—the good news is that the Navy still has time to change this approach. You said earlier this year that now is the time to invest in the defense workforce and I could not agree more with you on that.

Part of the solution should be to take advantage of the resources that we already have but we are not using or not using enough like union shipyards. More broadly, there is a lot that the Department can do, for example, making sure that contractors are properly notifying employees of their right to organize, improving contractors' compliance with anti-union consultant disclosure forms, and ensuring that Federal funds are not spent by contractors on union busting.

Secretary Del Toro, can you tell me what steps you plan to take to ensure that the Navy is reinforcing the Defense Industrial Base while preserving union jobs?

Mr. DEL TORO. Senator, I am committed to preserving union jobs, as I said earlier, and we actually have several shipyards that are already under union labor agreements as well, too. My commitment to you is that I will work with my acting Assistant Secretary of the Navy for Research, Development, and Acquisition (RD&A), that I hope we will actually have a permanent Assistant Secretary RD&A [for] Research, Development, and Acquisition, so I can actually invest more time in looking into these issues and many other issues as well.

Senator WARREN. I appreciate it and I look forward to working with you on this. President Biden has made an historic commitment to empower workers by prioritizing union labor in Federal contracting and, as you know, DOD is not exempt from that pledge and should not want to be exempt from that pledge.

Protecting union jobs in the defense sector is a question of national security and I look forward to working with you to make sure that the Navy can fulfill its duty to the American people. Thank you.

Mr. DEL TORO. Thank you, Senator.

Senator WARREN. Thank you, and I now recognize Senator Scott.

Senator SCOTT. Thank you, Chairwoman Warren.

[Off mic.]

If we could talk about Taiwan a little bit. It sure appears that China is building a military to somehow intimidate or defeat Taiwan. If that happens the United States Navy and most likely the marines are going to be front and center in doing whatever we can to support Taiwan.

In the meantime, the most important thing we could do is make sure does not happen. So can each of you talk about what you are doing to get Taiwan prepared to make sure this does not happen?

One thing you keep hearing up here is the fact that I think it is something like $19 billion worth of United States military equipment has been ordered and not been delivered and so what are we doing to make sure Taiwan is doing their part?

What are we doing to make sure our military industrial base provides the resources and what can you do to make sure that happens? Because it does not make any sense to me that the equipment is not there and Taiwan is not actually doing more than what they are doing right now. So if each of you could answer that.

Mr. DEL TORO. Senator, if I could start.

Our National Defense Strategy is hyper focused on China as the pacing threat, obviously, with regards to their interest in potentially using military force against Taiwan, which we have to avoid at every possible moment.

Part of the challenge that we face in providing the equipment, obviously, is the challenges that we have had in the supply chain over the last 3 or 4 years. So that is an issue that the Office of the Secretary of Defense is trying to address with special authorities.

Senator SCOTT. Can I just stop you right there? Can I just stop you right there for a second?

Mr. DEL TORO. I am sorry?

Senator SCOTT. That sounds really good. I have not heard one thing that is going to accelerate the $19 billion or whatever the number is. We have had these hearings and it keeps coming up. I have not heard one thing that actually has been done to accelerate it.

Mr. DEL TORO. I will—happy to provide you a list of things that have been done in the industrial base to actually accelerate the deliveries of those equipments and authorities.

[The information referred to follows:]

Mr. DEL TORO. While the Department of State has legal responsibility for the FMS process, accelerating delivery of these capabilities to Taiwan is a focus at the highest levels of the Department of the Navy. From the Secretary on down, we are working with senior Department of Defense leadership and our industrial partners to see how fast they can accelerate their production lines. We are working to identify and provide investment opportunities to streamline testing and recertification to alleviate some of the existing barriers to increased production throughput. In particular, we are making targeted investments in those critical munitions necessary in a high-end, sustained war fight. But it's going to take some time to do so, because capital investments need to be made, both materially and also in the workforce, in order to increase the production rates that are necessary to get new capabilities to Taiwan, in addition to our other international allies and partners, who have been asking for additional munitions, as well, too.

So industry has to do its part to fulfill its contracted obligations for timely delivery of systems to our international partners. I think that they see the commitment that the President and the Secretary of Defense are making in terms of ensuring a reliable, solid pipeline in the future and now is the time for industry to make those capital investments.

In the meantime, we are not standing still. We are working to ensure Taiwan is ready and able to use this equipment to full effect upon delivery, increasing their overall training and readiness postures.

Senator SCOTT. So is it happening? Is there anything that is happening?

Mr. DEL TORO. There is discussions at the OSD [Office of the Secretary of Defense] level, both at the DSD [Deputy Secretary of Defense] level and the Under Secretary of Defense for Acquisition and Sustainment across the entire Department, working with suppliers of munitions providers and other equipment across the board to see how fast they could accelerate their production lines.

But it is going to take some time to do so because capital investments need to be made, both materially and also in the workforce in order to increase the production rates that are necessary to get them to Taiwan in addition to our other international allies and partners as well, too, who have been asking for additional munitions as well, too.

So industry has to do its part. I think that they see the commitment that the President and the Secretary of Defense is making in terms of ensuring a reliable solid pipeline in the future. Now is the time for industry to make those capital investments.

Senator SCOTT. I would love to see concrete actions that are actually going to change the timeline because I was just in Cyprus the week before last. They got the same issue. They are not getting all—everything they want. They do not have any expectation of the dollar numbers but even a country like that cannot get what they want.

So what is the Navy doing, what are the marines doing actually to get Taiwan in position on top of the equipment and ready to make—hopefully, deter China from doing something?

Admiral GILDAY. Sir, I think it is best if we talk about that in a classified session in terms of the things that we are looking at in terms of our responsibility to field a ready force every single day.

So our priorities have been readiness of the current force, modernization of the force, 70 percent of which we are going to have 10 years from now, and that is important from two aspects. One is you got to be ready to fight tonight to put doubt in Xi's mind that today is not the day.

In a series of speeches last month in one of them he challenged his generals to be ready for war now, and so we take those kinds of assertions very seriously. Readiness has to be our top priority. Getting ships out of maintenance on time, which we are improving at but not yet satisfied with, has to improve.

As the Commandant said earlier in this hearing, pushing everything we can forward: that is where we need to be. The Navy and the Marine Corps needs to be forward, and it is not just likely that it will be the Navy and Marine Corps. It is definitely that it will be the Navy and the Marine Corps as the away team and the first on the scene.

Again, we are making balanced investments in the force that we have today, the best we can put in the field in terms of weapons.

We have just done in this budget proposal four big multiyear procurements based on the authorities that the Congress has provided us for weapons with range and speed. Two of those are between the

Navy and the Marine Corps. The other two are with the United States Air Force.

So, sir, already approaching your limit. But Commandant——

Senator SCOTT. Do you want to add anything?

General BERGER. We have been training with the Taiwanese marines for more than a decade. I think lately, the last 2 years, I would say, focus on command and control, air defense, defense from the beach, and mining and building out their national guard and reserve—in other words, making it a whole total force, which is what they are going to need.

Senator SCOTT. [Presiding.] Thank you.

Let me recognize Senator Schmitt.

Senator SCHMITT. Thank you, Senator Scott, and unlike Senator Scott's home State of Florida, Missouri is landlocked—my home State. But when I started on this Committee I wanted to be on the Seapower Subcommittee.

So we have an Army base. We have an Air Force base. Missouri, obviously, does not have a naval base. Mississippi is not deep enough.

The reason for that is because I think that our biggest challenge from a national security perspective that we are facing—Missourians, Americans—is China. That is a focus of mine and I know that it is a focus of yours with the Navy and the Marines and to that end there are several very concerning trends that I want to discuss.

The first is the fact that China's naval fleet is rapidly outpacing our own and that gap is only widening. The Pentagon reports suggest China may have 420 ships by 2025 and 460 ships by 2030. What is worse, Beijing is devoting significant amounts of its maritime training on island capture scenarios.

In 2021, the People's Liberation Army, quote, "conducted more than 20 naval exercises with an island capture element, greatly exceeding the 13 observed in 2020," according to a Pentagon 2022 report on Chinese military developments.

This is another indicator, I think, of China's ambitions and Taiwan is in the crosshairs. There is no doubt about it.

So to sort of followup on Senator Scott's questions, to me the best way to support Taiwan's ability to defend itself from Chinese aggression is to bolster their defensive capabilities today.

Harpoon anti-ship missiles, which the U.S. Government is already committed to providing, is critical, providing a hundred new delivery systems, which I think has already been committed, as well as 400 Harpoon Block II surface-launched missiles.

But the fact is that these are not going to be fully fielded until 2027. To expedite this critical capability as a stopgap until the new systems can be fielded, the U.S. should transfer from several hundred older missiles in the military's inventory that are under consideration for deep militarization or destruction.

Secretary Del Toro, will you commit to working collaboratively and creatively with the Taiwanese and the Administration to leverage existing munitions and support equipment to expedite defense aid to Taiwan?

Mr. DEL TORO. Absolutely, I will. We have been actually collaborating within the letter of the law and the authorities that are al-

lowed by law for us to collaborate with the Taiwanese, provide them the munitions that are necessary, the equipment that is necessary for them to be able to defend themselves.

Senator SCHMITT. Well, I think—that is good to hear. I think we have heard a lot about the supply chain issues. But Taiwan—the shot clock has probably started. It is between now and 4 years.

I mean, this is coming and I just do not know how much time they really have to have the support that they need to deter a Chinese offensive. Which they seem to be dead set at.

In that vein and also in this broader sort of industrial base, you mentioned the discussions that have been had. Let us say we were at war today. Let us say today the United States is at war with some power—China, whoever. What would we do differently than we do right now to ramp up that industrial base? What is holding us back?

There is a demand signal, which I think is being sent. There is a demand—what else would we do? I mean, three or four things that we would do differently than we are doing right now to be prepared, and also this also relates to Taiwan.

Mr. DEL TORO. There are war authorities that would be exercised that are not currently exercised. But let us—the goal here is to prevent war with China——

Senator SCHMITT. Correct.

Mr. Del TORO.—to deter China from going to war and I think the power of our coalitions with our allies and partners internationally has much to do with that fact.

Senator SCHMITT. I agree, and I have limited time. I think the Philippines see what is happening. I think this is——

Mr. DEL TORO. In South Korea and many other——

Senator SCHMITT. Yes.

Mr. Del TORO.—countries in the Indo-Pacific that we rely on as partners actually.

Senator SCHMITT. But as it relates specifically to the industrial base other than the war powers what is it that we can do differently? Are there State barriers in the states where we have naval shipyards? What is it——

Mr. DEL TORO. So this President's Budget actually has increased the amount of funding for increased munitions by 50 percent, for example. That is the most significant increase that we have had in the several past years and its investments in SM–6, LRASM [Long-Range Anti-Ship Missile], and numerous other missions as well, too.

We are also investing in CPS [Conventional Prompt Strike], for example, to try to get deployable on the *Zumwalt*-class destroyer by 2025 and on the *Virginia*-class submarine by 2030. Those—we are pushing on all fronts, on all cylinders, to actually try to move as fast as we can.

But just like in the shipbuilding industry with regards to the shipbuilding plan as well, too, we can only move as fast as industry can actually produce as well, too. Because the opportunity costs associated with making major multibillion dollar investments when industry cannot keep up with those productions means that we cannot spend money in other places as well too where it is badly needed as well.

So it is all about finding the right balance and the right compromise to move forward . . .

Senator SCHMITT. Right, which is why I am sort of highlighting Taiwan. Because I think they have been on the backburner and I do not think they can be anymore.

Admiral GILDAY. Sir, can I make one——

Senator SCHMITT. Yes.

Admiral GILDAY. So if I would use Austal Shipbuilding in Alabama as an example. That company shifted from completely working with aluminum to working with steel.

The reason they could do that—the sole reason they could do that—is because of the Defense Production Act. So to answer your question, there needs to be substantial investment by the U.S. Government in those industries in order for them to surge.

We stopped doing that in shipbuilding in the Reagan administration. You saw 30 shipyards go down to 7. We saw that in the 1990's during the Clinton administration with the aircraft industry and how it supports the military. That is the first thing.

The second thing is you need a bigger Navy and Marine Corps to protect those approaches from the sea to keep the United States economy humming and to deny that to any adversary. Those are the two things.

Senator SCHMITT. I am going to ask my hypersonic question in closed session. So thank you.

Senator SULLIVAN. [Presiding.] I am taking over as the Chairman until the Chairman gets back so I will call on myself.

General Berger, you have gotten a lot of compliments on Force Design. I have complimented you on it previously. But it is not without risks—significant risks. You acknowledged this in your testimony last year.

Like the Navy, the Marine Corps has minimum force levels that are required by Congress. I have been reading a lot about the history of the 82d Congress. The Marine Corps loves to cite the 82d Congress in the aftermath of the Korean War.

You know this, General. The only reason the Marine Corps exists—the only reason the Commandant of the Marine Corps is a coequal to the CNO in a hearing like this is because of Congress.

Very importantly, the 1952 law that the Secretary of Defense, Secretary of Navy, the President of the United States all opposed, mandated that the Marine Corps has three full combat infantry divisions, three full air wings, and task-organized for combined arms operations.

I am going to talk about some of the Force Design divestments. They have been dramatic. But I have concerns they have been so dramatic that the current U.S. Marine Corps does not meet the congressionally required minimums. Again, that is not your choice. We gave that to you. So I do not want to debate that right now.

What I would like for the record to this Committee I would like you to provide a detailed T&O [Table of Organization] of the Marine Corps as it currently stands. You can use MCRP 1–10 [Marine Corps Reference Publication], three regiments, everything in here, that the Marine Corps has kept these minimums that are required by the Congress. [The MCRP 1–10 has been retained in Committee files.]

Can I get a detailed detail of the current T&O of the Marine Corps Today to make sure Force Design is not taking us under the statutory requirements of the 1952 law?

General BERGER. We can provide you—absolutely, it is unclassified—a task organization of the Marine Corps today. The law—the statute, as you accurately depicted, three divisions, three wings.

[The information referred to follows:]

General BERGER.

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9 May 23

Executive Summary

Subj: PUBLICATION OF MCRP 1-10.1, *ORGANIZATION OF THE UNITED STATES MARINE CORPS*

1. BACKGROUND

a. Marine Corps Reference Publication (MCRP) 1-10.1, *Organization of the United States Marine Corps*, provides general information on the mission, concept of employment, organization, and equipment of Marine Corps forces and their subordinate organizations.

b. This is the first update to MCRP 1-10.1 since August 2015 and provides an overview of Marine Corps force structure since Force Design 2030 began in 2019. The publication should be used as a high-level overview, not a detailed guide, of the Marine Corps force structure and equipment. It is intended for Marine commanders and staffs, Marine Corps training and education institutions, and Department of Defense personnel. Specific structure and equipment information can be obtained from the Total Force Structure Management System (TFSMS) as changes occur frequently.

c. The Marine Corps is modernizing at a pace beyond what can reasonably be captured in a formal publication, therefore any update serves only as an institutional snapshot and is the catalyst for subordinate or adjacent doctrinal publications. As such, the defined structures, command relationships, mission, tasks, and concepts of employment reflected in MCRP 1-10.1 lags behind the most current structured decisions and is based on decisions reflected in the February 2023 Authorized Strength Report.

2. KEY UPDATES

a. This publication was informed by approved force structure within the Marine Corps inventory through Fiscal Year 2022. Key Updates include the Marine Littoral Regiment (MLR), Marine Corps Information Command (MCIC), Marine Forces Cyber, and updated missions, capabilities, and organizational charts. This publication also includes the Amphibious Combat Vehicle (ACV), along with references to FD 2030 formations like the Littoral Anti-Air Battalion (LAAB), Littoral Combat Team (LCT), and Littoral Logistics Battalion (LLB). Finally, the publication standardizes all doctrinal terms in accordance with the latest Marine Corps and DoD dictionaries.

b. Similarly, all Force structure and equipment changes (new organization and equipment, reductions, or outright divestments) depicted in the MCRP reflect approved changes in the requirements through February 2023. Associated Changes in inventory (manpower and on-hand equipment) are still underway.

3. OMISSIONS

a. Due to the dynamic nature of the Marine Corps' organizational change process, large-scale initiatives spanning multiple years of execution, future year programmed changes are not depicted

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Subj: PUBLICATION OF MCRP 1-10.1, *ORGANIZATION OF THE UNITED STATES MARINE CORPS*

herein and will be updated in future promulgations of this reference publication once fully instantiated. It is not that these omissions are unimportant, but that doctrinal publications are based on formations and units that are at full operational capability, or no longer associated with experimentation. Other changes were omitted due to pending decisions, such as snipers within infantry battalions.

b. Ground Combat Element: MCRP 1-10.1 displays pre-Force Design Infantry Battalion organizational structure with no depiction or mention of Infantry Battalion Experiment-30 (IBX-30) capabilities or structure changes and include snipers. It also does not align the Marine Division capabilities with the Stand-in-Force, Expeditionary Advanced Bases, MLR, etc. Finally, there is no mention of Medium-range Missile or Long-range Missiles Batteries and depicts the Artillery Regiments having two cannon and 1 High Mobility Artillery Rocket System (HIMARS) batteries for 2d Marine Division, 1 HIMARS battery for 1st Marine Division, and 1 cannon battery for 3d Marine Division.

c. Logistics Combat Element: MCRP 1-10.1 does not include the LCE Modernization or the Material Readiness Battalion, while the Landing Support Battalion and Transportation Support Battalions still depicted. Finally, the MCRP states that the requirements for emplacement of standard and nonstandard bridging and rafting will be globally sourced as required to support this function.

d. Aviation Combat Element: Within 2d Marine Aircraft Wing (MAW), the Marine Unmanned Aerial Vehicle Squadron was not changed to Marine Unmanned Aerial Vehicle Training Squadron, and within 4th MAW the MCRP shows Marine Aerial Refueler Squadron 452 under 2d MAW, despite it being deactivated in December 2022.

3. CONCLUSION. Because the MCRP 1-10.1 is a snapshot of Marine Corps, it is out of date the moment it is released. Despite continual change, this publication is an important combat development milestone because it resets the organizational baseline. This update reflects three years of Force Design 2030 initiatives.

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The Publication of MCRP 1–10.1, Organization of the United States Marine Corps (Limited Dissemination Control: None) and the Publication of MCRP 1–10.1 Organization of the United States Marine Corps (Distribution Statement A: Approved for public release, distribution is unlimited). [The MCRP 1–10 has been retained in Committee files.]

Senator SULLIVAN. Correct.

General BERGER. There was nothing more specific in that and we have changed it significantly over 70 years.

Senator SULLIVAN. I just want—just look at the T&O. I have been looking at this. Look at the same one for the air wing and just

say that you are meeting it. Again, that is not your call. That is our call and you need to meet that, and I would like to see details on that.

I have been focused on Force Design more than any other U.S. senator. Again, I have been very complimentary of your bold approach. It takes a lot of guts, as Senator King said.

I have been, as you know, General, frustrated by some of the answers that the Committee has been provided with. I think this idea that everything has to be classified—I think even your comment to Senator Budd that, well, you get classified stuff and the other generals do not. I get classified stuff.

So I think it is really in the Marine Corps' interests to be able to explain this. There is a lot of criticism of it. One of the criticisms is that the Marine Corps is creating more of a niche force focused on one combatant command with one littoral mission, and putting at risk the critical statutorily-mandated global crisis combat capability, kick in the door capability of the Marine Corps anywhere in the world for any contingency, not just littoral contingencies, and without 31 amphibs I believe this is a real concern.

Lieutenant General Heckl, recently at the Seapower Subcommittee when I was asking him, said having a hearing on this—I have talked to the Chairman and others—just getting it out there. Marine Corps defend this, critics come and—I think it is good for the Marine Corps. Would you be supportive of that, General?

General BERGER. Senator, earlier this week we finished another briefing, as you all have requested. That was, by our count, 429 briefings——

Senator SULLIVAN. Those are classified—those are classified briefings, General. You need a hearing on this. The Congress of the United States—the biggest undertaking of reorganization of the Marine Corps in decades, merits a hearing. I do not know why you would resist that and I do not know why we keep getting——

General BERGER. I have never said no to a hearing from any Committee in 4 years.

Senator SULLIVAN. Okay. So would you be up for a hearing?

General BERGER. Any hearing that is requested by a Committee with jurisdiction over the military absolutely I would say yes to.

Senator SULLIVAN. Okay.

General BERGER. I have not said no yet.

Senator SULLIVAN. I have run out—I am running out of time here and I have committed to the Chairman.

Let me just ask one—one of the things that I put in the section 1023 of last year's NDAA—and, again, I do not think we have gotten it in the way in which I was expecting it and it has been classified, which does not help—is the extent to which the Marine Corps has divested so much capability and I have the long list here and it is very long—and the aviation side is enormously shocking to me—that the Marine Corps would have to rely on the Army to provide such capabilities.

I do not think anyone has, at least as far as I can tell, given this Committee that information we requested—bridging, armor, assault breaching, route clearing, MPs [Military Police]. There is a lot that we do not have anymore, that if we go to war tomorrow and

there is a river the marines have to cross, they cannot cross the river.

So can you commit to this Committee again to take a look at section 1023 and the letter I sent you on April 5th to answer those questions? You have answered. Maybe I will just ask around.

Do you have answers to that question on what capability have the Marine Corps given up that the Army now has to take? Then that is my final question.

General BERGER. The Act required us—asked us to give briefings, which we provided this month in accordance with the statute.

Senator SULLIVAN. Classified.

General BERGER. We checked with the Committee to make sure that it answered——

Senator SULLIVAN. I do not think classified briefings do that justice, but go on.

General BERGER. That was what was required in the NDAA——

Senator SULLIVAN. It was not classified. I wrote it. I know what I am talking about.

General BERGER. It did not specify classified or unclassified. I think across the joint force to get the whole picture of what the capability of any element of the joint force is, you need to have unclassified and classified put together so you get a better picture of both capability and capacity.

Senator SULLIVAN. The Army question?

General BERGER. Pardon me?

Senator SULLIVAN. The Army question?

General BERGER. What is the question again, Senator?

Senator SULLIVAN. This is in the law—the extent to which the Marine Corps is relying on the Army to provide capabilities it has divested.

General BERGER. What requires the combatant commander to make decisions on how to employ the force that is the combatant commander's decision, not mine? We provide, man, train, and equip forces as does the other services. How they are employed that is up to combatant commanders.

Chairman REED. [Presiding.] Thank you, Senator Sullivan. I have two additional questions, gentlemen, before we break.

First, unfortunately, there has been an impasse in confirming general offices at a regular schedule. We previously used unanimous consent for all general officers except those with key positions requiring hearings.

Are you seeing an impact, Admiral Gilday, in the service not only in terms of readiness but also in terms of quality of life of families, planning for families, planning for schooling, and also decisions at that level about whether they retain themselves in the service or depart?

Admiral GILDAY. Sir, we are not at that point yet. We are not at that point yet but we will be soon, and so to give you just a few examples, the director of Naval Reactors, responsible for more than 60 reactors and in the middle of AUKUS, is a concern. Four fleet commanders, including the fleet commander forward in the Western Pacific and the fleet commander in the Middle East, is a concern.

Three force commanders—surface, air, and subsurface—three-star officers, the head of Naval Installations Command, the superintendent of the naval academy as we are beginning to—as we are on the verge here of bringing another class and to keep that production line moving uninhibited is another example.

We have five promotion lists with over 50 people and so it is close to 80 right now and growing, sir, but I would double it in terms of the amount of families that are affected this summer.

Chairman REED. General Berger, do you have comments?

General BERGER. I think my review is exactly the same. Within 90 days they are going to have significant impacts. At the one-and two-star general list we can move those. At the three-and four-star level they are one by one assignments.

As you point out, without confirmation there is no moves. There are vacancies or delayed retirements or family plans that they do not know when that will happen. It is—I think by the late summer, early fall, you will have fairly—you will have significant impacts to both readiness and quality of life both.

Chairman REED. Let me followup one question. This force structure is interesting and should be pursued but you train regularly, I presume, the Marine Corps with Army armored units and the Army has far more tanks and mechanized vehicles than Marine Corps could ever want, not only need. The whole thrust, I think, of our strategy over the last several decades has been joint fighting, not individual services with their expertise.

So you have available armored vehicles if the combat commander believes that is for the mission. Is that correct?

General BERGER. Absolutely do. Everything that we do is as a joint force. The Navy, the Marine Corps will not do anything on a large scale by itself. It is entirely as a joint force.

There is some duplication, as you know, Senator, but mostly we want complementary capabilities. We have capabilities the Army does not. They have capabilities we do not. I think that is what you want.

Chairman REED. Yes, I tend to agree and you could want everything in the world like your own fleet of C–141s so you could be flown everywhere with marine pilots. But that would not make a lot of sense, would it?

I think, again, we have to look carefully at this because we do have a responsibility to view the force structure changes and make sure they are correct. But I think so far what we have done is try to incorporate the threat that is emerging, not fight the last war.

Mr. DEL TORO. Mr. Chairman, you could not have said it better. I am sorry to interrupt. It is about today's threat and I fear that some of the critics of both, perhaps, Force Design or our Navy operations fail to understand that the threat very much has changed in the Indo-Pacific. When you take into account satellites and cyber security and everything else—cyber warfare that is at play here, they fail to understand that we have to evolve and we have to be able to innovate in order to be able to effectively fight not yesterday's war in 1953 or 1952 but tomorrow's war.

Chairman REED. Well, thank you all very much. We are going to recess until 1230 hours to go into the closed session and in the meantime I hope the second vote is called.

So we will reassemble in the SVC–217 at 12:30. Thank you very much.

[Whereupon, at 12:15 p.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

PORT SECURITY BARRIERS

1. Senator SHAHEEN. Admiral Gilday, I continue to be concerned about the State of the Navy's port security barriers. We do everything we can to ensure our ships are capable and protected at sea, so we should commit a similar level of effort to make sure they are protected from terrorist and other threats when they are in port. How important is it that we are investing in modern, capable port security barriers that can defeat the threats we face today?

Admiral GILDAY. The Navy is committed to ensuring the security of our ships, while in port and at sea. The Navy utilizes Port Security Barriers, also called Waterborne Security Barriers (WSB), which are systems designed and used to protect U.S. military assets. WSBs are able to thwart attacks by terrorists that use small vessels laden with explosives as mobile weapons targeting military ships and waterside installations. In order to defeat the threats we face today, the Navy has developed WSB technical requirements to support the acquisition of the next generation of WSBs (WSB 2.0), which will include enhanced attack survivability and maintainability over existing Port Security Barriers. Barriers are sustained and placed on a phased replacement plan to ensure continued operation and protection of our ships.

2. Senator SHAHEEN. Secretary Del Toro, will you commit to ensuring that any efforts to procure port security barriers will involve a fair and open competition?

Secretary DEL TORO. The Navy complies with all statutory and regulatory requirements, including Part 6 Competition Requirements of the Federal Acquisition Regulations (FAR), to acquire quality supplies and services that satisfy the Navy's needs for measurable improvements to mission capability and operational support at a fair and reasonable price. If an other than full and open competition strategy is used, it is performed in accordance with FAR 6.302 and in compliance with Title 41 United States Code (U.S.C.) 3304 and Title 10 U.S.C. 3204.

An Acquisition Strategy Framework was developed in March to support competitive procurement of new Waterborne Security Barriers 2.0 (WSB 2.0). The Navy intends to engage industry using Industry Days and Requests for Information, to include review of a draft Request for Proposal (RFP), before releasing the final RFP. WSB 2.0 will provide for enhanced attack survivability and maintainability over legacy variants.

INTELLECTUAL PROPERTY

3. Senator SHAHEEN. Secretary Del Toro, I am concerned with China's ongoing theft of American intellectual property and the impact that has on small businesses, including a constituent company of mine that provides an important technology to your Department. What is your view of China's ongoing theft of United States private sector intellectual property and the impact that has on our defense industrial base?

Secretary DEL TORO. Chinese cyber intrusions are the most prolific in the world. China uses cyberspace to conduct operations against the Department of Defense Information Network and the United States Homeland. They do this to weaken our allies and partners and to undermine United States interests. We need to do better at protecting our intellectual property.

4. Senator SHAHEEN. Secretary Del Toro, do you see this an issue that the Department of the Navy, and the Department of Defense as a whole, can do a better job of working to address?

Secretary DEL TORO. The Department of the Navy continues to focus on cyberspace activities by prioritizing investments in cyberspace workforce, operations, research and capabilities.

SHORTFALLS IN CIVILIAN POLICE FORCE STAFFING

5. Senator SHAHEEN. There is a Department of Defense (DOD) civilian police force shortage across the Department that has developed into a severe national security concern. In the State of Maine, this directly affects Portsmouth Naval Shipyard (PNSY) and Naval Computer and Telecommunications Area Master Station Atlantic Detachment Cutler (Naval Support Area Cutler), with PNSY falling below 50 percent of their authorized force and 37 percent of their required, and Naval Support Area Cutler falling 32 percent below their authorized force and 25 percent of their required.

Admiral Gilday, how aware is the Navy of this issue, how long has this been occurring, and how is the Navy addressing these shortfalls?

Admiral GILDAY. The Navy is keenly aware of the challenges we continue to face attracting, hiring, and retaining security force personnel at PNSY and NSA Cutler. We have focused on recruiting and retaining talent for several years. We have employed a number of strategies to address the manning shortfalls; including expanded authorization and use of direct hiring capabilities for Police and Security positions, authorizing targeted recruitment, relocation and retention incentives, and raising the full performance level of Police Officer positions to the GS–7 level. Several CNIC Regions expanded outreach through Navy and State sponsored marketing, and hiring events targeted toward Police Officers have been carried out over the years to recruit local talent to expedite the hiring process. Further, CNIC has a focused Performance to Plan (P2P) working group that is assessing recruiting and retention challenges and proposing mitigations to reduce fill time and enable management's ability to respond to turnover.

6. Senator SHAHEEN. As it stands, multiple barriers contribute to the workforce shortage. Some include pay parity with civilian counterparts, the Commander, Navy Installations Command requirement to have a bachelor's degree (which is not required by police departments in the local area), and a lack of transferability of credentials/qualifications. For example, a Navy Master at Arms on the PNSY police force might not meet the hiring criteria to be a General Schedule (GS) police officer, given that the prerequisite for a new applicant is that they must have a bachelor's degree or like experience. Or, a 10-year veteran of the Maine State police would have to go to the Federal Law Enforcement Training Center or police academy since the mid-Atlantic region will not honor a waiver for a 20-year retired officer or anyone with a prior police academy with a law enforcement background.

Secretary Del Toro, of these barriers, which can the Navy remove, which require the DOD to remove, and which require changing by Office of Personnel Management? In addition, will pay levels need to be considered?

Secretary DEL TORO. The Office of Personnel Management (OPM) is the authority that establishes formal qualification requirements for jobs within the General Schedule employment system. The Department of Navy (DON) applies the OPM regulations when evaluating candidates for jobs in the Police Series (0083) and does not supplement these requirements with other qualification factors.

A candidate for employment as a Police Officer may qualify for the position based on three criteria: 1) education; 2) experience; or 3) a combination of the two. New entrants to the 0083 series may qualify at grades GS–02 through GS–06. Qualification at a specific level is dependent upon the candidate's experience and/or education. Personnel with prior Law Enforcement (LE) experience may submit a waiver for LE training and police academy requirements. The waiver must be reviewed by the DOD Peace Officer Standards and Training (POST) Commission and approved by the Under Secretary of Intelligence & Security per Department of Defense (DOD) Instruction 5525.15, *"Law Enforcement Standards and Training."*

7. Senator SHAHEEN. Admiral Gilday, would it be helpful to change policy and consider classifying base police as law enforcement officers?

Admiral GILDAY. Candidates who lack qualifying work experience related to the position may also seek qualification consideration by a substitution of education for experience. All Executive Agencies use the OPM established minimum qualification requirements, along with agency-prescribed specialized requirements to qualify candidates for Federal positions. Establishment of a Law Enforcement Officer (LEO) designation would create significant labor implications to include age requirements and benefit contributions.

8. Senator SHAHEEN. Secretary Del Toro and Admiral Gilday, has DOD or the Navy applied for direct-hire authority to address the issues identified at the named facilities?

Secretary DEL TORO. The Department of Defense currently has Direct Hire Authority (DHA) for Police Officer positions The Department of the Navy is taking advantage of the DHA to address the identified issues at the named facilities.

Senator SHAHEEN. In talks with constituents of Maine impacted by this, a suggestion I received was to amend the recruitment process by hiring recruits as GS–5, processing them through their required training in the time that takes, and joining the field as GS–7, skipping GS–6.

9. Secretary Del Toro, how feasible would change be, and what effects would it have across the organization?

Secretary DEL TORO. The experience and training completed at each GS level provide our civilian Police Officers with the necessary qualifications for career advancement. Adjusting the career development to allow for a two-grade interval pattern would not be consistent with current training requirements.

Police Officer hires have a rigorous training and development plan that includes specific work and exposures at each grade level. Adjusting the development plan to increase compensation without alignment to their skill would not result in improved quality of the work performed at the higher level without the on-the-job experience at the intervening level.

It should be noted that increasing the grade level is not the only way to increase pay for General Schedule (GS) employees. The Navy, similar to other civilian employing components and agencies, has the option to seek OPM approval of higher special rates of pay for a category of GS employees if a determination is made that pay increases are needed to address significant recruitment and/or retention difficulties. (See 5 U.S.C. 5305 and 5 CFR part 530, subpart C.)

QUESTIONS SUBMITTED BY SENATOR MAZIE HIRONO

AMPHIBIOUS TRANSPORT DOCKS (LPDS)

10. Senator HIRONO. General Berger, a key part of Force Design 2030 is the ability to get marines and supplies to austere locations, which requires a robust amphibious fleet. Yet, I understand the Office of the Secretary of Defense has delayed the purchase of a required LPD for a 12th study. How would not resourcing the LPD line impact the Marine Corps vision for Force Design 2030?

General BERGER. The LPD is an essential component to reaching the operational and statutory requirement of 31 amphibious warfare ships. As ships are being decommissioned faster than they are procured, delivered, and eventually employable, this inventory under President's Budget 2024 will decrease to 27 ships over the next 5 years. While we will likely still be able to support the Indo-Pacific Theater, we will accept risk elsewhere in the world. The decrease in the overall Amphibious Warfare Ship (AWS) inventory, combined with consistent/constant Global Force Management (GFM) demand and longer than planned maintenance availabilities results in an overworked AWS fleet with no "ready bench" lacking ships to fulfill SECDEF directed GFM requirements, delayed deployments and reductions in training and certification periods. Meanwhile, the LPD Flt II continues to be affordably constructed with capabilities critical to providing strategic mobility, force projection, and the ability to campaign across the globe. It provides the ability to operate offensively in a medium-density, multi-threat, anti-access littoral environment by being a seabase from which the Marine Expeditionary Unit (MEU) operates helicopters, tiltrotor aircraft, landing craft, and amphibious vehicles.

Effective integrated deterrence requires amphibious warfare ships. LPDs with embarked marines provide a Distributed Maritime Operations capability that is a flexible, scalable, and visible capability for our combatant commanders to employ at the time and place of their choosing in support of integrated deterrence campaigning. This flexibility is further enhanced by the LPD Flt II capability to embark rotary-wing and tilt-rotor aircraft and operate independently, unlike its predecessor LSDs, which expands the options provided to the combatant commanders.

The Marine Corps has a requirement for no less than 31 amphibious warfare ships: 10 LHA/LHD and 21 LPDs. Since 2019, three DON studies have examined amphibious warfare ship force structure requirements. The requirement was informed by combining the findings of those studies, the most recent being the SecNav directed Amphibious Fleet Requirement Study (AFRS) in 2022, with amphibious warfare ship readiness trends over the past 10 years. AFRS was a threat informed, scenario directed, model driven, multiple phase event executed by the analytic arms of the Navy and the Marine Corps. The findings of AFRS were briefed to the service chiefs and SecNav, 31 amphibious warfare ships were reported as the minimum re-

quired. This finding is consistent with 11 amphibious warfare ship inventory studies completed over the last 14 years.

The last Congress recognized this requirement in the James M. Inhofe National Defense Authorization Act, Public Law 117–263 (2023). Section 1023 requires the Navy maintain "not less than 31 operational amphibious warfare ships, of which not less than 10 shall be amphibious assault ships." This law mirrors the need of the National Security Strategy, but it is important to note, this is a floor not a ceiling.

SEA LIFT CAPACITY

11. Senator HIRONO. Secretary Del Toro, it is widely known lift will be crucial for any contingency in the Pacific. There are many ongoing Navy programs aimed at this problem: the future Landing Ship Medium and the re-capitalization of the Ready Reserve Fleet to name a few. What does the Navy need to make sure we have the lift capabilities the force needs in this decade?

Secretary DEL TORO.

- To address inter-theater lift requirements, Department of Navy (DON) has made it a priority in their fiscal year 2024 budget submission to recapitalize the sealift forces. This plan is an integrated three-phase approach that 1) modernizes most viable existing ships through a Service Life Extension program, 2) procures militarily useful used sealift vessels to address near term capacity gaps, and 3) develops requirements for new construction ships to recapitalize Maritime Prepositioning Force. This work is being accomplished in order to meet Combatant Commands delivery requirements.
- Navy's commitment to meeting near-term surge sealift requirements continues through procurement and refurbishment of used commercial Roll-On Roll-Off ships for replacement of aging Ready Reserve Force capacity. The Navy requires continued support for the BuyUsed recapitalization program in order to provide a stable acquisition profile with forecasted maintenance and repair costs to meet strategic mobility requirements at a moderate level of risk.
- Navy continues to act on congressional authorities to address strategic sealift readiness and recapitalization by purchasing two used vessels that participated in the Maritime Security Program. The CAPE ARUNDEL and CORTES will complete re-classification, baseline readiness and modification and be ready for tasking Q3 FY23. Also, Maritime Administration (MARAD)'s Vessel Acquisition Manager awarded a contract for three sister ships and is performing a market analysis for additional ships. Ships will complete re-flag, reclassification and modification and be ready for tasking approximately 8 months after transfer of ship from seller.
- The Sealift Buy-Used program will execute to authorized limitations with the purchase of nine used vessels by fiscal year 2024. The Navy requires support for the fiscal year 2024 Sealift Legislative Proposal requesting removal of the overall limitation of the purchase of foreign-built used vessels, necessary to expediently and cost effectively be prepared to deliver this required capability in wartime.
- As part of the intra-theater lift requirement the Navy is investing in requirements development of the newest class of at-sea resupply ships, the Next-Generation Logistics Ships (NGLS). NGLS will augment existing Combat Logistics Force ships, adding more capacity in theater for the distribution of logistics commodities. The Navy's fiscal year 2024 budget request includes research and development funding for the NGLS program to support procurement of the first ships in fiscal year 2026.
- As part of the integrated solution to address tactical lift, Navy is investing in Landing Craft Air Cushion (LCAC) service life extension and the procurement of the LCAC's replacement, the Ship to Shore Connector (SSC). The SSC provides a robust, modern operational capability to land credible combat power from amphibious ships across beaches not accessible by conventional landing craft, thus enabling the Marine Corps and Navy to project combat power ashore from the sea. The SSC provides a one-for-one enhanced replacement platform for legacy LCAC, which are reaching an average 30 years of age. The Navy is continuing to support production progress in serial SSC deliveries.
- The Navy is also replacing its aging Landing Craft Utility (LCU) fleet with the LCU 1700 program which recapitalizes the capabilities and flexibility currently provided by the LCU 1610 Class in a more fuel efficient, cost effective, and updated design. Navy requires support of the fiscal year 2024 budget request to continue to modernize the aging LCU 1610 fleet, which is currently approaching an average age of 50 years, with a request for two additional LCU 1700.

- The Navy is investing in a Medium Landing Ship to provide distributed maneuver and mobility support for littoral expeditionary forces such as Marine Littoral Regiments in contested littoral environments. The fiscal year 2024 funding request continues the development of the equipment baseline and efforts to support a lead hull contract award in fiscal year 2025.
- Navy's integrated strategy addresses near-term lift needs while establishing strategically placed long-term lift solutions to support employment across the competition continuum.

SHIPYARD MODERNIZATION

12. Senator HIRONO. Admiral Gilday, I was glad to see the Dry Dock 3 replacement at Pearl Harbor was fully funded in this year's budget request. As you know, this is a complex project that the Navy must get right. I also remain focused on resourcing the Waterfront Production Facility to ensure our shipyard workers have the required tools and a logical shop layout. While I understand there may be engineering constraints to completing the dry dock at the same time as the production facility, this is a critical part of the Shipyard Infrastructure Modernization Plan and should be prioritized as such. Admiral Gilday, the planned mission need date for the waterfront production facility is fiscal year 2028. Is the facility on track to be completed by then?

Admiral GILDAY. The Waterfront Production Facility (WPF) at Pearl Harbor Naval Shipyard (PHNS) is not on track to meet the mission need date of fiscal year 2028 reflected in the most recent Shipyard Infrastructure Optimization Program 5-Year Plan Report to Congress. The Navy has prioritized completion of the PHNS Dry Dock 3 replacement project, but as mentioned in the same report, needs additional funding for WPF planning and design efforts. The $20 million provided for WPF design funding in the fiscal year 2023 Omnibus spending bill allowed for the initiation of facility design efforts.

13. Senator HIRONO. Admiral Gilday, how are is the Navy ensuring that the Dry Dock 3 replacement project stays on time and on budget?

Admiral GILDAY. The Navy is employing a coordinated management strategy across contracting, organizational, and scope domains to control cost and schedule for the Dry Dock 3 replacement project at Pearl Harbor Naval Shipyard (PHNS). That work is synchronized with fleet and maintenance schedules to ensure alignment with operational demands.

During project design, the acquisition strategy used early contractor involvement to obtain feedback from all five potential bidders on constructability of the project and the contract documents. Their feedback ensured the design was buildable, led to improvements in the design, and corrected items that would have otherwise been found during construction, potentially creating cost and schedule changes. The contract allowed for alternative technical approaches, changes to the design that the government accepted as part of the award which will mitigate cost and schedule risk.

Additionally, the Navy awarded separate contracts ahead of the main construction contract, to accomplish environmental dredging and remove unexploded ordnance, averting a significant risk of delay at the beginning of work. A separate contract was completed to relocate the perimeter fence around the Controlled Industrial Area, allowing unimpeded access for the construction contractor at the start of work. The construction contract includes an economic price adjustment clause that places risk for the escalation of many materials on the government, lowering the award cost. The contract offers significant award fees for completing specific milestones (including ultimate completion) by specific dates, providing meaningful incentives to meet performance standards.

Lastly, the Shipyard Infrastructure Optimization Program's Program Management Office retains visibility and accountability for schedule, cost, and performance at every level, with well-defined thresholds to preserve flag officer-level decision space. The Navy has established formal project governance, learning from other mega-projects, setting expectations for issue resolution. The Naval Facilities Engineering Systems Command commissioned a dedicated Officer in Charge of Construction to provide a level of oversight far beyond the typical construction effort, patterned off recent success at other naval depots. The project execution team continuously identifies and monitors risk and uses both qualitative and quantitative analysis to report on and manage risks until they are retired.

WORK FORCE DEVELOPMENT; IMMIGRATION REFORM

14. Senator HIRONO. Secretary Del Toro, I am concerned by the slow pace of ship and submarine construction and maintenance. For example, the Navy is buying 2 *Virginia* submarines a year, but only receiving about 1.2 a year, which I know you both find unacceptable. The DOD is spending a fortune to fix this, in part through workforce development—but I am not sure that we have yet to find the right answer to this complex problem. Developing a workforce is a worthy endeavor, but if there are simply not enough workers, money alone will not solve the problem. Secretary Del Toro, I was pleased to hear you speak on the need for immigration reform earlier this year. Could you expand further on the importance of our immigrant workforce to military readiness?

Secretary DEL TORO. We are facing a national shortage of blue collar workers and with historically low unemployment rates, recruiting skilled laborers is even more challenging. We need to take a holistic approach to maintaining a shipyard workforce that is capable of executing the Department of the Navy's (DON) shipbuilding plans. This all-hands-on-deck approach involves multiple engagement strategies to include retention and recruitment efforts as well as potentially increasing the number of candidates by leveraging applicable visa work programs.

With retention efforts focused on monetary incentives for current employees, the DON is expanding its outreach program with hiring events at colleges, vocational centers, and conference centers. In addition to these employment focused events, the DON is developing an engagement strategy to advertise and recruit skilled laborers at various public venues to include sporting events and Fleet Week festivities.

The abovementioned efforts may not be enough and we will need to do more to attract the skilled labor force our shipyards require. This includes a potentially greater focus on programs that provide foreign nationals an opportunity to lawfully employ their skills in a trade that advances our military readiness.

CLIMATE RESILIENCY

15. Senator HIRONO. Admiral Gilday and General Berger, your services own many of the bases most vulnerable to climate change in the country. This year's budget request includes $3.7 billion for installation resiliency measures, which is about equal to the cost of repairs to Camp Lejeune after Hurricane Florence. Rising sea levels and more extreme weather events will make these types of repairs costlier and more frequent unless we make investments now. Following the Department of Defense's Climate Adaption Plan, the Department of the Navy released Climate Action 2030. Admiral Gilday and General Berger, how is implementation of both these plans going, and what is the importance of fully funding these measures?

Admiral GILDAY. The Department of the Navy's Climate Action 2030 acknowledges that climate resilience is an important component of mission readiness and works to ensure our installations and infrastructure are resilient to a wide range of near-term and long-range challenges. These challenges include extreme weather events, water scarcity, sea level rise, flooding, wildfires, and other environmental considerations and threats that can affect operations and present significant risks to mission. We see climate affecting the Navy in significant ways and expect this impact to intensify in the coming years. By incorporating climate change considerations into the decisionmaking process for shore investments, the Navy gains operational and tactical advantages, remains agile, preserves decision space, and reduces climate hazard risks to mission and operations.

To further support the Administration's priorities, the Navy integrated the goals of Climate Action 2030 into current mission requirements and installation investments, for example:

- Incorporating installation climate resilience plan (ICRP) components in our Master Planning process and plans. The Navy completed an ICRP at Naval Base San Diego and prioritized and resourced ICRPs at Naval Base Guam, Naval Base Coronado, and Naval Support Activity Hampton Roads.
- Increasing implementation of water and energy conservation measures in buildings and piloting use of low-carbon building materials.
- Incorporating water resilience analysis and mitigation recommendations into annual Installation Energy Program Summaries.
- Conserving water to the maximum extent practicable through activities that positively impact groundwater recharge, stormwater retention, and sustainable land management on Navy installations and ranges.
- Planning installation micro-grids and long duration battery storage to ensure continuity of critical missions.

- Proactively leveraging public and private ventures and third-party financing to reduce greenhouse gas emissions of non-tactical vehicle fleets and the emissions and traffic impacts of the commuting military, civilian, and contractor workforce.
- Constructing living shorelines and breakwater projects to reduce shoreline erosion and protect Navy missions from sea level rise and storm surge.
- Investing in resilience projects at the U.S. Naval Academy (USNA) to improve installation resilience.

Investments in the President's Budget 2024 focus on building installations resilience and include investments to improve the Navy's aging utility systems, USNA resilience investments, planning and design of two Net Zero building retrofits, upgrading building control systems for improved cybersecurity and energy savings, initiating carbon footprint assessments to identify energy savings opportunities at Navy installations, planning and installation of electric vehicle support equipment (EVSE) and leasing of non-tactical zero emission vehicles, greening bases initiative, xeriscaping projects, and greenhouse gas emissions tracking and reduction.

General BERGER. These initiatives are important to ensuring the ability of our installations to to withstand natural hazards and extreme weather events (e.g., coastal storms, floods, desertification, drought, wildfire, etc.).

The Department of Defense's Climate Adaptation Plan, Department of the Navy's Climate Action 2030, and congressional statutes improve resiliency and sustainability of installations through master planning; improve energy security posture through third party financing and accelerating advanced micro-grid deployment; and implement nature-based solution projects to address climate impacts, sequester carbon, and enhance ecosystems. We are pursuing climate resiliency initiatives aligned with our missions.

Marine Corps Recruit Depot (MCRD) Parris Island (PI) completed a Climate Change Resiliency and Adaptation Plan (2020) and a Master Plan (2021). These documents are being used to develop military construction and facilities, sustainment, restoration, and modernization investment projects to reduce existing and projected localized flooding. The Military Installation Resilience Review of Marine Corps Air Station (MCAS) Beaufort and MCRD PI has developed a toolkit for structural infrastructure interventions and nonstructural planning approaches to adapt to climate change and optimize resilience for shared community assets and infrastructure.

Fiscal year 2023 funding and the Fiscal Year 2024 President's Budget Request address erosion and flooding issues affecting training areas and ranges at Marine Corps Base (MCB) Hawaii, MCAS Cherry Point, MCAS Beaufort, and MCAS Yuma. Installation Master Plan updates will be complete in fiscal year 2025 for MCB Camp Lejeune and in fiscal year 2026 for MCB Camp Pendleton.

These resources ensure the Marine Corps is postured to meet the Department's stated performance goals: 1) build climate resilience, and 2) reduce climate threat through prioritizing Science & Technology research of Operational Energy advancements and fossil fuel demand reduction initiatives such as anti-idle applications, hydrogen power research and continued research into tactical vehicle hybrid/electric components.

PIER SIDE MAINTENANCE

16. Senator HIRONO. Admiral Gilday, as more ships and submarines are based forward the need for pier side maintenance capacity is outpacing shipyard growth. What is the importance of replacement submarine tenders in Guam?

Admiral GILDAY. Forward-based replacement submarine tenders are required to support SSNs, SSBNs, SSGNs, UUVs, and submarine emergency response requirements for homeported, transient, and visiting submarines and UUVs in Guam. Submarine tenders directly contribute to submarine force readiness by enhancing submarine material readiness through intermediate-level maintenance support, loading, unloading, and storing submarine weapons and unmanned vehicles, and resupplying submarines with a range of materials. The tenders also support emergent nuclear and non-nuclear repairs for submarines across the theater. The replacement submarine tenders will be more capable of providing submarine and UUV support than current tenders and will be specifically designed to support deployed *Virginia*-class and *Columbia*-class submarines. The nearest Intermediate Maintenance Facility (IMF) is in Pearl Harbor, HI for Guam homeported boats. Replacement tenders in Guam also add significant time in operational availability back to Guam-homeported and visiting platforms since they are not forced to transit to Pearl Harbor for tending, resupply or intermediate-level maintenance. In addition, future tenders in Guam will be required to support submarines during peacetime and war-

time. The proximity of Guam replacement tenders will allow the submarine force to maintain presence and project power in the INDOPACOM theater.

USS *Frank Cable* and USS *Emory S. Land* submarine tenders will exceed their service lives by 13+ years before the first AS(X) reaches initial operational capability in fiscal year 2031. These tenders were designed and fitted to accommodate attack submarines in a peacetime environment at Guam and provide pier-side moored repair and services to submarines. The current tenders lack the capacity to support modern weapons systems handling and storage, C5I communications, water processing, rapid mooring counter weights, and fender storage/deployment. The current tenders also lack dedicated airlift capability.

The AS(X) platform, as an expeditionary tender, will have peacetime and wartime missions. In peacetime, the AS(X) provides pier side support in a forward deployed submarine homeport, providing sustained repair, supply, weapons handling, and tending operations for home ported or visiting submarines and ships, and fly away emergent voyage repair services for other deployed submarines and ships. AS(X) also provides rapid emergency response to crew rescue operations, nuclear/radiological emergencies, and natural disasters. AS(X) will periodically provide tended submarines off ship support, including messing and berthing facilities, when they become uninhabitable due to repair and overhaul work.

In wartime, AS(X) may be tasked to transit in an open-ocean, hostile environment, unescorted to or from a port where operations are occurring. During the transit, the AS(X) can conduct independent anti-surface self-defense operations against non-warship surface craft and limited anti-air self-defense employing small caliber crew-served weapons fire. Once AS(X) has arrived at a Joint or Allied force forward staging port or at anchor, it will continue self-defense and force protection and require minimal port security. From the forward location, AS(X) will be capable of providing repair, resupply, weapons replenishment, and tending operations to multiple submarines providing rapid repair and replenishment of deployed submarines, allowing them to get back to the fight faster.

17. Senator HIRONO. Admiral Gilday, Hawaii is scheduled to get a floating dry dock in 2032. Will that be late to need?

Admiral GILDAY. The Navy plans to initiate construction of a floating dry dock for Hawaii in 2032 for delivery to meet the mission need date in 2036. The Navy awarded a site selection study in late 2022 to evaluate potential operating sites within Joint Base Pearl Harbor-Hickam. The results of this study are due this summer and will inform the Navy's way ahead on pier infrastructure requirements and Military Construction / Sustainment, Restoration and Modernization project funding needed to support the floating dry dock.

18. Senator HIRONO. Admiral Gilday, what can be done to make pier-side maintenance more efficient?

Admiral GILDAY. Analysis by the Center for Naval Analysis shows Days of Maintenance Delay are attributed to four main efforts: Modernization, Throughput, Unplanned Work, and Material Availability. Improvements in each of these efforts will make pier-side maintenance more efficient.

To address the challenges of completing availabilities on time from CNO Availabilities and Intermediate Availabilities, the Navy continues to develop and institute Naval Sustainment System—Shipyard (NSS-SY) and Supply initiatives, leverage Performance to Plan (P2P) and Get Real, Get Better behavior and improvements. These initiatives are not constrained to availabilities in dry docks, rather they permeate throughout each of the public shipyards, and include pier side maintenance.

In support of all maintenance availabilities, the Navy has developed the 15-Year Maintenance Strategy while NSS-SY identifies and executes initiatives that reduce nuclear ship and submarine maintenance availability durations at public shipyards.

Additional initiatives underway to improve shipyard performance, throughput and material readiness, and reduce unplanned work include:

- Waterfront improvement initiatives which span three focus areas:
  1. Project Management Fundamental adherence including transparency, accountability and training needed at all levels.
  2. Improved metrics fidelity to drive better understanding of performance versus targets and why goals are missed.
  3. Implementing a culture of fix or elevate at shipyards. Leadership is spending more time on the deck plates and improving process review to better support inputs from mechanics.

- Inside the shops, there is focus on lean transformation resulting in leaning out ship areas to drive safe, quality flow of material. The shops are also working on schedule integration to improve connectivity to project schedules and implement "drop-in" governance. Finally, shops are using lean skillsets to unlock shop leads and Gemba through lean coaching and training. Gemba is the observation of work in action, often to provide senior leaders a better understanding of how things get accomplished and provide any help that may be needed.
- NAVSEA is leveraging a three-pronged approach to address hiring challenges and improve retention.
  - Special Pay Rates: One of the leading indicators related to under performance of hiring plans is the disparity of pay in comparison to private industry. Each shipyard developed data-driven positions to be considered for Special Pay Rates.
  - Through the NSS-SY People Pillar the Expert Tradesperson initiative creates a career path that incentivizes our best and brightest mechanics to stay in the wage grade field. The Expert Tradesperson position was established with a clear vision and intent to enhance a career in trades and increase responsibilities and authorities within the production department, thereby dramatically improving throughput and productive capacity.
  - Exceptions to Pay Increase Limitations: Annual appropriations law found in the Financial Services and General Government Appropriations Act places limits on wage schedule increases for Federal Wage System positions. This limitation does not provide parity with private industry and places undue burden on the naval shipyards to recruit or retain qualified employees.
- Development of a comprehensive plan to purchase CNO availability material with sufficient lead time to ensure it is received by the start of availability.
- Development of the Planning Improvement Control Board process which helps alter or remove outdated requirements, or anticipate more efficiently addressing planning or inspection requirements.
- Development of the Engineering Intervention Board (EIB) which was established in fiscal year 2021 to revise or remove maintenance requirements and improve maintenance effectiveness by leveraging SEA 05 expertise and technical authority. The goal of this effort is to reduce work package sizes by challenging cumbersome technical requirements and supporting ideation of priority improvement items, in partnership with field activity stakeholders. This effort by the EIB supports the NAVSEA Commander's intent to implement a full system transformation to deliver nuclear ships from maintenance availabilities to the Fleet on time.

The aforementioned initiatives will improve Modernization, Throughput, Unplanned Work, and Material Availability and thus increase the overall efficiency of ship maintenance including pier side maintenance availabilities within the public shipyards.

QUESTIONS SUBMITTED BY SENATOR TIM KAINE

NON-DEPLOYABLE ASSIGNMENT & CARE

19. Senator KAINE. Secretary Del Toro and Admiral Gilday, as discussed during the hearing, it came to my attention during visits to the Mid-Atlantic Regional Maintenance Center following the suicides of 4 sailors that Navy manning policy allows for a 60 percent increase in the assignment of personnel (30 percent for limited duty and 30 percent for pregnancy/post-partum) but does not address the additional resources needed to support a population that requires specialized time and attention. During the hearing Secretary Del Toro mentioned that Navy is "channeling back" on that policy. Where are these changes codified and how are you ensuring their implementation?

Secretary DEL TORO. and Admiral GILDAY. Navy is currently conducting a holistic review of assignment policies for both Limited Duty (LIMDU) and pregnant/postpartum sailors to ensure their assignment offers sufficient support and meaningful duties with accommodation for their medical/work limitations. As an immediate and interim action while this review is ongoing, distribution of LIMDU sailors was shifted from previous distribution models to an even percentage across appropriate shore commands within a geographic region, providing a reduction in LIMDU populations at our largest shore commands.

RCOH ASSIGNMENT POLICIES

20. Senator KAINE. Secretary Del Toro, last year's House report to the National Defense Authorization Act for fiscal year 2023 directed a report to the Committees of the Armed Services of the Senate and House to address alternative approaches to manning ships undergoing refueling and complex overhaul (RCOH). What is the status of the report?

Secretary DEL TORO. The report has been drafted and is under review within the Department of the Navy. It will be provided to you and the Committee in the near future.

21. Senator KAINE. Secretary Del Toro and Admiral Gilday, is the Navy considering the implementation of alternative policies for first-term sailors assigned to ships undergoing RCOH as a result of the House report requirement?

Secretary DEL TORO. and Admiral GILDAY. The Navy is considering options for assignments policies for first-term sailors assigned to ships undergoing RCOH with anticipated costs and benefits. Options currently being reviewed by Navy leadership include:

1) Expanding cross-deck opportunities for first-term sailors to serve aboard operational units.

Developing a split-tour program that ensures first-term sailors are not assigned to carriers in RCOH for longer than 2 years.

22. Senator KAINE. Secretary Del Toro and Admiral Gilday, in addition to considering changes to policy regarding first-term sailor assignment to ships undergoing significant maintenance, what are other ways (if any) that the Navy is challenging assumptions about crew assignments during RCOH?

Secretary DEL TORO. and Admiral GILDAY. The Navy is challenging assumptions about crew assignments during RCOH in the following areas:

1) Navy Manpower Analysis Center will conduct a study to identify RCOH "essential" manning. The study will establish minimum acceptable RCOH crew size by rating, for each of the different phases of the RCOH.
2) Evaluating Basic Allowance for Subsistence (BAS) policy and the provision of crew meals when shipboard food services are not available or are limited during RCOH.

COMPONENTS OF MENTAL HEALTH

23. Senator KAINE. Secretary Del Toro and Admiral Gilday, we understand that Navy has recently made adjustments to its physical readiness program in an effort to boost recruitment and retention. Although the program can be an effective force-shaping tool when used in this manner, it does not appear to incentivize the individual physical readiness of the average sailor but rather, encourages meeting the minimum standard by employing negative reinforcement in terms of career consequences. This type of policy does not seem to align with the Navy's Get Real, Get Better or Culture of Excellence campaigns. Furthermore, physical health is an essential component of mental health so it stands to reason that positive reinforcement of and a commitment to physical fitness requirements could have a positive effect on the overall mental health of the force. What is the feasibility of providing sailors with career incentives for individual physical readiness achievements and are there plans to incorporate this into future talent management initiatives?

Secretary DEL TORO. and Admiral GILDAY. Navy supports a holistic approach to overall wellness, recognizing that a tough and resilient mind, body, and spirit is essential to preparing one's self for the rigors of deployments and combat.

Sailors are incentivized for their physical fitness in their periodic performance evaluations. The military bearing section considers a sailor's performance in physical readiness. These performance evaluations are considered when sailors compete for advancement.

Commanding Officers and Officers in Charge are highly encouraged to further develop awards or incentive programs that encourage sailors to live healthier lifestyles. Examples include special liberty for excellence, award certificates for excellence and improvement, and sailors who score outstanding being exempt from command physical training for a period of time.

24. Senator KAINE. Secretary Del Toro and Admiral Gilday, during the hearing Senator Reed asked about sleep deprivation as a contributing factor to sailor mental health and suicide. You responded by saying that the suicide of the sailor he was referring to was partly due to their inability to sleep aboard the USS *George Wash-*

ington, undergoing RCOH. However, a Government Accountability Office (GAO) report in 2021 found that only 14 percent of deployed Surface Warfare Officers were receiving the recommended 7 or more hours of sleep needed for optimal performance and that the Navy was inconsistent in its efforts to ensure the mandatory amount of rest per 24-hour period. A survey of surface fleet officers and enlisted personnel drew similar conclusions. Fatigue management has not only been a causal factor in the USS *Fitzgerald* and USS *John S. McCain* collisions but it is shown to contribute to mental health issues. The Navy's own Mental Health Playbook issued in February states, "Consistently, the data and the science show that if our people are not sleeping, eating, or exercising—they are at higher risk for mental health issues." How is the Navy implementing and enforcing Commander Naval Surface Forces Pacific Instruction/Commander Naval Surface Forces Atlantic Instruction 3120.2A?

Secretary DEL TORO. and Admiral GILDAY. The Navy is implementing the measures below to mitigate the effects of fatigue and improve the sleep obtained by Navy Surface forces.

- A 24-hour work and sleep cycle for all hands, every day.
- Target of 7.5 hours of sleep opportunity for all hands each 24-hour period, subject to operational tasking and manning. If not achievable in a single block, planned naps.
- Limits to the length of the work-day (12 hours planned, maximum of 14 hours)
- A shipboard routine that supports both rest and work (scheduled watch, meals, announcements, training, meetings).
- Specific, formal consideration of the risk of fatigue in planned and unplanned work and watch evolutions.
- Leveraging bio-monitoring, analytics, data-driven manning experiments, and additional research to further improve, supervised by our Human Factors Engineer, including our Human Systems Integration experts, and share best practices with other type commanders via the U.S. Fleet Forces Command & Commander, Pacific Fleet Fleet Operational Safety Council.
- Addressing physical barriers to quality sleep/sleep obtained and better watch environment including:
  - Improved lighting for berthing and workspaces, mattresses, blankets, rack design, berthing noise, and berthing temperatures.
  - Bridge lighting and equipment lighting/positioning improvements for day and night, bridge and combat information center paint schemes
  - Partnership with Naval Sea Systems Command Human Systems Integrations and technical warrant holders.
- Training in these policies is provided at each milestone including the Basic Division Officer Indoctrination Course, Department Head School, and the Surface Command Course. Similar training is provided to each ship as part of the shipboard Basic Phase.

Since 2022, to promote enforcement, the Navy has introduced two tools that provide near real-time data on sleep and fatigue at multiple echelons. Command Readiness, Endurance and Watchstanding (CREW) collects biometric sleep, activity and health data to provide near real-time information to the sailor, medical, and leaders. This overcomes the inaccuracy inherent in individuals' attempts to gauge the effects of fatigue on performance, and allows for timely, effective individual, team, unit-level and Force interventions and risk management. This effort is largely funded by the Military Operational Medicine Research Program (MOMRP) and builds on previous work to monitor COVID and a partnership with the Naval Health Research Center and Office of Naval Research, in addition to previous work with NASA and the trucking industry. Initial operational capability is pending additional funding.

Additionally, Optimized Watch bill Logistics (OWL) uses data and individual qualifications in a sophisticated model for watch bill and work planning and management. Initial operating capacity is 2023 with several ships already enrolled. Like CREW, OWL is largely MOMRP funded. Modeling and decision tools are also embedded within the Surface Training and Readiness Management System (replacing the Relational Administrative Data Management system), which is in testing at sea for integration with the Consolidated Afloat Networks and Enterprise Service. OWL has a fatigue module that is based on schedules; once CREW is fully funded, it will provide actual fatigue data to OWL to aid decision makers.

25. Secretary Senator KAINE. Del Toro and Admiral Gilday, how is the Navy implementing and enforcing the fatigue management recommendations made in the GAO–21–366, Navy Readiness report, particularly recommendations 1–4 related to

collecting data, addressing causal factors, and identifying and assisting units that are not in compliance?

Secretary DEL TORO and Admiral GILDAY. The Afloat Safety Climate Assessment Survey is administered twice per Optimized Fleet Response Plan (OFRP) to each ship. This focused, peer-reviewed set of questions focuses on safety and sleep and provides detailed information on the amount of sleep achieved by each individual, with the data sorted by ship class and Department. To assist individual ships with compliance, the results are reviewed by the cognizant Type Commander and debriefed in-person to the Triad (CO/XO/CMC) with specific recommendations for improved sleep. To date, the average sleep has increased from 5.1 to 5.25 hours since the surveys started in 2021, but further improvements will be contingent upon improved manning onboard ships. In addition to the length of sleep, the transition to circadian watches has been shown to reduce overall fatigue across the force. The surveys also show the main factors that impact the quality of sleep: the most frequently cited issues are work stress, mattresses, interference from other crew members, and rack curtains. Initiatives are underway with the NAVSEA Habitability Technical Warrant Holder to address the challenges associated with the berthing environment.

Starting in 2023, each ship must conduct a quarterly self-assessment in the Training and Operational Readiness Information Services program, to address adherence to the Crew Endurance Policy. Additionally, each ship must sign out a Commanding Officer's Standing Order that articulates a tailored policy to meet the requirements of the SURFOR instruction. This approach is designed to ensure a consistent deckplate application of the instruction and a culture of self-assessment. External assessments are conducted once per OFRP during Mariner Skills Week as part of the Basic Phase.

The Command Readiness, Endurance and Watchstanding (CREW) represents the primary effort by the Navy Surface Force to collect data on sailor fatigue, identify causal factors for sailor fatigue, and identify units not in compliance with Commander Naval Surface Forces Pacific Instruction/Commander Naval Surface Forces Atlantic Instruction 3120.2A. CREW collects biometric sleep, activity and health data to provide near real-time information to the sailor, medical, and leaders, providing for systematic collection of quality and timely fatigue data from sailors that are accessible to operational commanders to support underway decisionmaking.

Once fully implemented, CREW data on sailor fatigue will be utilized to identify, monitor, and evaluate factors that contribute to fatigue and inadequate sleep such as the effects of crew shortfalls, work requirements, administrative requirements, and collateral duties. Additionally, the data provided to operational and administrative leadership by CREW will allow for identification of those units that need greater assistance and attention in implementing the Navy's policies on fatigue.

HR TRANSFORMATION

26. Senator KAINE. Secretary Del Toro and Admiral Gilday, our office has received over 18,000 pieces of correspondence from constituents concerning Navy pay and personnel issues, ranging from inaccurate affiliation dates resulting in a break in service and loss of Transitional Assistance Management Program benefits, to DD–214 errors and untimeliness that cause significant issues for servicemembers attempting to transition from the service. What is the status of your Human Resources modernization efforts and how do you plan to offer increased transparency and responsiveness (in addition to speed, accuracy and quality) to your processes?

Secretary DEL TORO and Admiral GILDAY. The MyNavy H.R. system digital transformation is designed to improve services to all Active component and Reserve sailors and future recruits through a modernized MyNavy H.R. information technology (IT) system of systems. We are engaging in a number of lines of effort within transformation:

1. Enterprise Customer Relationship Management (eCRM)—focused on enhanced recruiting and maintaining customer relationships to provide transactional handoffs through a tiered service helpdesk model.
2. MyNavy All Access (MNAA)—dedicated to developing a single point of entry for the sailor to interact with and view data in the MyNavy H.R. environment via web and mobile applications.
3. Authoritative Data Environment (ADE)—the data service for MyNavy HR, providing a single, integrated, and authoritative source of data to enable workforce decisionmaking to improve sailor and fleet readiness.
4. Navy Personnel and Pay (NP2)—the integrated personnel and pay system that enhances how sailors receive pay support. NP2 leverages an audible,

cloud-hosted software solution to enable Treasury-Direct disbursement and a single pay source.

5. Learning Stack (LS)—provides modernized content delivery and curriculum development to support on-demand training at the point of need.

This IT modernization will enable improved operations in recruiting, personnel and pay support, assignment and distribution, training, and in other mission areas within the Personnel, Manpower and Training space. With regards to personnel and pay issues, MyNavy Career Center (MNCC) recently transformed the legacy, decentralized Personnel Support Detachment (PSD) model of 27 locations to align around the work and eliminate variability. It now consists of a Human Resources Service Center (HRSC) with call center locations in Millington, TN and Little Creek, VA; six Transaction Service Centers (TSC); a Travel Processing Center (TPC) in Millington; and 13 Regional Support Centers (RSC) to improve efficiency, accuracy, and training.

Each TSC functions as a Center of Excellence (COE) for a specific major transaction type and is led by an O–5 or above commanding officer for accountability, transparency, responsiveness and to uphold a higher standard for Sailor Pay. RSCs are designed as the principal point of contact for leadership teams who are working through personnel and pay issues and to train Command Pay and Personnel Administrators (CPPAs).

HRSC operates 24/7/365 and provides a wide range of assistance to sailors and their families. HRSC provides up-to-date information and resolves issues at the Tier 1 level. HRSC conducts "warm handoffs" to subject matter experts in our TSCs and one TPC if the situation requires action beyond the authority of HRSC agents.

In order to deliver a simple IT solution to Personnel/Pay and increase the visibility, transparency, and responsiveness of the personnel and pay enterprise, the following items have recently been implemented for use by MNCC, command triads, and CPPAs:

- Enterprise Customer Relationship Management (eCRM). Allows MNCC to globally track, process, and manage most Personnel/Pay transactions. eCRM allows MNCC to track a transaction from the time it is submitted through completion, with full visibility of all actions taken.
- CPPA Dashboard. Increases transparency of transactions and allows command leaders to view individual CPPA performance metrics at the unit level.
- Enhanced Unit Commanders Financial Report (eUCFR). MNCC coordinated with the Defense Finance Accounting Service to develop the eUCFR, providing commands with a monthly snapshot of each sailors monthly pay and entitlements.

MNCC continues to review and improve business processes for all types of personnel and pay transactions. As these processes improve MNCC has also been dedicated to increase Personnel/Pay knowledge and experience in our TSCs, RSCs, and CPPAs to further improve transaction responsiveness and accuracy.

SUBMARINE INDUSTRIAL BASE

27. Senator KAINE. Secretary Del Toro, Congress has provided significant funding for investment in the submarine industrial base. How is the Navy deciding where that funding should go? Can you provide a summary of where these investments are being made?

Secretary DEL TORO. The Navy's ability to reach and sustain the required submarine production cadence of one *Columbia*-class submarine and two *Virginia*-class submarines per year is gated by addressing challenges to Submarine Industrial Base (SIB) capability, capacity, and workforce. SIB funding is addressing these challenges by investing in critical areas to include modernizing shipbuilder infrastructure, strengthening supply chain capability/capacity, scaling new technologies, addressing workforce trade skill gaps and constraints, expanding productive capacity via strategic outsourcing, and scaling government oversight of expanded industrial base efforts.

Through significant analysis, the Navy has identified the most pressing needs within each of these areas and is providing resources to address.

QUESTIONS SUBMITTED BY SENATOR ANGUS KING

SHORTFALLS IN CIVILIAN POLICE FORCE STAFFING

28. Senator KING. There is a DOD civilian police force shortage across the Department that has developed into a severe national security concern. In the State of Maine, this directly affects Portsmouth Naval Shipyard (PNSY) and Naval Com-

puter and Telecommunications Area Master Station Atlantic Detachment Cutler (Naval Support Area Cutler), with PNSY falling below 50 percent of their authorized force and 37 percent of their required, and Naval Support Area Cutler falling 32 percent below their authorized force and 25 percent of their required.

Admiral Gilday, how aware is the Navy of this issue, how long has this been occurring, and how is the Navy addressing these shortfalls?

Admiral GILDAY. The Navy is keenly aware of the challenges we continue to face attracting, hiring, and retaining security force personnel at PNSY and NSA Cutler. We have focused on recruiting and retaining talent for several years. We have employed a number of strategies to address the manning shortfalls; including expanded authorization and use of direct hiring capabilities for Police and Security positions, authorizing targeted recruitment, relocation and retention incentives, and raising the full performance level of Police Officer positions to the GS–7 level. Several CNIC Regions expanded outreach through Navy and State sponsored marketing, and hiring events targeted toward Police Officers have been carried out over the years to recruit local talent to expedite the hiring process. Further, CNIC has a focused Performance to Plan (P2P) working group that is assessing recruiting and retention challenges and proposing mitigations to reduce fill time and enable management's ability to respond to turnover.

As it stands, multiple barriers contribute to the workforce shortage. Some include pay parity with civilian counterparts, the Commander, Navy Installations Command requirement to have a bachelor's degree (which is not required by police departments in the local area), and a lack of transferability of credentials/qualifications. For example, a Navy Master at Arms on the PNSY police force might not meet the hiring criteria to be a General Schedule (GS) police officer, given that the prerequisite for a new applicant is that they must have a bachelor's degree or like experience. Or, a 10-year veteran of the Maine State police would have to go to the Federal Law Enforcement Training Center or police academy since the mid-Atlantic region will not honor a waiver for a 20-year retired officer or anyone with a prior police academy with a law enforcement background.

29. Senator KING. Secretary Del Toro, of these barriers, which can the Navy remove, which require the DOD to remove, and which require changing by OPM? In addition, will pay levels need to be considered?

Secretary DEL TORO. OPM is the authority that establishes formal qualification requirements for jobs within the General Schedule employment system. The DON applies the OPM regulations when evaluating candidates for jobs in the Police Series (0083) and does not supplement these requirements with other qualification factors.

A candidate for employment as a Police Officer may qualify for the position based on any of three criteria: 1) education, 2) experience, or 3) a combination of the two. New entrants to the 0083 series may qualify at grades GS–02 through GS–06. Qualification at a specific level is dependent upon the candidate's experience and/or education. Attainment of a bachelor's degree is not required under OPM qualifications in order to qualify at any grade level in the 0083 series. Personnel with prior law enforcement (LE) experience may submit a waiver for LE training and police academy requirements. The waiver must be approved by the DOD Peace Officer Standards and Training (POST) Commission.

30. Senator KING. Admiral Gilday, would it be helpful to change policy and consider classifying base police as law enforcement officers?

Admiral GILDAY. Candidates who lack qualifying work experience related to the position may also seek qualification consideration by a substitution of education for experience. All Executive Agencies use the OPM established minimum qualification requirements, along with agency-prescribed specialized requirements to qualify candidates for Federal positions. Establishment of a Law Enforcement Officer (LEO) designation would create significant labor implications to include age requirements and benefit contributions.

31. Senator KING. Secretary Del Toro and Admiral Gilday, has DOD or the Navy applied for direct-hire authority to address the issues identified at the named facilities?

Secretary DEL TORO. The DOD has Direct Hire Authority for Police Officer positions. The DON is taking advantage of the DHA to address the identified issues at the named facilities.

32. Senator KING. In talks with constituents of Maine impacted by this, a suggestion I received was to amend the recruitment process by hiring recruits as GS–5, processing them through their required training in the time that takes, and joining the field as GS–7, skipping GS–6.

Secretary Del Toro, how feasible would change be, and what effects would it have across the organization?

Secretary DEL TORO. The experience and training completed at each GS level provide our civilian Police Officers with the necessary qualifications for career advancement. Adjusting the career development to allow for a two-grade interval pattern would not be consistent with current training requirements.

Police Officer new hires have a rigorous training and development plan that includes specific work and exposures at each grade level. Adjusting the development plan to increase compensation without alignment to their skill would not result in improved quality of the work performed at the higher level without the on the job experience at the intervening level.

It should be note that increasing the grade level is not the only way to increase pay for General Schedule (GS) employees. The Navy, similar to other civilian employing components and agencies, has the option to seek OPM approval of higher special rates of pay for a category of GS employees if a determination is made that pay increases are needed to address significant recruitment and/or retention difficulties. (See 5 U.S.C. 5305 and 5 CFR part 530, subpart C.)

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

33. Senator WARREN. Secretary Del Toro, Admiral Gilday, and General Berger, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

Secretary DEL TORO and Admiral GILDAY. The President's Budget represents the best balance and prioritization of resources to execute the National Defense Strategy and National Military Strategy. However, opportunities always exist to enhance the President's Budget, accelerate capabilities, and reduce warfighting risk should additional resources become available. In addition, as we operate over time, there can be emergent warfighting needs that are identified too late to be included in the annual President's Budget.

General BERGER. Yes.

34. Senator WARREN. Admiral Gilday and General Berger, historically, have previous UPL items been included in the following year's base budget? Have UPL items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

Admiral GILDAY. My understanding of the purpose of 10 U.S.C. 222 directing the Unfunded Priorities List (UPL) is to identify items that are executable in the budget year in order to provide Congress with options to enhance or accelerate capabilities and reduce warfighting risk, should additional resources become available as Congress marks up the defense bills that year. While some UPL items may be included in the following year's budget, they are not necessarily correlated to the UPL. For example, maritime and aviation spares were identified on the fiscal year 2023 UPL as an executable way that Congress could enhance readiness in fiscal year 2023 if funding above the President's Budget Request was available. The fiscal year 2024 President's Budget includes funding for maritime and aviation spares to fund fiscal year 2024 requirements—not because they were included on the fiscal year 2023 UPL. The funding is related, but cannot be directly correlated. The Navy's Program Objective Memorandum (POM) process assesses each year's requirements to inform the President's Budget Request.

General BERGER. Yes, previous unfunded UPL items have historically been included in the following year's budget. Yes, unfunded fiscal year 2023 UPL items have been included in the fiscal year 2024 budget. The information for those items is articulated in the fiscal year 2024 budget justification material.

35. Senator WARREN. Admiral Gilday and General Berger, do you agree that Federal agencies should be required to work within the confines of base budget process?

Admiral GILDAY. The base budget process includes the submission of the President's Budget Request, working with and supporting Congress in their review and oversight of the budget, and Congress' enactment of the final defense bills each

year. This process is typically sufficient for the Navy to operate. However, there are circumstances where supplemental funding may be necessary. For example, in fiscal year 2022–2023, the Department of Defense was challenged with resourcing support for Ukraine beyond our base budget, and fact-of-life increases needed in our base budget for higher than expected inflation. We are grateful to the Congress for supporting these emergent needs.

General BERGER. Yes.

36. Senator WARREN. Admiral Gilday and General Berger, Secretary of Defense Austin supports legislation that would repeal the requirement for individual leaders to submit unfunded priority lists under 10 U.S.C. 222a. He stated this publicly in a Senate Armed Services Committee hearing on March 28, 2023 and in a letter that Under Secretary Michael J. McCord sent on behalf on Secretary Austin to me on March 20, 2023. Do you plan to continue to submit unfunded priority lists?

Admiral GILDAY. As a Service Chief, I plan to meet the reporting requirements directed to me by Title 10 of the U.S. Code. Should Congress repeal 10 U.S.C. 222a, then I would no longer be required to submit my unfunded priorities list each year.

General BERGER. Yes.

37. Senator WARREN. Admiral Gilday and General Berger, if you plan to submit unfunded priority lists in the future, why are you doing so despite Secretary of Defense Austin's support for the repeal of these required lists?

Admiral GILDAY. As a Service Chief, I plan to meet the reporting requirements directed to me by Title 10 of the U.S. Code. Should Congress repeal 10 U.S.C. 222a, then I would no longer be required to submit my unfunded priorities list each year.

General BERGER. While my term as the Commandant will end on 10 July 2023, in order to be in compliance with 10 U.S.C. 222a, which requires Service Chiefs to submit a unfunded priority list, it is likely that future Commandants will submit a list.

INFORMATION ON UPLS

38. Senator WARREN. Admiral Gilday and General Berger, what was the cost of putting together this UPL list?

Admiral GILDAY. The Navy developed the fiscal year 2024 Unfunded Priorities List (UPL) as part of the POM–24 budget development process, so there was minimal additional cost. Emergent needs were added to the UPL as identified through normal execution processes, e.g. dry dock repairs needed at Puget Sound Naval Shipyard and Trident Refit Facility Bangor.

General BERGER. There is no additional cost for putting together the UPL as it is part of our Planning, Programming, Budgeting and Execution process.

39. Senator WARREN. For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

Admiral Gilday and General Berger, please provide a detailed description of the UPL.

Admiral GILDAY. Attached is the Navy fiscal year 2024 Unfunded Priorities List (UPL) package provided to Congress, which includes a detailed description of each UPL item [Appendix].

General BERGER. In support of 10 U.S. Code § 222a, I submitted a prioritized list of the Marine Corps' unfunded priorities for fiscal year 2024, which I respectfully asked the Senate Armed Services Committee to consider should additional funds above those requested in the Fiscal Year 2024 President's Budget be made available. I have made extensive efforts in the fiscal year 2024 budget submission to assess, prioritize, and balance force capability, capacity, and readiness to most rapidly achieve Force Design objectives and build the Joint Force's Stand-in Force while maintaining the Nation's crisis response capabilities. The UPL submission reduces risk in executing the National Defense Strategy by prioritizing investment in the next LPD–17 Flight II *San Antonio*-class Warship (LPD–33), continuing a vital component in amphibious warfare ship formations to meet the demands of Distributed Maritime Operations and crisis response. It accelerates key Force Design warfighting investments and supporting modernization initiatives that advance the kill chain and increase our ability to credibly deter adversaries. Finally, military construction projects are listed that accelerate development of facilities supporting our future force. Please see the enclosure which I included with my letter to the Committee that provides detailed supporting material on each of the 32 items requested in the Marine Corps Unfunded Priority List. [Enclosure 1 has been retained in Committee files.]

40. Senator WARREN. Admiral Gilday and General Berger, what does the UPL purchase?

Admiral GILDAY. Attached is the Navy Fiscal Year 2024 Unfunded Priorities List (UPL) package provided to Congress, which includes a list of each UPL item that Congress could procure if additional funding becomes available. [The Navy Fiscal Year 2024 Unfunded Priorities List has been retained in Committee files.]

General BERGER. Please see "Item" in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

41. Senator WARREN. Admiral Gilday and General Berger, please include detail on all end items with quantities, contractor full-time equivalents, etc.

Admiral GILDAY. Attached is the Navy Fiscal Year 2024 Unfunded Priorities List (UPL) package provided to Congress, which includes a detailed description of each UPL item and the quantity where applicable. Some UPL items (e.g. maritime and aviation spare and repair parts) cannot be quantified at this time. Contractor full-time equivalents will be determined during contract negotiations should Congress enact appropriations for the UPL item. [The Navy Fiscal Year 2024 Unfunded Priorities List has been retained in Committee files.]

General BERGER. Please see the table at the top of Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

42. Senator WARREN. Admiral Gilday and General Berger, what specific capability will the UPL provide?

Admiral GILDAY. Attached is the Navy fiscal year 2024 Unfunded Priorities List (UPL) package provided to Congress, which includes a detailed description of each UPL item and the capability each item will support.

General BERGER. Please see Operational Impact in Section I of the enclosure and 11 in Section III. [Enclosure 1 has been retained in Committee files.]

43. Senator WARREN. Admiral Gilday and General Berger, what gap will this fill that is not in the base budget?

Admiral GILDAY. [Deleted.]

General BERGER. Please see 11 in Section III of the enclosure. [Enclosure 1 has been retained in Committee files.]

44. Senator WARREN. Admiral Gilday and General Berger, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

Admiral GILDAY. [Deleted.]

General BERGER. Please see 11 in Section III of the enclosure. [Enclosure 1 has been retained in Committee files.]

45. Senator WARREN. Admiral Gilday and General Berger, what is the operational requirement? How does this UPL support current or future operations?

Admiral GILDAY. Attached is the Navy fiscal year 2024 Unfunded Priorities List (UPL) package provided to Congress, which includes a detailed description of each UPL item and how each item will support current or future operations and requirements. [The Navy Fiscal Year 2024 Unfunded Priorities List has been retained in Committee files.]

General BERGER. Please see "OPERATIONAL IMPACT" in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

46. Senator WARREN. Admiral Gilday and General Berger, what is the operational impact if this UPL is not funded in fiscal year 2024?

Admiral GILDAY. The President's Budget provides the best balance of investments to meet operational requirements within the directed fiscal topline. My understanding of the purpose of 10 U.S.C. 222 directing the Unfunded Priorities List (UPL) is to identify items that are executable in the budget year in order to provide Congress with options to enhance or accelerate capabilities and reduce warfighting risk, should additional resources become available as Congress marks up the defense bills that year. Thus, the operational impact of not funding the UPL is the missed opportunity to enhance or accelerate capabilities and reduce warfighting risk.

General BERGER. Please see "OPERATIONAL IMPACT" in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

47. Senator WARREN. Admiral Gilday and General Berger, are there plans to include this item in the fiscal year 2025 base budget?

Admiral GILDAY. All fiscal year 2024 UPL items will be considered as we develop the fiscal year 2025 budget. Some UPL items are regularly included in our budget whether included on the UPL or not, e.g. maritime and aviation spares; and facilities sustainment, restoration, and modernization funding. The Navy's Program Objective Memorandum (POM) process assesses each year's requirements to inform the President's Budget Request. The POM–25 process is currently ongoing and the final fiscal year 2025 President's Budget is pre-decisional.

General BERGER. The fiscal year 2025 budget process is ongoing and this information cannot be shared at this time.

48. Senator WARREN. Admiral Gilday and General Berger, why was this UPL not included in the fiscal year 2024 President's Budget submission?

Admiral GILDAY. The President's Budget provides the best balance of investments to meet operational requirements within the directed fiscal topline. My understanding of the purpose of 10 U.S.C. 222 directing the Unfunded Priorities List (UPL) is to identify items that are executable in the budget year in order to provide Congress with options to enhance or accelerate capabilities and reduce warfighting risk, should additional resources become available as Congress marks up the defense bills that year. The UPL also includes emergent warfighting needs that are identified too late to be included in the annual President's Budget, e.g. dry dock repairs needed at Puget Sound Naval Shipyard and Trident Refit Facility Bangor.

General BERGER. The Fiscal Year 2024 President's Budget submission reflects our extensive efforts to assess, prioritize and balance force capability, capacity, and readiness within a constrained topline.

49. Senator WARREN. Admiral Gilday and General Berger, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

Admiral GILDAY.

1. Maritime Targeting Cell Afloat (MTC-A) Development—Northrop Grumman
2. Fund ZEUS for DDG–1000 Class—Raytheon
3. Dry Dock Repairs for PSNS Investment Restoration and Modernization (RM)—Kiewit-Alberici
4. DDG–51 SEWIP Blk III (DDG 136–137)—Northrop Grumman, GD-BIW, HII
5. CVN 75 and CVN 80 SEWIP Blk III—Northrop Grumman, HII
6. E–2D Theater Combat Id and HECTR—Northrop Grumman
7. Navy Unique Fleet Essential Airlift Logistics KC–130J (+1 A/C Reserves)—Lockheed Martin
8. Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment—Various Vendors competing
9. APN–6 Spares—Various vendors and depends on Program (air vehicle)
10. OPN–8 Maritime Spares—Various vendors and depends on program (ship type)
11. VIOLET—classified, will provide information through appropriate channels if requested.

General BERGER. Please see Section II of the enclosure. [Enclosure 1 has been retained in Committee files.]

50. Senator WARREN. Admiral Gilday and General Berger, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?

Admiral GILDAY. Vendors are selected through a competitive process in accordance with Federal Acquisition Regulations. For those items where contracts with vendors are already established, the Navy has frequent, ongoing contact as a normal course of program management. The focus of such contact ensures proper administration of contract requirements and oversight of contractor performance to confirm the effective delivery of goods and services to the Government.

General BERGER. Please see Section II of the enclosure. Vendors are selected through a competitive process in accordance with Federal Acquisition Regulations. For those items where contracts with vendors are already established, the Marine Corps has frequent, ongoing contact as a normal course of program management. The focus of such contact ensures proper administration of contract requirements and oversight of contractor performance to confirm the effective delivery of goods and services to the Government. [Enclosure 1 has been retained in Committee files.]

51. Senator WARREN. Admiral Gilday and General Berger, what is your history with this vendor? Please detail when the relationship began, the number of contracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor.

Admiral GILDAY. Vendors are selected through a competitive process in accordance with Federal Acquisition Regulations. In the conduct of my duties as Chief of Naval Operations, any relationship with vendors providing goods or services to the Navy is on a professional basis and in accordance with Government ethics rules.

General BERGER. Please see Section III of the enclosure. Vendors are selected through a competitive process in accordance with Federal Acquisition Regulations. In the conduct of my duties as Commandant, any relationship with vendors providing goods or services to the Marine Corps is on a professional basis and in accordance with Government ethics rules. [Enclosure 1 has been retained in Committee files.]

52. Senator WARREN. Admiral Gilday and General Berger, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

Admiral GILDAY. The Navy does not track this level of information. However, Government ethics rules impose employment restrictions on personnel after leaving the Department of Defense. This includes representational bans that prevent individuals from representing a vendor before the Government regarding any official action for a certain period of time.

General BERGER. The Marine Corps does not track this level of information. However, Government ethics rules impose employment restrictions on personnel after leaving the Department of Defense. This includes representational bans that prevent individuals from representing a vendor before the Government regarding any official action for a certain period of time.

53. Senator WARREN. Admiral Gilday and General Berger, in which city/State will the UPL be executed?

Admiral GILDAY. The locations would vary with each UPL.

1. Maritime Targeting Cell Afloat (MTC-A) Development—Northrop Grumman (Aurora, CO)
2. Fund ZEUS for DDG–1000 Class
   - Total Ship Computing Environment (TSCE): Raytheon (Tewksbury, MA & Portsmouth, RI)
   - Integrated Combat System (ICS): Lockheed Martin (Moorestown, NJ)
   - AN/SPY–6 radar: Raytheon (Andover, MA)
   - Installed on DDG 1000 Class in San Diego, CA during a maintenance avail
3. Dry Dock Repairs for PSNS Investment Restoration and Modernization (RM)—Kiewit-Alberici (Bremerton, WA)
4. DDG–51 SEWIP Blk III (DDG 136–137)—Northrop Grumman (Baltimore, MD);
   - Installed on DDG 136 BIW (Bath, ME)
   - Installed on DDG 137 at HII (Pascagoula, MS)
5. CVN 75 and CVN 80 SEWIP Blk III—Northrop Grumman (Baltimore, MD)
6. E–2D Theater Combat Id and HECTR—Northrop Grumman (Melbourne, FL)
7. Navy Unique Fleet Essential Airlift Logistics KC–130J (+1 A/C Reserves)—Lockheed Martin (Marietta, GA)
8. Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment —Various vendors competing
9. APN–6 Spares—Various vendors and depends on Program (air vehicle)
10. OPN–8 Maritime Spares—Various vendors and depends on program (ship type)
11. VIOLET—classified, will provide information through appropriate channels if requested.

General BERGER. Please see II.3. and II.4 Section II of the enclosure. [Enclosure 1 has been retained in Committee files.]

54. Senator WARREN. Admiral Gilday and General Berger, is this requirement on an existing contract? If so, with who? What is the history of the contract?

Admiral GILDAY. Yes, the UPL identifies items that are executable in the budget year in order to provide Congress with options to enhance or accelerate capabilities and reduce warfighting risk.

General BERGER. Please see III.3 and III.4 in Section III of the enclosure. [Enclosure 1 has been retained in Committee files.]

55. Senator WARREN. Admiral Gilday and General Berger, what is the anticipated contract award date if the UPL receives funding?

Admiral GILDAY. Funding vehicles are in place for every UPL. The obligation and execution of funds would vary depending on if Congress funded a UPL and the project funded.

General BERGER. Please see 8b of Section III of the enclosure. [Enclosure 1 has been retained in Committee files.]

56. Senator WARREN. Admiral Gilday and General Berger, what funding lines are associated with this UPL?

Admiral GILDAY. Below is the Navy fiscal year 2024 Unfunded Priorities List (UPL) with appropriation, line title, and line item numbers identified for each UPL item.

NAVY FY24 UNFUNDED PRIORITIES LIST (UPL)

Priority	Navy FY24 Unfunded Priorities List (UPL)	APPN	J-Book Line #	J-Book Line Title	BLI	LI	TY$K
1	Maritime Targeting Cell Afloat (MTC-A) Development	RDTEN	102	Maritime Targeting Cell	50604038	0604038	$ 45,300
2	Fund E-2D Theater Combat ID and HECTR	RDTEN	111	Advanced Hawkeye	50604234N	0604234N	$ 49,300
3	Fund ZEUS for DDG-1000 Class	OPN RDTEN	16 170	DDG 1000 Class Support Equipment DDG-1000	10947 50204202N	0947 0204202N	$ 186,400
4	VIOLET	OMN OPN RDTEN	130 78 203	Combat Communications and Electronic Submarine Broadcast Support Navy Strategic Communications	11C1C 23107 70101402N	1C1C 3107 0101402N	$ 25,600
5	Dry Dock Repairs at PSNS Investment Restoration and Modernization (RM)	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 300,000
6	Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 550,000
7	DDG-51 SEWIP Blk III (DDG 136-137)	SCN	32	Completion of PY Shpbldg Progr	55300	5300	$ 208,100
8	CVN 75 and CVN 80 SEWIP Blk III	SCN	3 7	Carrier Replacement Program CVN Refueling Overhauls	22001 22086	2001 2086	$ 264,000
9	Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)	APN	15	KC-130J	40416	0416	$ 118,800
10	APN-6 Spares	APN	62	Spares and Repair Parts	60605	0605	$ 175,000
11	OPN-8 Maritime Spares	OPN	142	Spares and Repair Parts	89020	9020	$ 100,000
						TOTAL	$ 2,022,500

General BERGER. Please see the table at the top of Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

57. Senator WARREN. Admiral Gilday and General Berger, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?

Admiral GILDAY. Any funding enacted for the Navy fiscal year 2024 Unfunded Priorities List (UPL) will be used to enhance or accelerate capabilities and reduce warfighting risk as identified. However, funding the identified multiple appropriations together enables better integration of effort and reduces delays. The unfunded portions may be requested in future budget requests to complete the identified UPL item/effort and deliver the subsequent benefit.

General BERGER. Please see table at the top of Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

58. Senator WARREN. Admiral Gilday and General Berger, how much was enacted and obligated (or expended for Research, Development, Test, and Evaluation) in fiscal years 2022–2023 for this requirement?

Admiral GILDAY. The table below shows the enacted and obligated (and expended for RDT&E) amounts for fiscal year 2022 and fiscal year 2023 for each Unfunded Priorities List (UPL) item based on the line item, program element, and/or ship hull. The UPL informs Congress of ways they can enhance, accelerate, or reduce risk for existing line items/program elements should additional resources become available.

NAVY FY24 UNFUNDED PRIORITIES LIST (UPL)								PB-22 / FY22 ($K)			PB-23 / FY23 ($K)		
Priority	Navy FY24 Unfunded Priorities List (UPL)	APPN	J-Book Line #	J-Book Line Title	BLI	LI	TY$K	FY22 Enacted	FY22 Obligated	FY22 Expended	FY23 Enacted	FY23 Obligated	FY23 Expended
1	Maritime Targeting Cell Afloat (MTC-A) Development	RDTEN	102	Maritime Targeting Cell	50604038	0604038	$ 45,300	$ -	$ -	$ -	$ 69,600	$ 49,907	$ 25,309
2	Fund E-2D Theater Combat ID and HECTR	RDTEN	111	Advanced Hawkeye	50604234N	0604234N	$ 49,300	$ 348,360	$ 314,909	$ 237,141	$ 487,281	$ 173,018	$ 43,527
3	Fund ZEUS for DDG-1000 Class	OPN RDTEN	16 170	DDG 1000 Class Support Equipment DDG-1000	10947 50204202N	0947 0204202N	$ 186,400	$ 71,561 $ 112,576	$ 69,117 $ 104,417	$ 86,458	$ 314,333 $ 180,374	$ 31,680 $ 162,279	$ 37,918
4	VIOLET	OMN OPN RDTEN	130 78 203	Combat Communications and Electronic Submarine Broadcast Support Navy Strategic Communications	11C1C 23107 70101402N	1C1C 3107 0101402N	$ 25,600	$ 126,833 $ 47,579 $ 35,451	$ 129,753 $ 43,938 $ 34,137	$ 31,546	$ 156,860 $ 91,150 $ 49,424	$ 86,086 $ 65,309 $ 21,448	$ 8,875
5	Dry Dock Repairs at PSNS Investment Restoration and Modernization (RM)	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 300,000	$ 323,313	$ 323,313		$ 282,921	$ 6,038	
6	Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 550,000	$ 1,142,491	$ 1,182,448		$ 951,863	$ 108,446	
7	DDG-51 SEWIP Blk III (DDG 136-137)	SCN	32	Completion of PY Shpbldg Progr	55300	5300	$ 208,100	$ -	$ -		$ -	$ -	
8	CVN 75 and CVN 80 SEWIP Blk III	SCN	3 7	Carrier Replacement Program CVN Refueling Overhauls	22001 22086	2001 2086	$ 264,000	$ 1,062,205 $ 66,262	$ 947,088 $ 66,262		$ 1,465,880 $ 612,081	$ 1,096,336 $ 88,248	
9	Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)	APN	15	KC-130J	40416	0416	$ 118,800	$ -	$ -		$ -	$ -	
10	APN-6 Spares	APN	62	Spares and Repair Parts	60605	0605	$ 175,000	$ 2,295,603	$ 2,219,692		$ 2,047,417	$ 820,716	
11	OPN-8 Maritime Spares	OPN	142	Spares and Repair Parts	89020	9020	$ 100,000	$ 445,621	$ 427,112		$ 582,313	$ 241,533	
						TOTAL	$ 2,022,500	$ 6,077,855	$ 5,862,186	$ 355,145	$ 7,291,497	$ 2,951,044	$ 115,629

- Fiscal year 2023 obligation/expenditure data is as of 18 May 2023.
- For UPL priority #7, the SCN funding data shows DDG 136 and DDG 137 (fiscal year 2021 ships) cost to complete.

- For UPL priority #8, the SCN funding for "Carrier Replacement Program" shows CVN 80 funding.
- For UPL priority #8, the SCN funding for "CVN Refueling Overhauls" shows CVN 75 refueling overhaul funding.

General BERGER. Please see the "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

59. Senator WARREN. Admiral Gilday and General Berger, how much was requested in fiscal year 2024 for this requirement?

Admiral GILDAY. The table below shows the amount requested in the fiscal year 2024 President's Budget for each Unfunded Priorities List (UPL) item based on the line item, program element, and/or ship hull. The table shows both the fiscal year 2024 and Future Years Defense Program requests. The UPL informs Congress of ways they can enhance, accelerate, or reduce risk for existing line items/program elements should additional resources become available.

NAVY FY24 UNFUNDED PRIORITIES LIST (UPL)								PB-24 ($K)	
Priority	Navy FY24 Unfunded Priorities List (UPL)	APPN	J-Book Line #	J-Book Line Title	BLI	LI	TY$K	PB-24 FY24 Request	PB-24 FYDP Request
1	Maritime Targeting Cell Afloat (MTC-A) Development	RDTEN	102	Maritime Targeting Cell	50604038	0604038	$ 45,300	$ 30,922	$ 186,103
2	Fund E-2D Theater Combat ID and HECTR	RDTEN	111	Advanced Hawkeye	50604234N	0604234N	$ 49,300	$ 399,919	$ 1,997,098
3	Fund ZEUS for DDG-1000 Class	OPN RDTEN	16 170	DDG 1000 Class Support Equipment DDG-1000	10947 50204202N	0947 0204202N	$ 186,400	$ 232,124 $ 231,778	$ 769,528 $ 433,831
4	VIOLET	OMN OPN RDTEN	130 78 203	Combat Communications and Electronic Submarine Broadcast Support Navy Strategic Communications	1C1C 23107 70101402N	1C1C 3107 0101402N	$ 25,600	$ 149,231 $ 73,791 $ 51,919	$ 772,525 $ 298,334 $ 166,568
5	Dry Dock Repairs at PSNS Investment Restoration and Modernization (RM)	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 300,000	$ 232,398	$ 1,018,200
6	Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 550,000	$ 872,854	$ 1,747,976
7	DDG-51 SEWIP Blk III (DDG 136-137)	SCN	32	Completion of PY Shpbldg Progr	55300	5300	$ 208,100	$ -	$ 123,533
8	CVN 75 and CVN 80 SEWIP Blk III	SCN	3 7	Carrier Replacement Program CVN Refueling Overhauls	22001 22086	2001 2086	$ 264,000	$ 1,115,296 $ 817,646	$ 3,532,013 $ 5,130,683
9	Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)	APN	15	KC-130J	40416	0416	$ 118,800	$ -	$ -
10	APN-6 Spares	APN	62	Spares and Repair Parts	60605	0605	$ 175,000	$ 2,451,244	$ 9,398,039
11	OPN-8 Maritime Spares	OPN	142	Spares and Repair Parts	89020	9020	$ 100,000	$ 645,900	$ 2,970,997
						TOTAL	$ 2,022,500	$ 7,305,022	$ 28,545,428

- For UPL priority #7, the SCN funding data shows DDG 136 and DDG 137 (fiscal year 2021 ships) cost to complete.
- For UPL priority #8, the SCN funding for "Carrier Replacement Program" shows CVN 80 funding.
- For UPL priority #8, the SCN funding for "CVN Refueling Overhauls" shows CVN 75 refueling overhaul funding.

General BERGER. Please see the "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

60. Senator WARREN. Admiral Gilday and General Berger, is there a tail associated with this UPL?

Admiral GILDAY. Yes, most items in the President's Budget and on the Unfunded Priorities List (UPL) have associated tail costs. For example, the procurement of a KC–130J aircraft will require additional manpower, training, operations, spares and repair parts, and maintenance costs when it delivers to the fleet. Some items, such as aviation and maritime spares, are continuous investments needed each year to sustain the overall Navy fleet.

General BERGER. Please see "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

61. Senator WARREN. Admiral Gilday and General Berger, is any tail funded in the future years defense plan?

Admiral GILDAY. The table below shows the amount requested in the fiscal year 2024 President's Budget for each Unfunded Priorities List (UPL) item based on the line item, program element, and/or ship hull. The table shows both the fiscal year 2024 and Future Years Defense Program requests. The UPL informs Congress of ways they can enhance, accelerate, or reduce risk for existing line items/program elements should additional resources become available.

For all UPL items except for the KC–130J, some funding is programmed over the FYDP of the fiscal year 2024 President's Budget. If Congress enacts appropriations to procure the KC–130J in fiscal year 2024, then Navy will include "tail funding" for the aircraft in the fiscal year 2025 President's Budget FYDP based on when it delivers to the fleet.

NAVY FY24 UNFUNDED PRIORITIES LIST (UPL)								PB-24 ($K)	
Priority	Navy FY24 Unfunded Priorities List (UPL)	APPN	J-Book Line #	J-Book Line Title	BLI	LI	TY$K	PB-24 FY24 Request	PB-24 FYDP Request
1	Maritime Targeting Cell Afloat (MTC-A) Development	RDTEN	102	Maritime Targeting Cell	50604038	0604038	$ 45,300	$ 30,922	$ 186,103
2	Fund E-2D Theater Combat ID and HECTR	RDTEN	111	Advanced Hawkeye	50604234N	0604234N	$ 49,300	$ 399,919	$ 1,997,098
3	Fund ZEUS for DDG-1000 Class	OPN RDTEN	16 170	DDG 1000 Class Support Equipment DDG-1000	10947 50204202N	0947 0204202N	$ 186,400	$ 232,124 $ 231,778	$ 769,528 $ 433,831
4	VIOLET	OMN OPN RDTEN	130 78 203	Combat Communications and Electronic Submarine Broadcast Support Navy Strategic Communications	11C1C 23107 70101402N	1C1C 3107 0101402N	$ 25,600	$ 149,231 $ 73,791 $ 51,919	$ 772,525 $ 298,334 $ 166,568
5	Dry Dock Repairs at PSNS Investment Restoration and Modernization (RM)	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 300,000	$ 232,398	$ 1,018,200
6	Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 550,000	$ 872,854	$ 1,747,976
7	DDG-51 SEWIP Blk III (DDG 136-137)	SCN	32	Completion of PY Shpbldg Progr	55300	5300	$ 208,100	$ -	$ 123,533
8	CVN 75 and CVN 80 SEWIP Blk III	SCN	3 7	Carrier Replacement Program CVN Refueling Overhauls	22001 22086	2001 2086	$ 264,000	$ 1,115,296 $ 817,646	$ 3,532,013 $ 5,130,683
9	Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)	APN	15	KC-130J	40416	0416	$ 118,800	$ -	$ -
10	APN-6 Spares	APN	62	Spares and Repair Parts	60605	0605	$ 175,000	$ 2,451,244	$ 9,398,039
11	OPN-8 Maritime Spares	OPN	142	Spares and Repair Parts	89020	9020	$ 100,000	$ 645,900	$ 2,970,997
						TOTAL	$ 2,022,500	$ 7,305,022	$ 28,545,428

- For UPL priority #7, the SCN funding data shows DDG 136 and DDG 137 (fiscal year 2021 ships) cost to complete.
- For UPL priority #8, the SCN funding for "Carrier Replacement Program" shows CVN 80 funding.
- For UPL priority #8, the SCN funding for "CVN Refueling Overhauls" shows CVN 75 refueling overhaul funding.

General BERGER. Please see "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

62. Senator WARREN. Admiral Gilday and General Berger, please describe how much the requirement will cost per year for the next 5 years.

Admiral GILDAY. The table below shows the amount requested in the fiscal year 2024 President's Budget for each Unfunded Priorities List (UPL) item based on the line item, program element, and/or ship hull. The table shows both the fiscal year 2024 and Future Years Defense Program requests. The UPL informs Congress of ways they can enhance, accelerate, or reduce risk for existing line items/program elements should additional resources become available. The cost per year may change if Congress enacts funding for the UPL items in fiscal year 2024. In some cases, accelerating funding may result in reduced costs per year over the next 5 years, pending contract negotiations and revisions to the program schedules.

NAVY FY24 UNFUNDED PRIORITIES LIST (UPL)								PB-24 ($K)	
Priority	Navy FY24 Unfunded Priorities List (UPL)	APPN	J-Book Line #	J-Book Line Title	BLI	LI	TY$K	PB-24 FY24 Request	PB-24 FYDP Request
1	Maritime Targeting Cell Afloat (MTC-A) Development	RDTEN	102	Maritime Targeting Cell	50604038	0604038	$ 45,300	$ 30,922	$ 186,103
2	Fund E-2D Theater Combat ID and HECTR	RDTEN	111	Advanced Hawkeye	50604234N	0604234N	$ 49,300	$ 399,919	$ 1,997,098
3	Fund ZEUS for DDG-1000 Class	OPN RDTEN	16 170	DDG 1000 Class Support Equipment DDG-1000	10947 50204202N	0947 0204202N	$ 186,400	$ 232,124 $ 231,778	$ 769,528 $ 433,831
4	VIOLET	OMN OPN RDTEN	130 78 203	Combat Communications and Electronic Submarine Broadcast Support Navy Strategic Communications	11C1C 23107 70101402N	1C1C 3107 0101402N	$ 25,600	$ 149,231 $ 73,791 $ 51,919	$ 772,525 $ 298,334 $ 166,568
5	Dry Dock Repairs at PSNS Investment Restoration and Modernization (RM)	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 300,000	$ 232,398	$ 1,018,200
6	Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment	OMN	280	Sustainment, Restoration and Modernization	1BSM1	BSM1	$ 550,000	$ 872,854	$ 1,747,976
7	DDG-51 SEWIP Blk III (DDG 136-137)	SCN	32	Completion of PY Shpbldg Progr	55300	5300	$ 208,100	$ -	$ 123,533
8	CVN 75 and CVN 80 SEWIP Blk III	SCN	3 7	Carrier Replacement Program CVN Refueling Overhauls	22001 22086	2001 2086	$ 264,000	$ 1,115,296 $ 817,646	$ 3,532,013 $ 5,130,683
9	Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)	APN	15	KC-130J	40416	0416	$ 118,800	$ -	$ -
10	APN-6 Spares	APN	62	Spares and Repair Parts	60605	0605	$ 175,000	$ 2,451,244	$ 9,398,039
11	OPN-8 Maritime Spares	OPN	142	Spares and Repair Parts	89020	9020	$ 100,000	$ 645,900	$ 2,970,997
						TOTAL	$ 2,022,500	$ 7,305,022	$ 28,545,428

- For UPL priority #7, the SCN funding data shows DDG 136 and DDG 137 (fiscal year 2021 ships) cost to complete.
- For UPL priority #8, the SCN funding for "Carrier Replacement Program" shows CVN 80 funding.
- For UPL priority #8, the SCN funding for "CVN Refueling Overhauls" shows CVN 75 refueling overhaul funding.

General BERGER. Please see the "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

63. Senator WARREN. Admiral Gilday and General Berger, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or UPL.

Admiral GILDAY. The table below shows the fiscal year 2022 and fiscal year 2023 amounts requested in the President's Budgets, included on the Navy's UPLs, and enacted by Congress for each UPL item based on the line item, program element, and/or ship hull. The UPL informs Congress of ways they can enhance, accelerate, or reduce risk for existing line items/program elements should additional resources become available.

NAVY FY24 UNFUNDED PRIORITIES LIST (UPL)								PB-22 / FY22 ($K)			PB-23 / FY23 ($K)		
Priority	Navy FY24 Unfunded Priorities List (UPL)	APPN	J-Book Line #	J-Book Line Title	BLI	LI	TYSK	PB-22 FY22 Request	FY22 Navy UPL	FY22 Enacted	PB-23 FY23 Request	FY23 Navy UPL	FY23 Enacted
1	Maritime Targeting Cell Afloat (MTC-A) Development	RDTEN	102	Maritime Targeting Cell	50604038	0604038	$ 45,300	$ -	$ -	$ -	$ 39,600	$ -	$ 69,600
2	Fund E-2D Theater Combat ID and HECTR	RDTEN	111	Advanced Hawkeye	50604234N	0604234N	$ 49,300	$ 386,860	$ -	$ 348,360	$ 502,956	$ -	$ 487,281
3	Fund ZEUS for DDG-1000 Class	OPN	16	DDG 1000 Class Support Equipment	10947	0947	$ 186,400	$ 126,107	$ -	$ 71,561	$ 314,333	$ -	$ 314,333
		RDTEN	170	DDG-1000	50204202N	0204202N		$ 112,576	$ -	$ 112,576	$ 197,436	$ -	$ 180,374
4	VIOLET	OMN	130	Combat Communications and Electronic	11C1C	1C1C		$ 143,493		$ 126,833	$ 145,320		$ 156,860
		OPN	78	Submarine Broadcast Support	23107	3107	$ 25,600	$ 47,579	$ -	$ 47,579	$ 91,150	$ -	$ 91,150
		RDTEN	203	Navy Strategic Communications	70101402N	0101402N		$ 35,451	$ -	$ 35,451	$ 49,424	$ -	$ 49,424
5	Dry Dock Repairs at PSNS Investment Restoration and Modernization (RM)	OMN	280	Sustainment, Restoration and Modernization	1B5M1	B5M1	$ 300,000	$ 123,313	$ -	$ 323,313	$ 276,921	$ -	$ 282,921
6	Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment	OMN	280	Sustainment, Restoration and Modernization	1B5M1	B5M1	$ 550,000	$ 362,491	$ -	$ 1,142,491	$ 809,209	$ 142,600	$ 951,863
7	DDG-51 SEWIP Blk III (DDG 136-137)	SCN	32	Completion of PY Shipbldg Progr	55300	5300	$ 208,100	$ -	$ -	$ -	$ -	$ -	$ -
8	CVN 75 and CVN 80 SEWIP Blk III	SCN	3	Carrier Replacement Program	22001	2001	$ 264,000	$ 1,068,705	$ -	$ 1,062,205	$ 1,481,530	$ -	$ 1,465,880
			7	CVN Refueling Overhauls	22086	2086		$ 66,262	$ -	$ 66,262	$ 618,295	$ -	$ 612,081
9	Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)	APN	15	KC-130J	40416	0416	$ 118,800	$ -	$ 305,800	$ -	$ -	$ 419,800	$ -
10	APN-6 Spares	APN	62	Spares and Repair Parts	60605	0605	$ 175,000	$ 2,339,077	$ -	$ 2,295,603	$ 1,872,417	$ 319,100	$ 2,047,417
11	OPN-8 Maritime Spares	OPN	142	Spares and Repair Parts	89020	9020	$ 100,000	$ 424,405	$ 201,600	$ 445,621	$ 532,313	$ 171,400	$ 582,313
						TOTAL	$ 2,022,500	$ 5,236,319	$ 507,400	$ 6,077,855	$ 6,930,904	$ 1,052,900	$ 7,291,497

- For UPL priority #7, the SCN funding data shows DDG 136 and DDG 137 (fiscal year 2021 ships) cost to complete.
- For UPL priority #8, the SCN funding for "Carrier Replacement Program" shows CVN 80 funding.
- For UPL priority #8, the SCN funding for "CVN Refueling Overhauls" shows CVN 75 refueling overhaul funding.

General BERGER. Please see "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

64. Senator WARREN. Admiral Gilday and General Berger, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution cycle?

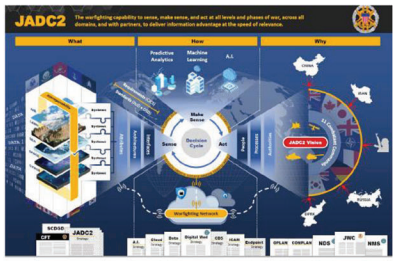
Admiral GILDAY. My understanding of the purpose of 10 U.S.C. 222 directing the Unfunded Priorities List (UPL) is to identify items that are executable in the budget year in order to provide Congress with options to enhance or accelerate capabilities and reduce warfighting risk, should additional resources become available as Congress marks up the defense bills that year. While some UPL items may be included in the following year's budget, they are not necessarily correlated to the UPL. For example, maritime and aviation spares were identified on the fiscal year 2023 UPL as an executable way that Congress could enhance readiness in fiscal year 2023 if funding above the President's Budget Request was available. The Fiscal Year 2024 President's Budget includes funding for maritime and aviation spares to fund fiscal year 2024 requirements—not because they were included on the fiscal year 2023 UPL. The funding is related, but cannot be directly correlated. The Navy's Program Objective Memorandum (POM) process assesses each year's requirements to inform the President's Budget Request.

General BERGER. Please see "Current Funding Profile" table in Section I of the enclosure. [Enclosure 1 has been retained in Committee files.]

65. Senator WARREN. Admiral Gilday and General Berger, please provide photos of this requirement for visual aid.

Admiral GILDAY. Below are photos of the items on the Navy fiscal year 2024 Unfunded Priorities List (UPL). Some UPL items are technology development, so a photo of the platform on which the technology will be used is provided. Some UPL items include a variety of efforts or parts, so a representative photo of the UPL item is provided as an example.

#1. Maritime Targeting Cell Afloat (MTC-A) Development



Source: DOD JADC2 Summary Strategy – March 2022

#2. Fund E-2D Theater Combat ID and HECTR



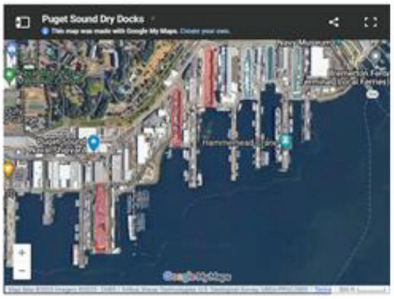
Source: U.S. Navy

#3. Fund ZEUS for DDG-1000 Class



Source: U.S. Navy

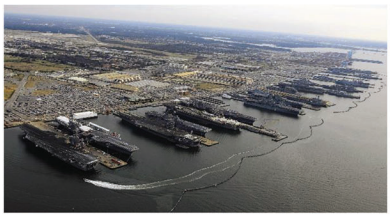
#5. Dry Dock Repairs at PSNS Investment Restoration and Modernization



Source: USNI News (https://news.usni.org/2023/03/28/navy-puget-sound-submarine-dry-dock-to-complete-seismic-repairs-by-july)

#6. Targeted Facilities Sustainment, Restoration and Modernization (FSRM) Investment

Example: Naval Station Norfolk



Source: U.S. Navy

#7. DDG-51 SEWIP Blk III (DDG 136-137)



Source: U.S. Navy

#8. CVN 75 and CVN 80 SEWIP Blk III  *Source: U.S. Navy*	#9. Navy Unique Fleet Essential Airlift Logistics KC-130J (+1 A/C Reserve)  *Source: U.S. Navy*
#10. APN-6 Spares  *Source: Military.com (https://www.military.com/daily-news/2019/10/28/navy-audit-uncovered-126m-aircraft-parts-we-didnt-even-know-existed.html)*	#11. OPN-8 Maritime Spares  *Source: U.S. Navy*

- #4. VIOLET is classified—details available at a higher classification.

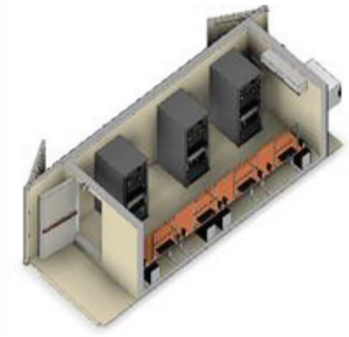
General BERGER. Please see the photos of each of the 32 items requested.
1 (+1) LPD–17 Flight II (LPD–33)



2 CH–53K Initial and Outfitting Spares



3 Project 7/11—Modular Operations Cells





4 (+2) KC–130J Aircraft and Initial Spares



5 Distributed Common Ground/Surface System-Marine Corps (DCGS–MC) All-Source SCI Workstations



6 Family of Field Medical Equipment (FFME) Damage Control Resuscitation (DCR) and Damage Control Surgery (DCS) Equipment Sets



7 (+4) AN/TPS–80 G/ATOR Radar



8 Satellite Communications Terminal, Network-on-the-Move (NOTM)



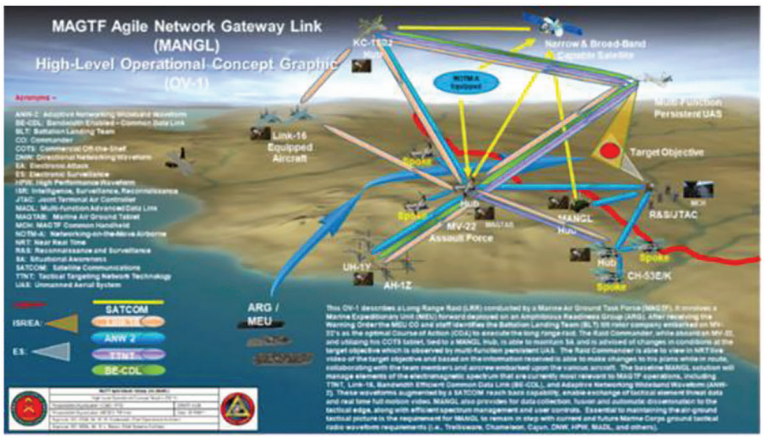
9 Joint Light Tactical Vehicles and Trailers



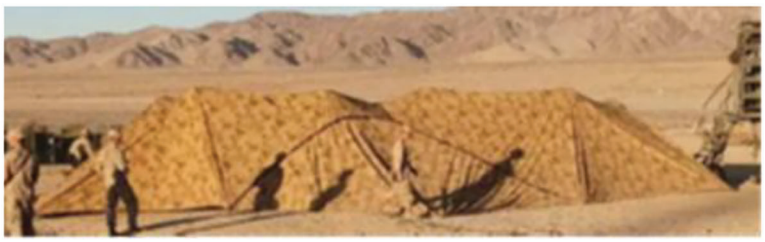
10 Ultra-Light Tactical Vehicle—High Power (ULTV-HP) Purchase



11 Digital Interoperability (DI)—Marine Agile Network Gateway Link (MANGL) Roll-Up



12 Ultra-Light-Weight Camouflage Netting System (ULCANS)



13 Joint All Domain Command and Control (JADC2) / Testing, Evaluation and Engineering Environment



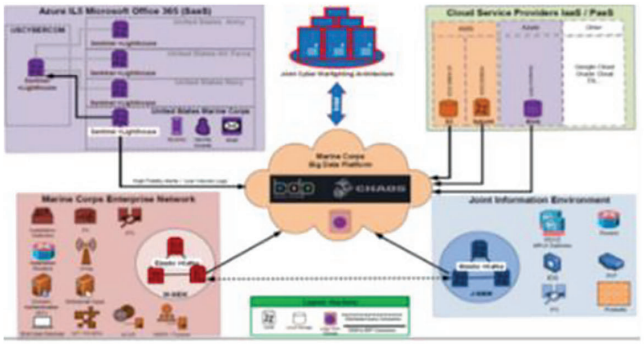
14 (+4) F–35B Engine/Lift System USMC Spares



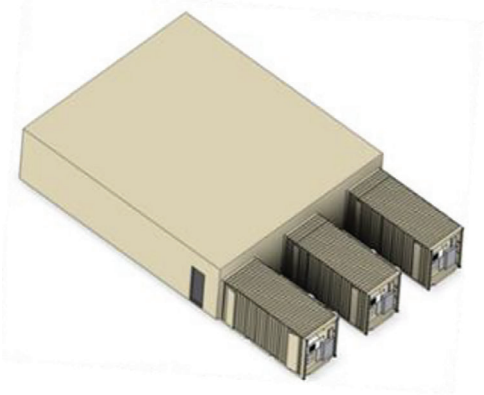
15 USMC MAGTF Defensive Cyberspace Operation-Internal Defensive Measures (DCO-IDM) Suites (MDS)



16 Marine Corps Cyberspace Environment (MCCE)—Archimedes Program



17 Joint Marine Innovation Unit (MIU) Fusion and MARFORCYBER Continuity of Operations Site



18 (+1) KC–130J Weapons System Trainer and Initial Spares



19 Demolition Equipment Set, Squad Engineer/Explosive Hazard Defeat Systems



20 (+3) UC–12W(ER) Beechcraft King Air 350ER with Cargo Door and Initial Spares



21 Multi-Terrain Loader—Replacement



22 H–1 Digital Interoperability (DI) Link–16



23 H–1 Digital Interoperability (DI) Mobile User Objective System (MUOS)



24 P875 Water Reclamation Facility Compliance Upgrade, MCB Kaneohe Bay, HI



25 P1556 10th Marines Maintenance & Operations Complex, MCB Camp Lejeune, NC



26 P258 2D LAAD Maintenance and Operations Facilities, MCAS Cherry Point, NC



27 P982 Consolidated Communication Facility, MCLB Albany, GA



28 P1499 Corrosion Repair Facility Replacement, MCB Camp Lejeune, NC



29 P1546 Amphibious Combat Vehicle Shelters, MCB Camp Lejeune, NC



30 P521 Fire/Emergency Response Station (53 Area) Replacement, MCB Camp Pendleton, CA



31 P100 Unspecified Minor Construction



32 P101 USMC Military Construction Planning & Design



This information is provided in the supporting material accompanying the Marine Corps fiscal year 2024 Unfunded Priority List.

MENTAL HEALTH AND SUICIDE PREVENTION

66. Senator WARREN. Admiral Gilday and General Berger, what steps are the Navy and Marine Corps taking to integrate the recommendations of the Suicide Prevention and Response Independent Review Committee (SPRIRC) and when does it expect these recommendations to be implemented?

Admiral GILDAY. Upon receipt of the Suicide Prevention and Response Independent Review Committee report, the Secretary of Defense directed the immediate implementation of several recommendations. These addressed servicemember well-being and access to behavioral and mental health care along with establishing a Suicide Prevention Implementation Working Group as the primary body to assess the advisability and feasibility of implementing each of the remaining recommendations.

General BERGER. On March 22, 2022, the Secretary of Defense established the Suicide Prevention and Response Independent Review Committee (SPRIRC) to conduct a comprehensive review of the Department's efforts to address and prevent suicide. The Committee provided a range of recommendations to eliminate suicide in the military. The SECDEF's SPRIRC issued its final report on February 24, 2023, and made 127 recommendations. The Marine Corps fully supports efforts to reduce suicide. Marine Corps representatives are serving on most of the 20 sub-working groups and have begun developing implementation plans for the IRC recommendations. The Marine Corps continues efforts to reduce suicides by focusing on integrated and comprehensive efforts. We will continue to invest at every level of our

Corps to ensure marines know how to recognize signs of a teammate who is struggling, and where to go for resources.

67. Senator WARREN. Admiral Gilday and General Berger, the SPRIRC report emphasizes the critical need to limit or reduce access to highly lethal methods for suicide. What steps are you taking to reduce access to these methods, particularly firearms, and which of the SPRIRC recommendations regarding lethal means reduction do you plan to implement?

Admiral GILDAY. Lethal means safety is a critical component of Navy's suicide prevention program. The Navy has continued its partnership with the Defense Suicide Prevention Office and Department of Veterans Affairs to provide sailors with over 413,400 gunlocks.

Navy promotes the voluntary use of gunlocks and other safe storage methods for privately owned firearms. If a sailor demonstrates suicidal ideations or presents themselves at risk for causing harm to others, it is a requirement for the health professional and/or commander who witnesses these action to ask the member to store their privately owned firearms and ammunition for temporary safekeeping. This step must be entirely voluntary for the sailor and for a duration determined solely by the owner of the firearm. The Navy also continues to work with the Defense Suicide Prevention and the other Services on how best to highlight the importance of safe firearm storage practices.

General BERGER. The SECDEF's SPRIRC issued its final report on February 24, 2023, and made 127 recommendations. The Marine Corps fully supports efforts to reduce suicide. We are working with the Office of the Secretary of Defense to review the recommendations and develop implementation plans. Reducing access to lethal means is an important aim and part of the SPRIRC's recommendations. Gun locks are provided with every purchase of a firearm at Marine Corps Exchanges, and safes and other locking devices are available for sale. The Marine Corps also has been working with the Department of Veterans Affairs to distribute gun locks throughout the Marine Corps. Additionally, lethal means and firearm safety messaging are being disseminated to marines and families to increase suicide prevention and lethal means safety awareness. Other strategies include our Suicide Prevention Podcast Series, Welcome Aboard Briefs, and Suicide Prevention and Lethal Means Safety Toolkit, all of which provide suicide prevention and lethal means safety education and resources.

68. Senator WARREN. Admiral Gilday and General Berger, what mental health services do you provide to Navy and Marine Corps-affiliated civilians and contractors and what steps do you plan to take to support those communities in suicide prevention?

Admiral GILDAY. The Department of the Navy (DON) Civilian Employee Assistance Program (CEAP) provides services to civilian employees and their families. The DON regularly reminds employees about DONCEAP services and encourages them to seek assistance. DONCEAP services include mental health counseling, suicide prevention, educational materials, and webinars. Employees have continuous access to many of these services, twenty-four hours a day, 7 days a week. DON civilian employees have increased their use of DONCEAP services over the course of the last 3 years.

Navy and Marine Corps leadership will continue to encourage employees about DONCEAP services as well as the importance of cultivating healthy wellness habits, including mental health. Supervisors are reminded to include the availability of DONCEAP services when counseling employees on leave and workplace flexibility options. These flexibilities include self-help and caring for eligible family members. DON leadership believes that initiating regular conversations surrounding mental and emotional well-being is instrumental in normalizing and destigmatizing receiving mental health treatment and fostering a healthier workforce.

The DON is committed to supporting civilian employee well-being and ensuring that employees are aware of available mental health and suicide prevention services.

General BERGER. Each Federal executive branch agency has an Employee Assistance Program (EAP). An EAP is a voluntary, confidential program that helps employees work through various life challenges that may adversely affect job performance, health, and personal well-being to optimize an organization's success. EAP services include assessments, counseling, and referrals for additional services to employees with personal and/or work-related concerns, such as stress, financial issues, legal issues, family problems, office conflicts, and alcohol and substance use disorders. EAPs also often work with management and supervisors providing advanced planning for situations, such as organizational changes, legal considerations, emer-

gency planning, and response to unique traumatic events. An essential role of Federal Work-Life and EAP Coordinators involves reducing the stigma associated with seeking support around mental wellness.

69. Senator WARREN. Admiral Gilday and General Berger, what steps are the Navy and Marine Corps taking to address concerns about drug overdoses among its Active Duty servicemembers?

Admiral GILDAY. The Navy takes drug misuse seriously and recognizes that even one overdose is one too many and has enacted the following actions to prevent drug overdoses:

- Educate leaders on the dangers of misusing prescription drugs to ensure early warning signs of misuse are identified.
- Educate sailors and their family members on properly disposing of unused and outdated medications and encourage them to dispose of medications following proper disposal procedures. The Navy supports the Drug Enforcement Administration's "Prescription Drug Take Back" initiative to turn in unused and outdated prescriptions.
- Increased urinalysis testing for the most commonly misused prescription drugs. The Navy monitors the prescription drug positives to identify specific drug and demographic trends.
- Promote information sharing across the medical continuum of care to deter Navy personnel from inappropriately gaining access to and using prescription drugs in a manner other than it was prescribed.

To further prevent drug overdoses, specifically opioids, the Navy also follows Department of Defense (DOD) policy that promotes the use of evidence-based pain management guided by clinical practice guidelines to effectively prevent acute pain, treat acute and chronic pain, promote non-pharmacologic treatment, and minimize the use of opioids with appropriate prescribing only when indicated. The DOD also makes opioid antagonist reversal medications (i.e., naloxone) available and promotes their use by military medical treatment facility providers and pharmacies in conjunction with patient education and training. Substance use identification, education, and awareness activities are a key component to the DOD and Navy's efforts at preventing or reducing drug misuse and overdose.

General BERGER. Urinalysis testing includes illicit and prescription drugs, including marijuana and opiates. One hundred percent of urine samples are now tested for fentanyl, which will assist in efforts to assess fentanyl misuse in the Marine Corps. While the percent of marines testing positive for fentanyl remains very low, the Marine Corps did see an increase in fentanyl positives in fiscal year 2022 compared to previous years (.01 percent of all marines tested compared to .007 percent in fiscal year 2021 and .008 percent in fiscal year 2020).

70. Senator WARREN. Admiral Gilday, what steps is the Navy taking to better understand the needs of servicemembers living aboard aircraft carriers to prevent further suicides, as occurred on the USS *George Washington,* and those at maintenance centers such as those at the Mid-Atlantic Regional Maintenance Center?

Admiral GILDAY. Navy reinforces the importance of access to the full continuum of mental health (MH) resources for our sailors, while aiming to utilize the right care, at the right level, at the right time. There is "no wrong door" for our sailors and marines to get help through MH services in primary care and specialty clinics, embedded within the Fleet, and via virtual health (VH) platforms. Non-medical MH services are available for sailors and their family members through Fleet and Family Support Centers, Military and Family Life Counseling, and Military OneSource. Navy Chaplains provide confidential counseling and are important in ensuring spiritual readiness and resiliency of the Naval Force.

Embedded Mental Health (EMH) remains vital for Fleet and Fleet Marine Force, with just over 36 percent of Active Duty mental health providers and 31 percent of behavioral health technicians assigned to EMH billets. The Navy also recently assigned Chaplains to guided missile destroyers to provide confidential counseling while ensuring spiritual readiness and resiliency of the Naval Force.

71. Senator WARREN. Admiral Gilday, what steps is the Navy taking to respond to those identified needs of those servicemembers and reduce the risk of suicide of those who are stationed on aircraft carriers and at maintenance centers?

Admiral GILDAY. One of the Navy's key initiatives in addressing mental health needs is a recently developed "Mental Health Playbook" released in February 2023. The Playbook is designed to support command leaders in preventing mental health issues from occurring and, when they do, to connect sailors with the proper mental health care, at the right level, at the right time.

The Playbook enables all sailors to share an understanding of how to conduct mental health preventive maintenance and where to go for additional resources. The Navy must continue to prioritize access to the full continuum of mental health and wellness support resources for our sailors available ashore, within the Fleet, and via virtual health platforms.

72. Senator WARREN. Admiral Gilday, what steps is the Navy taking to provide more mental health resources to the needs of those servicemembers who are stationed on aircraft carriers and at maintenance centers?

Admiral GILDAY. Navy Medicine is committed to a comprehensive approach to support Fleet readiness through collaboration with stakeholders to address access to mental health resources. In effort to provide greater resources, Naval Surface Force, U.S. Pacific Fleet opened a new Embedded Mental Health facility in October 2022 to ensure fast and quality access to mental health care for their operational sailors. The facility also provides consultation to leadership triads (Commanding Officer, Executive Officer, Senior Enlisted Leader) and training for medical personnel and crews.

As further mental health support, chaplains were recently added on guided missile destroyers. President's Budget 2024 includes a request for additional end strength for Operational Forces Embedded Mental Health Programs to improve access to care for marines and sailors in the Operational Forces by reducing the time for evaluation and treatment. This increase includes 25 Psychiatrists, 18 Clinical Psychologists, 11 Licensed Clinical Social Workers, and 47 Behavioral Health Technicians (54 officer and 47 enlisted).

President's Budget 2024 also includes a request for additional end strength for USMC Medical Battalions to provide health service support to the Marine Expeditionary Force through forward resuscitative health care capabilities. The personnel addition includes eight officers (3 Medical Corps, 4 Medical Service Corps, and 1 Nurse Corps).

Further, the Navy is working with the Defense Health Agency and entering into agreements for additional clinical support from the staffs at military medical treatment facilities to provide assistance on ships or on installations.

73. Senator WARREN. Ongoing Naval Criminal Investigative Service (NCIS) Investigation into the Death of Lance Corporal Ronald Valentin

Secretary Del Toro, the Naval Criminal Investigative Service is continuing to investigate the death of Lance Corporal Ronald Valentin, USMC, who died in 2018. Five years later, this investigation continues to be ongoing with little answers for his family and they remain concerned about the lack of regular updates and information that they have been given by NCIS. Secretary Del Toro, will you commit to NCIS providing the family of Lance Corporal Valentin a monthly call to update them on the latest status of their son's investigation?

Secretary DEL TORO. NCIS has provided regular updates to the family of LCpl Valentin throughout the investigation and has noted recent contact and lengthy conversations with Ms. Ortiz (LCpl Valentin's mother) on the following dates: October 11, 2022; October 27, 2022; December 14, 2022; January 30, 2023; March 23, 2023; and May 3, 2023. The investigation has remained active since 2018 and NCIS is committed to completing this investigation in the most expedient manner possible, while ensuring all possible investigative leads are pursued. Because this remains an active criminal investigation, NCIS must limit the information being released in order to preserve the integrity of the investigation. Though NCIS seeks to be transparent and provide as much information as possible to the family, in some instances, no new information has been available to share.

74. Senator WARREN. Secretary Del Toro, when do you anticipate the investigation into the death of Lance Corporal Valentin will be completed?

Secretary DEL TORO. NCIS is working diligently to explore all logical leads in the investigation as quickly as possible while ensuring those steps are accomplished in the most effective manner possible. Determining an estimated date of completion of the active investigation is difficult given the complexity of the investigation and the possibility that additional investigative tasks may be identified from results of the remaining identified tasks. NCIS has completed hundreds of individual actions during this investigation and is currently pursuing the re-interview of several witnesses in an effort to identify additional information to explain the circumstances of Lance Corporal Valentin's death. Additional laboratory analyses have also recently been requested and are currently ongoing.

75. Senator WARREN. Secretary Del Toro, what has contributed to the delays of this investigation as it continues into its fifth year without a conclusion?

Secretary DEL TORO. This investigation has remained active since 2018 and NCIS continues to pursue all potential leads that might provide relevant information to explain the details of how Lance Corporal Valentin died, if criminal activity was involved, and if so, who was responsible. NCIS continues to support this investigation with multiple NCIS personnel around the globe.

76. Senator WARREN. Secretary Del Toro, during this investigation, the family of Lance Corporal Valentin has faced several changes in the case agents they are working with. How often do case agents turn over and what is the process for notifying the family in advance when the case agent will change?

Secretary DEL TORO. NCIS strives to limit the number of case agents in all cases and especially in complex investigations such as this one. As the incident occurred in an overseas location, there are regular cycles where NCIS Special Agents move, or complete a Permanent Change of Station (PCS), from Okinawa to other offices throughout the world. Per DOD PCS regulations, Okinawa, Japan, is designated as a 2-year tour, wigth option to request and extension. Three case agents have been assigned to this investigation since it was initiated in 2018 and each change was made as a result of the PCS of the assigned case agent. When the assigned case agent changes, the family would be notified prior to that occurring during a regular update.

77. Senator WARREN. Secretary Del Toro, the family of Lance Corporal Valentin has disclosed that they initially received the body of a different individual instead when Lance Corporal Valentin was being returned to his family. Please explain why this incident occurred, if there are any other cases when NCIS has provided the incorrect body to other families, and what steps NCIS is taking to ensure this does not happen to another family.

Secretary DEL TORO. The Port Authority at John F. Kennedy Airport (JFK) and the commercial airline responsible for the transportation of Lance Corporal Ronald Valentin's remains misidentified the aircraft carrying his casketed remains resulting in this unfortunate mishap. This misidentification was communicated to family members and their Marine Casualty Assistance Calls Officer awaiting his arrival at JFK, to the family's funeral director who was present to receive custody of his remains from the commercial airline, and to the Marine Honor Guard who was onsite to conduct planeside honors. This resulted in the conduct of planeside honors of the incorrect casketed remains by the marines and transfer of custody from the commercial airline to the family's funeral home. Upon discovery of this mishap, the incorrect remains were returned to the custody of the commercial airline. Lance Corporal Valentin's casketed remains, accompanied by his commanding officer and escorted by a uniformed marine, were transferred via planeside honors conducted by the Marine Honor Guard to the family's funeral home. Lance Corporal Valentin's remains were escorted at all times throughout the process and treated with the utmost dignity and honor.

78. Senator WARREN. Secretary Del Toro, the family of Lance Corporal Valentin has expressed concerns that the cameras at Camp Hansen had stopped working in July 2018 and were still not working at the time of Valentin's death at the end of August. Why had these cameras not been fixed yet at the time of Valentin's death, how many of these cameras were not working, and how long were they inoperable before and after his death?

Secretary DEL TORO. These cameras were maintained by a DLA contract. The Marine Corps has no record of operational status or maintenance on these cameras.

79. Senator WARREN. Secretary Del Toro, the family of Lance Corporal Valentin has expressed concern regarding whether the investigators were able to access the information in Valentin's phone. Has NCIS been able to open and access the information in Valentin's phone?

Secretary DEL TORO. Because this remains an active criminal investigation, this information is not releasable in a public forum. The family has been provided updates regarding the phone's status.

NAVAL CRIMINAL INVESTIGATIVE SERVICE

80. Senator WARREN. Secretary Del Toro, in September 2022, the Government Accountability Office (GAO) released a report on "Servicemember Absences: DOD Actions Needed to Enhance Related Data, Procedures, and Staffing." This report found

that NCIS was not properly identifying the number of special agents it needed to conduct criminal investigations. The Department of Defense stated in February 2023 that it has begun to keep a record of the number of special agents it needs. What steps is NCIS taking specifically to fulfill this recommendation?

Secretary DEL TORO. NCIS disagreed with the GAO finding that NCIS does not have a process to determine staffing requirements to conduct criminal investigations. NCIS has an overall End Strength that is composed of special agent and non-special agent positions. From there, NCIS Director has discretion to properly allocate the resources authorized to meet strategic mission objectives.

NCIS maintains a dynamic approach to staffing occupational series in order to maximize recruiting efforts and maintain End Strength fill rates within authorized budgetary targets. Creating a process that forces rigidity on 1811 staffing levels, as a measure of mission success, fails to account for the diverse occupational series that contribute to the criminal mission and limits the ability to surge to emergent mission need.

Since April 2022, NCIS keeps a record of the number of special agents needed to support NCIS' mission. At the beginning of each fiscal year, NCIS will update that number and keep previous years' numbers for historical trending. Specifically, NCIS is taking the following steps:

1. NCIS maintains data of numbers of special agents each fiscal year.
2. This dashboard will include data from past and future fiscal years for comparison.
3. NCIS' process is to record the necessary number of special agents at the start of each fiscal year.
4. NCIS will keep a similar record for future fiscal years.

81. Senator WARREN. Secretary Del Toro and General Berger, in the same GAOreport, GAO found that the Marine Corps lacks procedures to determine whether the absence of a servicemember is involuntary or voluntary, which is important in helping to "ensure that the absence is reported to the appropriate military organization for further action, to include notifying and assisting the servicemember's family and investigating any criminal activity associated with the absence." In February 2023, DOD stated there were Marine Corps working groups being held to establish procedures addressing this recommendation and that these procedures would be issued by March 2023. What is the status of these working groups and have these procedures been completed? If so, please provide a copy of them.

Secretary DEL TORO. Staff from Marine Corps Installations and Logistics and Manpower and Reserve Affairs held working group meetings in late 2022 and early 2023 to establish procedures for commanders to use to determine whether a marine's absence is voluntary or not. The working group is recommending updates to policies on the absentee and deserter collection program in the Marine Corps Corrections Manual, which are in final coordination. We expect a final decision in summer 2023.

Currently, personnel accountability is taken the morning of every workday and status reported to local headquarters through an electronic Unit Manning Status Report. If a marine is not present or accounted for as expected, a command will attempt to locate them via telephone, by visiting their dwelling, speaking to coworkers and friends, contacting family members listed as emergency contacts in their Record of Emergency Data, and potentially notifying law enforcement. If a commander believes the marine is 'duty status unknown' as opposed to in an 'unauthorized absence' (UA) status, they follow policy outlined in the Casualty Procedures Manual. If they believe a marine is UA, they follow procedures outlined in the User Manual for Unit Diary Reporting.

General BERGER. Staff from Marine Corps Installations and Logistics and Manpower and Reserve Affairs held working group meetings in late 2022 and early 2023 to establish procedures for commanders to use to determine whether a marine's absence is voluntary or not. The working group is recommending updates to policies on the absentee and deserter collection program in the Marine Corps Corrections Manual, which are in final coordination. We expect a final decision in Summer 2023.

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QUESTIONS SUBMITTED BY SENATOR GARY PETERS

FFG INDUSTRIAL BASE

82. Senator PETERS. In recent years, this Committee has advocated for investments in Navy shipbuilding to ensure timely acquisition and reduce program risk. We've seen the benefits of these investments in programs like *Columbia* and DDG–51, to name two. I'm pleased that Congress provided $50 million last year for the Frigate industrial base and workforce development and look forward to seeing the positive impact on the workers and manufacturers in Michigan's Upper Peninsula.

I understand that this funding has already been allocated and needs remain. That's why I'm advocating for another round of additional funding in fiscal year 2024 to continue to address challenges typical of new ship classes as they ramp up production—like recruiting, retaining and training skilled workers, developing critical suppliers, and supporting needed shipyard infrastructure improvements.

Secretary Del Toro, can you share your thoughts on how these investments are critical to ensuring the success of the Frigate program?

Secretary DEL TORO. Sustained Industrial Base investment is a critical enabler to ensuring the success of the Frigate program. Recruiting, retaining, and training skilled workers to build Frigates is the primary long-term challenge to the program's ability to meet the Navy's small surface combatant requirements. Fincantieri must execute an aggressive talent acquisition strategy and compete with other non-defense industrial activities in Wisconsin and Michigan to grow and maintain a skilled workforce. Continued investments in workforce activities must include outreach to local school systems to increase interest in skilled trade jobs, coordination with universities and technical colleges to develop and bolster training pipelines and apprenticeship opportunities, and direct recruitment and retention incentives such as bonus programs and other tangible benefits. Workforce development efforts are also constrained by a lack of available housing in Marinette, Menominee, and the surrounding areas. Continued investment will allow the Frigate program to support regional investments in the communities where defense workers reside, increasing their attractiveness and accessibility to sustain and grow the workforce.

The Frigate Industrial Base includes regional suppliers facing similar challenges. Beyond the benefits of supporting the workforce at the shipyards and their suppliers, investments in supply chain risk reduction, efficiency improvements, and capacity expansion are warranted. Fincantieri has invested substantially in shipyard infrastructure, and commensurate investment in the supply chain that provides equipment, materials, and subcontracted services will allow the program to realize the full potential of those investments.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN

FORCE DESIGN 2030

83. Senator MANCHIN. Secretary Del Toro, your testimony highlighted the importance of Force Design 2030. Can you detail to the Committee, how you as Service Secretary responsible for the Marine Corps and Navy are supporting Force Design 2030 and the improved integration of the Navy and Marine Corps? General Berger, as I said we're proud to see the Marine Corps making tough decisions as it relates to funding to get after the China problem, but what is your estimate for future funding increases needed to support Force Design and what are your top three priorities?

Secretary DEL TORO. Supporting and accelerating Force Design 2030 is a top priority for Department of the Navy budget requests. I am closely working with both the Marine Corps and Navy to ensure that this and future budget requests support both Force Design 2030 and drive increased integration of naval capabilities. These efforts are central to my enduring priority of strengthening maritime dominance.

General BERGER. My estimate for future funding requirements needed to support Force Design 2030 will be provided in the fiscal year 2025 budget and in each subsequent budget cycle as we take stock of the impacts of inflation and prioritize our modernization efforts across the Department.

It is critical to maintain the funding levels we have been provided, adjusted for inflation in the future, to ensure we have sufficient buying power to continue to accelerate the Force Design 2030 capabilities needed to stay ahead of the pacing

threat. Over the course of the last several budget cycles, the Marine Corps has taken every possible opportunity to self-fund our modernization, reallocating $15.8 billion in structure and legacy platforms and systems for our transformation efforts. However, any reduction in topline will challenge our ability to modernize commensurate with the pacing threat, while simultaneously maintaining current levels of combat ready forces. The resulting lost buying power will force hard choices between Global Force Management commitments, current readiness, and the velocity of our modernization efforts, the speed which has been set by our adversaries.

As I've testified in the past, my main effort as Commandant is to build the Marine Corps that will define integrated American naval power in 2030, even as it must remain ready to confront the challenges of today. I remain fully committed to this goal. My three top priorities continue to focus on the three pillars of Force Design 2030—equipment modernization, talent management reform, and training and education modernization—that will enable the Marine Corps to meet global threats and remain the Nation's premier crisis response force. The Marine Corps will also prioritize Quality of Life and critical infrastructure investments going forward, areas where we have accepted risk in the past. To achieve this, sustained, adequate, predictable funding is the single most effective way to maintain critical strategic momentum in our ability to continue our Force Design 2030 transformation efforts, while ensuring that marine forces operating forward provide the foundational integrated deterrence and day-to-day campaigning necessary to build advantage with our allies and partners.

AMPHIBIOUS SHIP FLEET

84. Senator MANCHIN. Secretary Del Toro and General Berger, why was there no funding included in the Navy's budget request for amphibious shipbuilding? Taking the politics out and considering the future threat as well as unforeseen maintenance and accidents, what minimum number of amphibious ships do you believe we need? Same question for the Commandant.

Secretary DEL TORO. Admiral Gilday, General Berger, and I all agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes to ensure we meet the Nation's need for ARG/MEUs for decades to come. The current analytical work is assessing the recently approved Department of Defense Planning Scenario for the 2022 National Defense Strategy (NDS), and studying the cost/capability of LPD 17 Flt II amphibious ships. The analytic results of both will be reflected in the fiscal year 2025 30-Year Shipbuilding Plan.

General BERGER. The Marine Corps has a requirement for no less than 31 amphibious warfare ships 10 LHA/LHD and 21 LPDs. Since 2019, three DON studies have examined amphibious warfare ship force structure requirements. The requirement was informed by combining the findings of those studies, the most recent being the SecNav directed Amphibious Fleet Requirement Study (AFRS) in 2022, with amphibious warfare ship readiness trends over the past 10 years. AFRS was a threat informed, scenario directed, model driven, multiple phase event executed by the analytic arms of the Navy and the Marine Corps. The findings of AFRS were briefed to the service chiefs and SecNav, 31 amphibious warfare ships were reported as the minimum required. This finding is consistent with 11 amphibious warfare ship inventory studies completed over the last 14 years.

The last Congress recognized this requirement in the *James M. Inhofe National Defense Authorization Act,* Public Law 117–263 (2023). Section 1023 requires the Navy maintain "not less than 31 operational amphibious warfare ships, of which not less than 10 shall be amphibious assault ships." This law mirrors the need of the National Security Strategy, but it is important to note, this is a floor not a ceiling.

TALENT MANAGEMENT 2030—INVEST AND RETAIN ENLISTED MARINES

85. Senator MANCHIN. Can you comment on the potential benefits of a retain and invest model? What are the biggest challenges you are facing toward affecting this reform?

General BERGER. Force Design 2030 envisions a "Stand-in Force," of relatively small, highly mobile, distributed, and lethal units. To succeed, such units must possess both the maturity to decide and act during increasingly complex conflicts and a greater technical expertise demanded by high technology, multi-domain battlefields. As such, Talent Management 2030 has directed a paradigm shift from the Marine Corps' legacy, high turnover "recruit and replace" personnel model toward one that places greater emphasis on retention of the most capable marines. Some of these efforts are already well underway. This deliberate maturation of the force will develop the necessary structure to fight and win on tomorrow's battlefield. By

doing so, the marine Corps can achieve cost savings to entry-level training, reduce the accession requirement in today's challenging recruiting environment, increase unit continuity, and benefit from more mature marines.

As the Marine Corps strives to increase its return on investment, we will ensure that its warfighting capability is enhanced through training and education within its formations. This will create a more stable team to support the collective national defense. Lateral entry opportunities enable the service and marines to match duty to an individual's performance and desire to serve.

Potential challenges include the ability to retain enough marines to pivot to the new paradigm, which can be addressed by implementing tailored incentives. Additionally, the Marine Corps must recruit marines who are compatible with longer duration service, which can potentially be achieved through implementing new applicant screening tools and initiatives.

As the Marine Corps works to invest in and retain its best talent, it must also prioritize the quality of leadership, life, and support for marine families; these factors fuel the retention of talent.

LANDING SHIP MEDIUM

86. Senator MANCHIN. At a time of increasing tensions in the world, especially the Pacific, how will this delay in acquiring the Landing Ship Medium (LSM) hinder the Marine Corps' ability to operate in costal environments? Will you explain the difference in Marine Corps capability against our pacing threat when comparing 18 LSMs that the Amphibious Force Requirement Study identifies as a minimum capability and 36 LSM's, which the Marine Corps considers their requirement?

General BERGER. Operational intra-theater surface maneuver, tactical mobility and sustainment is critical today in the Indo-Pacific to assure campaigning activities are achieved for integrated deterrence of malign activities. Until the Medium Landing Ship (LSM) is available in appreciable numbers (IOC –FY34), the Navy and Marine Corps have developed a strategy known as the Littoral Maneuver Bridging Solution (LMBS). The LMBS utilizes a mixture of available ships and landing craft, as well as chartered platforms with an operational focus for use in Indo-Pacific region. The LMBS provides flexible options and informs future naval resourcing decisions to ensure the Marine Corps can operate throughout the littorals as required until the LSM is delivered to the fleet.

The purpose built, beachable, shore-to-shore LSM requirements is derived from multiple studies and wargames that highlight a critical gap in capability and capacity between amphibious warfare ships and their complementary landing craft. The LSM allows shore-to-shore maneuver, mobility and sustainment of task organized units of action of stand-in forces (SIF) and enables sustained logistics forward in contested environments. The delay in this capability hinders our ability to establish key terrain and develop relationships required. The LSM inventory objective is 35 ships based on the concept of operations (CONOPS) to provide littoral maneuver for three Marine Littoral Regiments (MLR) as the foundational formation of the SIF. The near-term inventory requirement is 18 LSM to initiate the program. Maturation of the CONOPS and experimentation will inform the long-term inventory objective.

DELAYED BUDGET AND CONTINUING RESOLUTIONS

87. Senator MANCHIN. Secretary Del Toro, General Berger and Admiral Michael M. Gilday, can I have each of your commitments to get Congress as accurate an estimate as possible on the financial impact previous continuing resolutions have had on the Department of Defense?

Secretary DEL TORO and Admiral GILDAY. Continuing Resolutions (CRs) of any duration create inefficiency in government operations. The execution of this year's requirements based on small incremented periods of availability substantiated by last year's appropriations means every transaction is executed in increments of the number of CRs, rather than deliberate transactions for the entire quarter or fiscal year. The administrative cost of the inefficiency is impossible to quantify but it spans across the Department wherever funds are executed, and increases with the number of CRs.

- The Department cannot execute our strategic priorities, such as investing in cutting-edge technologies and capabilities, with last year's budget.
- A full-year CR erodes the United States military advantage relative to China, impedes our ability to innovate and modernize, degrades readiness, and severely limits our ability to take action against energy challenges (e.g., fuel and utilities). It signals to our adversaries that the U.S. is not committed to its stated priorities.

- CRs create uncertainty, particularly in an era of increasing and evolving requirements to meet the demands of the DON as we face competitors who are not hamstrung by inefficiencies in funding requirements.
- The Department is challenged to execute national defense strategies required today when funding is limited to a prior year level, and more important, while there are restrictions to move ahead with the investments in new programs and technologies that are required today. The longer a CR lasts, the greater uncertainty, and decision time that is lost; longer CRs require the Department to respond to and execute the congressional decisions made on the President's Budget Request in an appropriations act in a truncated period of time. This is particularly challenging for military personnel and readiness accounts that are in 1 year appropriations.
- Given the commonplace nature of CRs today (in 13 of the last 14 years), the DON has worked around the inefficiencies as much as possible. However, delays in initiating new starts in procurement and research and development, and increased production rates place our Navy and Marine Corps at a strategic disadvantage with our competitors. In the last 3 years, each year there are have been over 60 programs that are precluded from execution during a CR because of restrictions on new starts and production rate increases. The DON appreciates the anomalies Congress has provided in the past for the Columbia program, but there are other programs that stall pending appropriations acts.
- While CRs are inefficient and delay getting on with today's business, receiving an appropriation act at some point is essential. A yearlong CR would have devastating consequences not only for funding levels, but the misalignment of priorities and budget requests in the current year compared to last year. . Further, the comparison of fiscal year 2024 program requirements compared with fiscal year 2023, without the ability to realign funding, would create a $26.1B misalignment of funds. We cannot afford this type of perturbation in funding the investments we need today and for the future.
- Increased inflation experienced during fiscal year 2023 and projected for fiscal year 2024 will reduce the Department's buying power, further stressing the Department's topline.
- This year we have identified 49 new starts slated for fiscal year 2024. When looking at the last 4 years (fiscal year 2020 to fiscal year 2023), all which have started under CRs of 80 days or more, the sum of delayed programs for the Department of the Navy alone is 81. This sets programs off poorly, creates doubt with committee staff, erodes trust in our industrial base, and cedes ground to our adversary.

General BERGER. Over the past several years that I have been Commandant, every fiscal year has begun with a continuing resolution or CR, due to the absence of enacted appropriations. Given that Congress has eventually passed the appropriations acts, the strictly financial impact is neutral. However, I'd offer three ways that these continuing resolutions, particularly a yearlong CR, adversely impact your Marine Corps.

First is people. In an all-volunteer force, an extended CR has the potential to eat away at the trust that marines and their families have in their government. Without enacted appropriations, I may have to delay or cancel transfer orders; reduce incentive pays and bonuses; families won't know whether to renew their housing leases; and spouses won't know whether to accept the job offer they got last week all due to uncertainty. The impacts on recruiting and retention may very well be lasting at the time we are facing the most challenging recruiting environment since the advent of the all-volunteer force.

Second is our ongoing transformation efforts. CRs look in one direction—backward—forcing us to execute last year's budget against this year's priorities. At a time when we are working to accelerate transformation efforts, CRs slow us down. They artificially slow acquisition programs delaying the start of new contracts. They effectively prevent modernization at speed, ceding the initiative to our adversaries. This includes slowing R&D and procurement of critical Force Design 2030 programs, affecting workers across the country, as well as preventing facilities supporting new platform investment, training, and quality of life initiatives. Service chiefs need sufficient, stable, predictable funding to stay in front of our pacing threat. CRs often require services to temporarily reprioritize their requirements to ensure sufficient resources remain available for must pay obligations.

Third is our strategic partners. Under every CR, we face the prospect of losing the trust and confidence of our allies and partners because commanders may have to scale back or cancel scheduled exercises. For a National Security Strategy that depends on allies and partners, trust is a big part of what keeps the door open. Once

that door closes, it's hard to recover from the damage done to the military relationships.

The concern with budgetary stagnation is compounded by the fact that our strategic competitor, China, is accelerating. The three impacts illustrated above translate to an increased risk to our ability to deter and compete with China, particularly in the Pacific. Our people, our transformation efforts, and our relationship with our strategic partners are key to staying ahead of the pacing threat.

QUESTIONS SUBMITTED BY SENATOR JACKY ROSEN

RESILIENCE OF SAILORS AND MARINES

88. Senator ROSEN. Secretary Del Toro and General Berger, sailors and marines have been subjected to extended deployments and heightened operational tempos over the last few years, which has impacted our people as well as the ships, aircraft, and equipment that they operate and maintain. Taking care of our servicemembers must also be a top priority, especially considering the particularly arduous pandemic-era operations coupled with ongoing supply chain issues and a downturn in recruitment.

How are the Navy and the Marine Corps focusing on the well-being of sailors and marines throughout the deployment cycle, in addition to maintaining their operational readiness and ability to deploy?

Admiral GILDAY. The Navy is overhauling the totality of its prevention programs through its Advance Navy Culture initiative. This places a focus on the outcomes of the Navy programs which are currently in place that aim to build teams with high connectedness, cohesion and inclusion to better monitor the well-being of our sailors throughout the deployment cycle. In addition, Navy is overhauling its internally developed Warrior Toughness and congressionally mandated Expanded Operational Stress Control program into one continuum focusing on building sailor minds, bodies, and spirits. The Navy is also increasing the number of mental health providers and chaplains on the waterfront.

In March, the Navy published its Mental Health Playbook which helps to normalize the conversations about mental health and provides a roadmap to navigate care options for sailors.

For Newport News Shipyard in particular, we have increased the mental health professionals assigned to Refueling and Complex Overhaul (RCOH) aircraft carriers and leased office space to put the crew's medical department in closer proximity to the ship. This increases accessibility and reduces commute times. Additionally, we have taken numerous actions to improve the quality of life of sailors. These include improving access to food options consistent with 24/7 work hours by bringing in food trucks in the evenings, reopening the self-use kitchen in unaccompanied housing, and opening a Navy Exchange mini-mart within the confines of the industrial area of the shipyard. We are also providing increased Wi-Fi access for sailor personal use. We have taken steps to improve the parking concerns. We centralized parking, allowing closure of some of the most remote parking areas.

General BERGER. Preserving the psychological health of servicemembers and their families is as much a warfighting matter as it is a sacred duty, and it is of paramount importance to mission readiness. The Marine Corps' Combat and Operational Stress Control (COSC) Deployment Cycle Training principles enable a cohesive ready force and promote long-term health and well-being among marines and attached personnel. The COSC program has three main goals—prevention, identification, and treatment of combat and operational stress (COS), stress arising from military training and operations, and typical life stressors experienced by servicemembers. COSC assists commanders in maintaining warfighting capabilities by prevention, identification, and management of COS. Training is focused on both warrior and leader audiences at three stages: pre-deployment (30 days prior to deployment), re-deployment (15–30 days prior to return), and post-deployment (60–90 days after deployment).

COSC is executed by Marine Corps' Operational Stress Control and Readiness (OSCAR) teams. They consist of command-selected marines who assist commanders in prevention and identification of COS, early intervention to mitigate stress, and reintegration efforts in all units, whether operational, deployed, in training, or in garrison. OSCAR team members act as sensors for the commander by noticing small changes in behavior and acting early. OSCAR marines become certified as the commander's representatives on COSC efforts in the unit. They support the commander in building unit strength, resilience, and readiness and keeping marines in the fight.

89. Senator ROSEN. Admiral Gilday, just this past week, U.S. Naval Forces Central Command (NAVCENT) held a mental health stand-down as a part of the Navy's mental health pilot program in Bahrain. We want to make sure that each of our sailors and their families have mental health resources available to them and communities that support them. Are there plans for this mental health pilot program to be expanded to other Navy installations, both overseas and right here at home?

Admiral GILDAY. The health and well-being of sailors and their families is a vital responsibility and a top priority for the Navy. We are focused on improving programs and investing additional resources to ensure that sailors and their families have access to the best possible mental health and community support resources. These investments are being made both at the command level and Navy-wide (e.g. deploying mental health trained chaplains on smaller ships for the first time and increasing the number of mental health care practitioners across the Navy). The work that NAVCENT is doing is a great example of a command-level initiative to optimally tailor resources to meet the needs of sailors and families in an overseas environment. The Navy will employ the best practices from this and other similar initiatives as we strive to better care for our people.

IMPACT OF MILITARY HEALTH SYSTEM GENESIS ON RECRUITMENT

90. Senator ROSEN. The transition to Military Health System (MHS) Genesis and digitized medical records is necessary to ensure that servicemembers, veterans, and their families are receiving proper health care with continuity between providers. Not only is this system used for the men and women already serving in the military, but it is also used to screen the medical history of potential recruits prior to accession.

Secretary Del Toro, given the Navy and Marine Corps' recruitment challenges and a decrease of people eligible for military service, how has the transition from the previous medical intake process to MHS Genesis impacted recruitment efforts?

Secretary DEL TORO. The capabilities and expectations from MHS Genesis were welcomed. It was thought that MHS Genesis would provide a more efficient and comprehensive medical history of an applicant during the enlistment process, allowing the Navy and Marine Corps to avoid the costs associated with undisclosed preexisting medical conditions on overall service readiness. After 1 year, the transition has not yet generated the expected efficiencies. During the same period, it has exposed issues within the processing of applicants at Military Entrance Processing Stations (MEPS). Collectively, those results have impacted recruiting.

One of the expected efficiencies from MHS Genesis was that an applicant's medical history would be made readily available through data gathered through the Health Information Exchange (HIE) networks. The Department of Health and Human Services mandated that HIE information be provided into MHS Genesis. However, it was quickly discovered that not all medical provider networks authorized or participated in the release of medical information. For example, one part of the country may only provide an applicant's prescription information history, while another network may only provide prescriptions with doctor's notes. This patchwork of inconsistent HIE medical information resulted in MEPS medical personnel requesting the applicant or recruiter obtain this information, which lengthened the overall enlistment process and defeated one of the intended purposes of MHS Genesis. Until the HIE networks provide a more uniform and comprehensive medical history flow into MHS Genesis, the system will not meet anticipated efficiency.

By its nature, MHS Genesis is designed to increase the volume of medical information provided for each applicant in order to uncover pre-existing medical conditions. Although the volume of information increased as a result of HIE data, there was no corresponding increase in MEPS personnel to screen and evaluate the documentation. This resulted in a greater burden being placed on a workforce designed to review and decipher medical information under the previous intake methodology. Limitations on civilian labor hours, staffing shortages due to less than competitive wages compared to the surrounding medical community, and inability to acquire the services of fee-based medical providers has compounded MEPS' ability to deliver optimum and timely processing for the recruiting services.

CYBER WORKFORCE

91. Senator ROSEN. The establishment of a cyber-capable workforce in the Navy is critical, recognizing that cyberspace is a warfighting domain that continues to adapt in terms of threat and sophistication. The fiscal year 2023 NDAA required the establishment of a dedicated Navy Cyber Warfare Operations career field, which ensures that the Navy has a capable cyber workforce that can integrate within the greater DOD cyber-warfare community.

We must continue to invest in innovative, traditional and non-traditional cyber capabilities and talent to support the Department of Defense's cyber mission requirements.

Admiral Gilday, how do you envision that the creation of Cyber Warfare specialists will impact the retention of high-skilled cyber-capable sailors? Can you speak to the progress of the establishment of a training pipeline and implementation plan?

Admiral GILDAY. Creating a dedicated cyber warfare officer designator, an enlisted rating, and applying appropriate retention bonuses will help to increase retention rates. Cyber personnel will have dedicated career paths allowing them to stay in cyber roles for most—if not all—of their service. Before the creation of a dedicated designator and rating, it was necessary for personnel to take non-cyber tours within their communities to be considered competitive for promotion and retention; however, cyber skills can quickly atrophy. Now, those personnel will be competitive for promotion without having to periodically leave the cyber community. This workplace stability is a noted non-monetary benefit many of our sailors, regardless of designator or rating, have expressed interest in. Between these monetary and non-monetary incentives, the Navy is confident that we will see increased retention rates.

For officer training, the Navy will pilot a new approach to create Maritime Cyber Warfare Officers with on-keyboard skills this summer in Pensacola, Florida. Navy plans to utilize current enlisted cyber rating schools that are in high demand for Cyber Mission Force team work roles. The intent is for new Maritime Cyber Warfare Officers to undergo the same training as their enlisted Cyber Warfare Technician counterparts. For more senior officers, the Navy will initially seek to use other services' schools that have proven successful in delivering the required skills to meet work role assignments. For enlisted training, the ongoing coordination with USCYBERCOM to accomplish all foundational training prior to assignment to Cyber Mission Forces will be the basis of the new cyber warfare rating initial training.

The Navy established the Maritime Cyber Warfare Officer designator and the Cyber Warfare Technician rating on 26 June and 28 June 2023, respectively.

92. Senator ROSEN. Admiral Gilday, as a former director of operations for U.S. Cyber Command, can you discuss the value of reserve models, including potentially establishing a civilian cybersecurity reserve, to support the Department of Defense's cyberspace operations?

Admiral GILDAY. The Naval Reserve Force is vital to our national security. History has demonstrated the importance of maintaining a warfighting ready strategic reserve of trained military personnel, which reflects the essence of the Navy's mission and vision. Deploying and training side-by-side with Active Duty counterparts, Navy Reserve sailors provide a unique combination of military experience and civilian expertise that gives the Navy a competitive advantage over our adversary. Cybersecurity is one of the areas in which it is impossible to have too much capability or too much expertise. Extending the reserve force out to establish a civilian cybersecurity reserve corps builds to our existing reserve programs and could prove beneficial. A cost-benefit analysis determining further considerations (i.e., pay, benefits, risk, limitations, etc.) would need to be executed across the DOD to evaluate the advantage of tapping into the vast pool of cybersecurity talent.

QUESTIONS SUBMITTED BY SENATOR MARK KELLY

RECRUITING

93. Senator KELLY. Secretary Del Toro, I understand the Navy hit its Active Duty enlisted recruitment goals last year, but failed to meet target numbers for Reserve enlisted personnel, and for both Active Duty and Reserve officers. How has the Navy changed its strategy to meet Officer and Reserve recruitment goals?

Secretary DEL TORO. Commander, Navy Recruiting Command (CNRC) established a Navy Recruiting Reserve Command (NRRC) on 1 April 2022, a major command focused on Prior Service and Direct Commission Officer Reserve missions. Prior to NRRC, Prior Service recruiting was part of total force recruiting commands focused on both Active and Reserve missions. NRRC's model is Reserve Recruiters in Reserve Markets, working Reserve Only Missions and led by Reserve Leaders. In support of this model, there is newly developed Reserve-centric Prior Service Training and a new Reserve-centric Prior Service Marketing and Advertising called Navy+, which targets Civilians, Veterans and Active Duty separating from Service.

Since the execution of NRRC, 460 Enlisted and Officer recruiting professionals have been transferred from Navy Recruiting Command and 26 Navy Talent Acquisition Groups (NTAGs) to NRRC. Reserve recruiting billets (675) were transferred to

NRRC commensurate with the reserve missions that were transferred to the new command. NRRC's manning is strategically built with Officer and Enlisted Canvasser Recruiters from a variety of general and specialty rates and designators. Canvasser Recruiters are Reservists on Active Duty recruiting tours for up to 3 years. In essence, NRRC recruiters are reservists selling reserve careers. The Prior Service recruiters are strategically placed in densely populated veteran markets in each State to include Hawaii and Alaska, as well as Guam, Puerto Rico and the United States Virgin Islands.

As of April 2023, NRRC has produced an additional 270 Enlisted and additional 50 Officer contracts over the past year. Navy Recruiting is expanding reach to the Prior Service and Active Duty market to ensure separating individuals have the information they need to consider extending service by way of the Navy Reserve. NRRC currently attends all Transition Assistance Programs (TAP) in the local areas and they have designated Benefit Advisors that partner with Active Duty Command Career Counselors to educate separating sailors on Navy Reserve benefits.

Navy Recruiting Command (NRC) has adjusted to a very aggressive shipping posture. Upon receipt of selection results from the Officer Community Managers (OCMs), selectees are immediately booked for the next available Officer Candidate School (OCS) class, often within 2 weeks of board results. It has been communicated to the NTAGs to prepare applicants to ship selects as soon as possible. A selection memo has been introduced to reinforce candidate contact and reduce close-in attrition or "rolls" by mandating recruiters contact selectees directly following selection results to verify their acceptance to the community and verify their shipping date. Additionally, NRC has strategically overbooked designators with high pre-shipping attrition in hopes to attain shipping goals before the last OCS class of the fiscal year.

NRC is actively working with OCMs to reevaluate Program Authorizations to allow more applicants to be sent to selection boards. NRC provides a number of selections needed at each board to OCMs in order to maintain mission glideslope. OCMs are encouraged to select over their quota to allow for any potential attrition and build a Delayed Entry Program for fiscal year 2024.

NRC is expanding the Mobile Medical Recruiting Academy training topics to include Nuclear Propulsion Officer Candidate programs and renaming it Mobile Officer Recruiting Academy. This change should increase penetration to quality colleges and universities for all non-medical attainments if applied by field recruiters.

94. Senator KELLY. Secretary Del Toro, what can the Navy do to expose our youth to the opportunities the military can provide? This is critical to ensure we have the quality and quantity of sailors and marines needed to support our national defense in the future

Secretary DEL TORO. As propensity for military service has reached record lows, the Navy and Marine Corps are heavily focused on expanding and enhancing opportunities to tell our story and communicate the opportunities and benefits of military service to young Americans.

Expanding community and school outreach. High schools remain the most sustainable market for our recruiters, who are working hard to reestablish relationships with educators and students lost as a result of COVID closures and restrictions. We are also working closely with State and Federal education officials to promote the value of military service and military-connected recognition programs.

Currently, recruiter access requirements set a low threshold for compliance in schools that fulfill just their minimal obligations. We encourage Congress to modernize these requirements in a way that supports the ability of our recruiters to establish meaningful connections with both students and educators.

Enhancing marketing to youth and influencers. Today's fragmented media environment means television ads do not have the same impact on young people as in the past. Instead, we must employ creative and more personal approaches that directly appeal to our audience, highlight the diversity of our career opportunities, and convey the military's tangible and intangible benefits to youth and those who influence them, such as educators, family members, and community leaders.

Our advertising programs are vital to building awareness among high-quality, diverse populations that are increasingly disconnected from military service. A strong advertising program that reaches young people in formats they heavily utilize enables our recruiting commands to modernize, attract, and recruit the highest quality accession cohorts.

Attracting a diverse and skilled talent pool. The Navy and Marine Corps strive to recruit every zip code in the country and have implemented community outreach within under-represented communities to attract a wider range of potential recruits. The Department of the Navy continues to assess where our Naval Reserve Officer

Training Corps units are established and how we are leveraging cross-town affiliations at Minority-Serving Institutions in communities with large minority populations. Recruiters also seek diverse and innovative STEM talent by visiting magnet schools, specialized high schools, and career and technical education programs. By continuing to highlight our commitment to diversity and inclusion, we promote the Department of the Navy as an attractive and welcoming option for young people of all backgrounds.

95. Senator KELLY. General Berger, I understand that most of the services have recruiting challenges, but the Marine Corps has been doing well with retention. What does the data suggest is the reason for this success?

General BERGER. The Marine Corps has achieved exceptional retention rates, surpassing our goals. This achievement is a testament to the fact that once your marines become marines, they want to stay marines. The marines who we are retaining are extremely high quality; this year, over 70 percent come from the top 40 percent of our force. We are decisively retaining and increasing the number of marines who have innate ability, skills, and commitment to continued service, in line with our Talent Management 2030 strategy. Introducing initiatives, such as increased lateral move opportunities, allows marines to continue service while further aligning individual desires to service requirements. Our culture of warfighting excellence coupled with Talent Management initiatives that seek to enhance the marine and family experience significantly contribute to our retention success. Overall, the Marine Corps' retention achievements are a testament to its ability to attract and retain high-caliber personnel who are committed to serving their country with excellence. Also, we only select the best of our marines to serve on recruiting duty. As an example, a great majority of our General Officers have commanded recruiting stations.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

LITTORAL COMBAT SHIP

96. Senator COTTON. Secretary Del Toro, Congress asked you to look at alternative uses for the Littoral Combat Ship (LCS). You currently have a requirements study out for an unmanned mothership. Has there been any consideration of the LCS as a mothership for unmanned systems?

Secretary DEL TORO. Yes, LCS (Freedom Class) is among the various ships we have included in our SECNAV Unmanned Mothership Study. Additionally, it will also be evaluated as a potential solution, if/when required, as part of the Unmanned Systems (UxS) Expeditionary Support and Integration Requirements Evaluation Team (RET) commencing this summer.

97. Senator COTTON. Secretary Del Toro, what is the feasibility of experimentation with the LCS to inform those requirements as opposed to simply paper studies?

Secretary DEL TORO. Fourth fleet has commenced with their initial concept exploration. Additionally, the Navy is about to award a contract to put Unmanned Aerial System Intelligence Surveillance Reconnaissance, Commercially Owned / Commercially Operated Services on three LCS from Multiple Fleets. This is an expansion of the work that was done last year to put the same capability on DDG FLTI/II (x2) in 7th Fleet. This is meant to be complementary to the MQ–8 (if available) and not replace.

QUESTIONS SUBMITTED BY SENATOR MIKE ROUNDS

ADDITIVE MANUFACTURING

98. Senator ROUNDS. Admiral Gilday, do you believe additive manufacturing provides a major opportunity for reducing maintenance lead times both on board ships and at the shipyards?

Admiral GILDAY. Additive manufacturing provides a strong opportunity to reduce maintenance lead times. It is currently being used at the shipyards with conventional manufacturing and sustainment, particularly with tooling and fixtures. Additive manufacturing on board ship has focused primarily on low criticality parts due to the current maturity of the materials and processes. Additively manufactured high criticalaity end-use items require qualification and certification for specific applications. The Department of the Navy is continuing to mature its processes and

invest in research and development to take advantage of additive manufacturing opportunities.

The Navy is embracing new technologies in order to deliver and maintain quality ships and submarines on time to meet the threat posed by our Nation's adversaries. The Navy sees significant opportunity for advanced manufacturing technology, particularly additive manufacturing, to deliver benefits across the shipbuilding industrial base and supply chain as a means to:

- Increase manufacturing resilience.
- Reduce reliance on sole-source supply points and address constraints in challenged markets.
- Reduce manufacturing lead-times and fabrication spans.
- Address obsolescence concerns for ship maintenance, modernization, repair, and sustainment.
- Reduce the manpower needed for critical manufacturing while attracting, upskilling, and retaining the skilled workforce needed across the supply chain.

99. Senator ROUNDS. General Berger, would forward deploying printers, capable of producing additively manufactured components, with logistics units help improve the ability of the marines to sustain themselves in a denied environment?

General BERGER. Yes. A forward deployed manufacturing capability (additive, subtractive, and hybrid versions of the two) are critical in sustaining Marine Corps and joint forces in a denied environment. In addition to fielding the hardware that produces these parts (Expeditionary Fabrication (XFAB) at the intermediate level, and Tactical Fabrication (TACFAB) at the organizational level), the Marine Corps is working to field the authoritative digital data thread required for those machines to produce required parts. We have fielded a deployable additive manufacturing capability to all three Active Duty Maintenance Battalions and additional logistics units are scheduled to receive this capability across the FYDP. We are on track to begin fielding polymer additive manufacturing capabilities to every battalion within the Marine Corps this calendar year (CY23). We are on course to update our dedicated maintenance unit's capabilities to be able to print metal parts in fiscal year 2026. Additionally, we intend to undergo a modernization effort for our deployable machine shop that will replace our legacy deployable subtractive manufacturing capability and provide our logistics units with a better sustainment capability.

100. Senator ROUNDS. Secretary Del Toro, what will you do to enable the Navy and Marine Corps to rapidly qualify additively manufactured components?

Secretary DEL TORO. The ability to rapidly qualify additive manufacturing (AM) processes and certify parts within the Department of the Navy (DON) is continuing to mature. The diverse nature of Navy and Marine Corps operational environments requires different qualification/certification approaches across various weapons systems. For example, approval of low-critical parts for ships, submarines, and ground units are delegated down to the waterfront and unit level while higher criticality parts (i.e., air-worthy and nuclear SUBSAFE/Level 1 parts) require higher levels of approval.

The AM industry at large is limited by a lack of AM standards, material data, and qualification/certification approaches. The DON is coordinating with other government, academic and industry partners in the development of these standards and approaches to enable more rapid AM qualification and certification. Current processes only enable approval of individual parts for particular platforms produced by specific machines. The DON is improving this process in the near term by identifying ways of scaling process qualification to multiple AM vendors as well as implementing approaches for "families of parts" in which parts with similar design features, performance requirements, and consequence of failure are certified together. In the longer term, qualification will be accomplished by analyzing the vast amounts of data captured through AM processes comparing the "as designed" part to the "as built" part. While these efforts are in their beginning stages, DON will continue to fund the efforts that contribute to the maturation of the AM qualification and certification process.

NAVAL MAINTENANCE

101. Senator ROUNDS. Secretary Del Toro and Admiral Gilday, the USS *Boise* still sits in dry dock at Newport News Shipyard. Due to compounding problems with the Navy's ship maintenance schedules and workflow, it has been over 8 years since this submarine completed its last mission. It has now spent 6 years in port due to maintenance issues. I view this case and the ship maintenance backlog as an extremely

grave matter. What is the plan to get USS *Boise* and other ships out of dry dock and back into the fight?

Secretary DEL TORO and Admiral GILDAY. *Boise* is currently in an Early Production Period (EPP), an availability that authorizes a portion of the Engineered Overhaul (EOH) Availability Work Package, at HII-NNS Shipyard in Newport News, VA. As *Boise* awaits commencement of the full EOH, the currently authorized and ongoing EPP is being executed by HII-NNS with the intent of reducing the risk associated with executing the entire EOH. The EPP commenced in September 2020.

An EOH is a CNO-scheduled depot level maintenance availability that is required within the submarine life cycle to perform repairs, upgrade capabilities, and reset the operating interval and certification. Commencement of the *Boise* EOH has been delayed due to resource shortages at HII-NNS, due primarily to the Navy's assignment of two higher priority submarine repair availabilities, the *Helena* (SSN 725) Drydocking Selected Restricted Availability (DSRA) and the *Columbus* (SSN 762) EOH, at the same time *Boise* entered the shipyard. The *Helena* DSRA is complete and the ongoing *Columbus* EOH has been progressing steadily following a slower than expected start.

The Navy is working with HII-NNS to award a *Boise* EOH contract that will incentivize performance and share risk. Once this contract is awarded, the *Boise* EOH will begin and then availability duration, undocking, and completion dates will be determined.

In July 2022, the Navy approved a 15-Year Attack Submarines (SSN) Maintenance Strategy, a holistic approach to SSN Maintenance that includes leveraging public and private sector capability and capacity to increase submarine operational availability and sustain material readiness.

The 15-Year SSN Maintenance Strategy provides long term guidance and planning of Public Shipyard and Private Shipyard Repair availabilities. The goal of this effort is to level load depot maintenance facilities, smoothing out peaks and troughs in combined workloads and enabling the facilities to execute maintenance with predictability.

Execution of the 15-year SSN Maintenance Strategy requires investment across public and private sector, to include:

- Fully funding public shipyards
- Establishing stable requirements and funding for private shipyard availabilities
- Addressing funding shortfalls for Virginia Class (VCS) material, obsolescence, rotatable pools, etc.
- Engaging industry on discrete jobs to outsource
- Executing funding options/processes to support material availability

The President's Budget 2024 adds for VCS material parts, obsolescence, acquisition, and private yard availability planning to improve SSN maintenance execution at public and private shipyards. Additionally, this fully funds Submarine Maintenance (1B4B) which will enable greater confidence in schedule execution and material availability for planned submarine overhauls.

Key President's Budget 2024 investments in SSN maintenance are:

- Invests in the long lead-time (LLTM) materials that are causing significant delays in VCS availabilities.
- Addresses obsolete systems or components and invests in outsourced work to enable shipyard worker focus on critical path work.)
- Restores Navy Working Capital Fund investment in VCS material made in fiscal year 2023.—$350 million (fiscal year 20DP)
- Funds planning of a private shipyard VCS availability in heel-to-toe fashion following *Boise* EOH, continuing Navy's partnership with private industry.
- Fully funds Submarine Maintenance (1B4B) which will improve confidence in schedule execution and material availability for planned submarine overhauls.

Additionally, President's Budget 2024 budget request adds $600 million in OPN to fund remaining shortfall for *Boise* EOH.

The Navy is committed to these investments, and executing the 15-Year SSN Maintenance Strategy to improve our national defense posture.

102. Senator ROUNDS. Secretary Del Toro and Admiral Gilday, in recognition of the poor State of our public shipyards, Navy leadership developed the Shipyard Infrastructure Optimization Program (SIOP) in 2018. Can you tell me what the State of this program is, whether the Navy is getting the resources it needs to recapitalize our public shipyards on an appropriate timeline to provide a credible naval deter-

rent to China, and whether resourcing this requirement to a higher level is something that this Committee needs to seriously consider?

Secretary DEL TORO and Admiral GILDAY. The Navy's primary initiative to modernize and optimize the four public shipyards is the Shipyard Infrastructure Optimization Program (SIOP). Shipyards with resilient facilities, efficient layouts, modernized equipment, and digital interconnections generate Fleet readiness and strengthen our Nation's security. The Navy's fiscal year 2024 budget submission confirms the Administration's commitment to SIOP with $9.9 billion of funding across the fiscal years 2024 to 2028 Future Years Defense Program.

With the support received from Congress—to include the $1.9 billion appropriated in fiscal year 2023—SIOP is advancing three lines of effort (LOE): (1) deliver required dry dock repairs and upgrades to support current and planned classes of nuclear-powered aircraft carriers and submarines, (2) optimize workflow within the shipyards through significant changes to their physical layout, and (3) recapitalize obsolete industrial plant equipment with modern technology, substantially increasing productivity and safety.

SIOP has achieved a number of accomplishments toward each LOE: Completion of the Portsmouth Naval Shipyard (PNSY) Super Flood Basin and the modernized Norfolk Naval Shipyard Dry Dock 4; awarding construction of the Norfolk Naval Shipyard Dry Dock 8 Saltwater Upgrades and Pearl Harbor Naval Shipyard (PHNS) Dry Dock 5; commencing design of a *Gerald R. Ford*-class aircraft carrier capable dry dock at Puget Sound Naval Shipyard; awarding multiple Facilities Sustainment, Restoration, and Modernization projects across all four shipyards; and continuing capital equipment investments to include delivery of a 175-ton portal crane to PNSY.

The foundation of SIOP's optimization effort are the industrial modeling and simulation, engineering studies, and area development plans (ADPs) underway for each shipyard. SIOP completed the first increment of industrial modeling in 2022, which provided facility-level data describing optimized workflow among buildings and validated reductions in availability durations possible by optimizing facility layouts and infrastructure. The second increment of industrial modeling started in 2022 and focuses on processes within facilities to optimize shop floor layout and equipment to further increase efficiencies. The modeling and simulation of the ideal shipyard layout, combined with the engineering studies that describe local constraints allow the development of shipyard specific ADP that provide the Navy a range of options and sequencing for facilities recapitalization. The PHNS ADP was delivered by the contractor in July 2022, and the Navy expects to make a recapitalization decision this year. The ADPs for the other shipyards will complete in 2024 and 2025.

The Navy budget balances requirements across all domains, and the scale of SIOP requires that it remain a Navy priority for many years. Consistent, predictable funding for the program is necessary to move swiftly through planning, design, and construction, while synchronizing the recapitalization with shipyard operations and fleet requirements. Acceleration opportunities exist if project designs can be further advanced to take advantage of operational windows for construction.

Navy readiness demands that all SIOP investments are coordinated with fleet operational commitments to ensure alignment of requirements, construction, and ship maintenance, while remaining mindful of the impact SIOP will have on our shipyard workers and our need for sustainable infrastructure. This includes ensuring the program is integrated with the Naval Sea Systems Command Performance to Plan, the Naval Sustainment System—Shipyards efforts, local communities and regulators, and the Administration's climate initiatives.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

WEAPONS PROCUREMENT

103. Senator ERNST. Secretary Del Toro, since the Navy proposes growing the weapons procurement account by more than 40 percent in fiscal year 2024, what production lines for missiles have been maxed out?

Secretary DEL TORO. Senator, the following weapons procurement production lines are maxed out:

- AIM–120 AMRAAM through fiscal year 2026. This is an Air Force led effort, to include the DON procurements.
- AGM–158C LRASM is near max capacity as annual quantities procured fluctuate year-to-year across the FYDP. LRASM is a Navy led program with Air Force as the contracting lead for procurement with both Navy and Air Force procurements.

- RIM–174 SM–6 is maxed out across the FYDP.
- RGM/UGM–109E Tactical Tomahawk is at maximum capacity and coordinating investments to increase capacity. The Tomahawk production line, and sub-vendors, are shared across new production and recertification and multiple service customers, including Navy, Marine Corps, Army and Foreign Military Sales.

104. Senator ERNST. Secretary Del Toro, what production lines have excess capacity?

Secretary DEL TORO.

- Naval Strike Missile has some additional capacity that the Navy could leverage as part of the planned fiscal year 2024 to 2028 Multi-Year Procurement. With additional funds, the Navy can procure up to 104 missiles across the FYDP on the planned fiscal year 2024 MYP for NSM.
- ESSM has additional capacity that can be leveraged. Due to investments made to increase production capacity, ordering capacity will increase from 300 up to 540 ESSM Block 2 missiles starting in fiscal year 2024.
- LRASM will achieve additional capacity in fiscal year 2025 following planned investments in fiscal year 2024.
- AGM–88G AARGM-ER currently has excess production capacity for up to 91 missiles. Fiscal year 2024 production capacity will be updated once the fiscal year 2023 contract is awarded.
- AIM–9X will have additional capacity that can be leveraged in fiscal year 2025. They are currently at 1,400/year with a stretch goal to reach 1,650 in fiscal year 2024. Multiple efforts are ongoing to increase production capacity up to 2,000/year with an eventual end State of 2,500/year.

105. Senator ERNST. Secretary Del Toro, can you describe how you have been using multi-year authorities for select munitions?

Secretary DEL TORO.

- The DON is moving in lock-step with the Air Force and OSD to support the Department's Critical Munitions Strategy (CMS).
- The DON continues to view MYPs as a valuable tool as we respond to an increasing demand for munitions.

To that end, the DON has planned MYPs upcoming for Naval Strike Missile and SM–6, and are partnering with other Services to use upcoming MYPs for AMRAAM and LRASM.

106. Senator ERNST. What more can Congress do to support the Navy and the industrial base surge capacity?

Secretary DEL TORO.

- Support the President's Budget and approve MYP and additional Advanced Procurement & Industrial Base requests.
- Continue to support and partner with the Department as we execute and consider expanding authorities to streamline processes to accelerate and efficiently acquire munitions.
  - Continue and expand support for Multiyear Procurement (MYP) and OSD's Large Lot Procurement (LLP) effort.
  - MYP contracts incentivize the OEM to build in LEAN and Six Sigma efficiencies more feasibly than with a 1-year contract; opportunity to deploy and yield efficiencies increases as the period of performance increases.
  - MYP guarantees Tier II, III and IV subcontractors work across the entire scope of the contract period, instead of only a single year of guaranteed work. For the "small companies" a multiyear contract solidifies their production capacity.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

FORCE DESIGN 2030 DIVESTMENT

107. Senator SULLIVAN. General Berger, you have been taking bold, innovative action on Force Design 2030 as part of your follow through on the National Defense Strategy. You should be commended for this. Nevertheless, given how dramatic and far reaching your actions have been with Force Design 2030, and given some of the criticisms this initiative has received, I am presenting a number of questions that are important to answer in the fullest possible detail.

General Berger, in your statement for the Committee, you asserted that today the Marine Corps fields "the most proficient combined arms teams on the globe." Mili-

taries around the world have long understood combined arms to mean employing a combination of infantry, tanks, cannon artillery, engineers, and close support aircraft in a coordinated manner. Those same militaries today are endeavoring to add these systems to their inventories, and daily we see their utility on the battlefields in Ukraine. Yet, the Marine Corps has divested or are on the way to divesting all the Marine Corps' tanks, two-thirds of its cannon artillery, nearly all its engineering equipment that enables breaching of enemy minefields and obstacles, all its engineering equipment that enables clearing and proofing minefields, all its bridging, and nearly a third of its close support rotary and fixed wing aircraft. How is it possible for the Corps to have "the most proficient combined arms teams on the globe" without these needed weapons and items of equipment?

General BERGER. The Marine Corps defines combined arms in our doctrinal publications, specifically in Marine Corps Doctrinal Publication (MCDP) 1 Warfighting (dtd 4 April 2018). According to MCDP 1, combined arms is "the synchronized and simultaneous application of different arms and elements of combat power to achieve an effect greater than if each element were used separately or sequentially." In detail the combined arms section of MCDP–1 states that:

> *"In order to maximize combat power, we must use all the available resources to best advantage. To do so, we must follow a doctrine of combined arms. Combined arms is the full integration of arms in such a way that to counteract one, the enemy must become more vulnerable to another. We pose the enemy not just with a problem, but with a dilemma—a no-win situation.*
> *We accomplish combined arms through the tactics and techniques we use at the lower levels and through task organization at higher levels. In so doing, we take advantage of the complementary characteristics of different types of units and enhance our mobility and firepower. We use each arm for missions that no other arm can perform as well; for example, we assign aviation a task that cannot be performed equally well by artillery. An example of the concept of combined arms at the very lowest level is the complementary use of the automatic weapon and grenade launcher within a fire team. We pin an enemy down with the high-volume, direct fire of the automatic weapon, making them a vulnerable target for the grenade launcher. If they move to escape the impact of the grenades, we engage them with the automatic weapon.*
> *We can expand the example to the MAGTF level: We use assault support aircraft to quickly concentrate superior ground forces for a breakthrough. We use artillery and close air support to support the infantry penetration, and we use deep air support to interdict enemy reinforcements that move to contain the penetration. Targets which cannot be effectively suppressed by artillery are engaged by close air support. In order to defend against the infantry attack, the enemy must make themselves vulnerable to the supporting arms. If they seek cover from the supporting arms, our infantry can maneuver against them. In order to block our penetration, the enemy must reinforce quickly with their reserve. However, in order to avoid our deep air support, they must stay off the roads, which means they can only move slowly. If they move slowly, they cannot reinforce in time to prevent our break-through. We have put them in a dilemma."*

MCDP 1 explains that combined arms are a fundamental concept of Marine Corps warfare, which involves the integration of various combat kinetic and non-kinetic capabilities. The goal of combined arms, employed with maneuver, " . . . is to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which the enemy cannot cope." Furthermore, MCDP 1 emphasizes that combined arms are not limited to the integration of combat arms but includes other elements of combat power, such as intelligence, logistics, and command and control.

The definition of combined arms remains valid, though the means and methods of employment continue to evolve under Force Design 2030. One of the Marine Corps' capstone research and development projects in Force Design 2030 is the family of integrated targeting cells. The effort accelerates the evolution of combined arms multi-domain formations by fusing operations, intelligence, and fires functions (i.e., Combined Arms) together in a single center, creating the means for marine units to participate in and control joint fires, while also gaining and maintaining persistent custody of adversary targets. The Marine Corps today now has the ability to fight and contest in all five warfighting domains to include space and cyber. The integration of advanced technological capabilities has increased the lethality of the MAGTF to deter, but also contend against our adversaries in these domains with combat credible formations and capabilities that can provide precision fires at range.

Additionally, Force Design 2030 investments have prioritized sensing and communication capabilities that enable forward postured formations to detect and track adversaries' targets and provide the Joint Force with the necessary target data to project combat power into an Anti-Access/Area Denial environment. These efforts will continue to enable maneuver of units, but more importantly the maneuver of Joint Force units and the maneuver of maritime platforms.

At its core, the Marine Corps modernization effort is focused on enhancing the ability to conduct combined arms. A key element of Force Design 2030 is developing and employing modern capabilities that contribute to a multiple joint "kill webs." This approach also improves our ability to leverage non-lethal fires that provide the combatant commander more options in day-to-day competition and pre-conflict deterrence activities. However, we continue to invest in modern lethal fire platforms that provide a more effective capability than legacy systems. This includes legacy systems such as heavy tanks and towed, tubed cannon artillery that lack the precision and range to be relevant in the maritime and littoral battlespaces applicable to our directed pacing threat. See question #20 for breakdown of retained artillery, as part of our kinetic, combined arms capability. Let us not forget that marines will be able to provide lethal combined arms with precision at ranges that far exceed current capabilities; combined arms inventory for FD2030: mortars, artillery, MLRS family of munitions on versatile JLTV platforms, HIMARS, loitering munitions, NSM, and close air support from RW and FW CAS. A rifle company will be able to destroy most targets on R400 (combined arms company assault range) before leaving the attack position, not the case in a pre-FD2030 rifle company.

Prior to Force Design 2030 initiatives, the Marine Corps focused primarily on kinetic combined arms consisting of surface and air assets making our combined arms capabilities two dimensional. Today, the Marine Corps still maintains the ability to conduct combined arms in the surface, air, and sea domains but we have significantly increased both the kinetic and non-kinetic combined arms capabilities in the cyber and space domains creating a multi-domain capability. Regardless of what assets are utilized to employ combined arms, they will only be as effective as the Command and Control (C2) architecture that is designed to enable the execution of the assets. Therefore, Force Design 2030 has focused significantly on organizing, training, and resourcing the MAGTF to effectively conduct MAGTF C2 at echelon and rapidly transition across the competition continuum to enable all-domain joint and combined kill webs. To do this we must transition from a legacy, air-land battle paradigm to a 21st Century, all-domain, joint single battle mindset. We can no longer accept multiple, disparate C2 systems optimized for single-domain awareness bound by analog/human-speed processing. There are a variety of ongoing efforts to evolve the Service's C2 capability to conduct all domain operations, enable kill webs, and further expand our value to the joint and combined force.

Our Marine Air Command and Control System remains the exemplar for the Service's evolving C2 ecosystem and has showcased an innovative capability to enable kill webs across multiple domains via the Multi-functional Air Operations Center (MAOC). Additionally, we are on track to create the first cadre of kill web subject matter experts via the C2 Interface Control Officer Primary Military Occupational Specialty in 2025.

As evidenced by experiments, exercises, wargames, and analyses, the integration of intelligence, fires, and C2 is at the heart of the targeting cycle and is required to enable and conduct kill webs across multiple domains.

108. Senator SULLIVAN. General Berger, do any of the changes to force structure in Force Design 2030 violate the Title 10 requirement that "[t]he Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein?" In your answer, please provide specific references to MCRP 1–10.1 and the exact number of marines in the three divisions and three air wings in 2018 and 2023.

General BERGER. Title 10 United States Code, Section 8063 (United States Marine Corps: composition; functions) states that:

(a) The Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein. The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. In addition, the Marine Corps shall provide detachments and organizations for service on armed vessels of the Navy, shall provide security detachments for the protection of

naval property at naval stations and bases, and shall perform such other duties as the President may direct. However, these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized.

(b) The Marine Corps shall develop, in coordination with the Army and the Air Force, those phases of amphibious operations that pertain to the tactics, technique, and equipment used by landing forces.

(c) The Marine Corps is responsible, in accordance with integrated joint mobilization plans, for the expansion of peacetime components of the Marine Corps to meet the needs of war.

Force Design 2030 adheres to the requirements set forth in Title 10 of the United States Code. The Marine Corps regularly assesses our force structure, capabilities, and readiness to ensure that we can fulfill our obligations as outlined in Title 10. Force Design 2030 optimizes Marine Corps force structure to meet the demands the National Defense Strategy and of modern warfare. This plan was developed with the direction and oversight of senior civilian and military leaders.

After the Commandant's Planning Guidance (CPG) was released in the summer of 2019 and Force Design 2030 modernization began, the Marine Corps has conducted over 400 congressional engagements with Members, Professional Staff Members, and staff from personal offices some of which were repeated engagements or deep dives with the same staff. The Marine Corps has averaged more than five congressional engagements a month for the past 3.5 years. Marine Corps leadership values and honors the need for congressional oversight and has actively supported that lawful requirement. Combat Development and Integration (CD&I) alone has conducted 209 of those engagements as of April 2023. Of those 209 engagements roughly 30 percent were classified briefs at the secret level and above, we must respect the threat and the associated security classification protocols to safeguard critical capabilities. The remaining 70 percent of those engagements were at the unclassified level to be as transparent as possible in our modernization efforts.

Force Design 2030 was also informed by an extensive and continuous review of current and future threats. The Intelligence Community (IC) Annual Threat Assessment continues to highlight the increase in military modernization from the Peoples Republic of China (PRC). The 2023 IC Annual Threat Assessment has identified the PRC as working to field a military by 2027 designed to deter U.S. intervention in a future cross-strait crisis. Furthermore, the 2022 NSS identifies the People's Republic of China (PRC) as the only competitor with the intent and the capacity to reshape the international order. The 2018 and 2022 NDS clearly State the case for change by identifying the Indo-Pacific as the priority theater from a competition and threat perspective.

Force Design 2030 creates a more agile, flexible, and lethal force that is better equipped to operate forward, compete, project power and influence as directed by the National Defense Strategy and other strategic guidance documents. This includes enhancing the Marine Corps' ability to conduct expeditionary and amphibious operations, improving our ability to operate in contested and denied environments, and increasing our capacity to conduct distributed operations with joint and allied partners. These efforts are directly tied to our Title 10 requirements of:

> *"The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign."*

Over the past two decades the Marine Corps has been involved in a land campaign as the Nation directed and required. Force Design 2030 redirects the Marine Corps to our original mission as a naval expeditionary force in readiness that supports the fleet commanders within the naval campaign. Overall, Force Design 2030 intends to ensure that the Marine Corps remains a highly capable and responsive force that can effectively fulfill our obligations under title 10 and other statutory and regulatory requirements.

Total Force Structure - Active Component

	2018	2023
Total	186807	178678
Change in force structure		-8129
Division		
	2018	2023
Total	43695	39727
Share of total Force	23.4%	22.2%
Change in force structure		-3968
Wings		
	2018	2023
Total	39343	35931
Share of total Force	21.1%	20.1%
Change in force structure		-3412

109. Senator SULLIVAN. General Berger, when responding to a question during the hearing on 18 April 2023 about where the Marine Corps would acquire the weapons and equipment it divested if needed in a future conflict, you stated that a combatant commander is able to tailor forces as required. You noted that it was your responsibility solely to organize, train, and equip marine forces. It stands to reason that marines would need to have the skill and knowledge to operate effectively in conjunction with supporting elements from sister Services, which would require training with them. Including information on units, dates, and locations, where have marines trained with the Army tank units, combat engineers, and bridging units in the past year?

General BERGER. The Marine Corps conducted multiple joint exercises with U.S. Army units in the previous 12 months at the National Training Center at Fort Irwin, California, the Joint Readiness Training Center at Fort Polk, Louisiana, and during Exercise NORTHERN STRIKE 23–1 at Selfridge Air National Guard Base, Michigan. The purpose of this training is to prepare marines to operate effectively in a joint environment. Consequently, Marine Corps Operation Plans (OPLANS) are being revised in accordance with guidance from Combatant Commanders, and capabilities contained in the Defense Readiness Tables and Apportionment Tables in response to Force Design 2030.

Marine Corps training with Army tank, combat engineer, and bridging units in the previous 12 months includes:

- National Training Center 22–10; 3—16 Sept 2022; Ft Irwin, CA
- 3d Low Altitude Air Defense Battalion trained with 2d Brigade Combat Team, 1st Armored Division to increase close-in, low altitude, surface-to-air weapons fire proficiency and readiness in support of maneuver elements and joint force.
- National Training Center 23–05; 20 Feb—31 Mar 2023; Ft Irwin, CA
- 1st ANGLICO trained with 2d Armored Brigade Combat Team, 3d Infantry Division to increase Joint Terminal Attack Controller proficiency and readiness.
- National Training Center 23–06; 20 Mar—30 Apr 2023; Ft Irwin, CA
- 3d ANGLICO trained with 3d Armored Brigade Combat Team, 1st Armored Division to increase Joint Terminal Attack Controller proficiency and readiness.
- NORTHERN STRIKE 23–1; 20—29 Jan 2023; Selfridge Air National Guard Base, MI
- VMFA–115 trained with 1st Battalion, 120th Field Artillery Regiment, 32d Infantry Brigade Combat Team to increase proficiency in Expeditionary Advanced Base Operations, cold weather Joint Close Air Support, Forward Air Controller-Airborne; Tactical Air Control-Airborne, Strike Coordination and Recon, Armed Recon, and Suppression of Enemy Air Defenses.
- Joint Readiness Training Center 23–04; 20 Feb—5 Mar 2023; Ft Polk, LA
- 2d ANGLICO trained with 2d Infantry Brigade Combat Team, 10th Mountain Division to increase Joint Terminal Attack Controller proficiency and readiness.
- Joint Readiness Training Center 23–07; 12 Apr—13 May 2023; Ft Polk, LA
- 6th ANGLICO trained with 3d Infantry Brigade Combat Team-Airborne, 82d Airborne Division to increase Joint Terminal Attack Controller proficiency and readiness.

110. Senator SULLIVAN. General Berger, in your statement for the Committee, you noted that". . . the Marine Corps is now complete with our major divestments. Reducing the approved acquisition objectives (AAO) of major programs like the CH–53K or F–35 at this point would not produce resources for investment elsewhere and would be premature decisions." Because you have cut squadrons it is unclear where the major program aircraft you list will go if the Marine Corps retains the numbers of aircraft in the Program of Record (POR). Will a future commandant come back to Congress seeking funds for the personnel and support equipment required to again stand up the needed squadrons?

General BERGER. Force Design 2030 not only provides a roadmap for Marine Aviation to modernize and optimize into a more capable agile expeditionary force, but Force Design 2030 also sets Marine Aviation on the path to look to the future. For example, Marine Aviation is teaming with U.S. Navy in the development of the Marine Air Ground Task Force Unmanned Expeditionary Family of Systems (FoS). These efforts include acceleration of prototyping and experimentation of TACAIR Collaborative Combat Aircraft and building a common interoperable system control architecture for control of Joint assets. In parallel, Marine Aviation is also exploring the Vertical Takeoff and Landing Family of Systems (VTOL FOS), where the Logistics Connector is the first major effort to support the execution of the Stand-in Force (SIF) through airborne logistics in a contested environment. This portfolio also includes but is not limited to Air Loitering Munitions, an Attack/strike capability, and a future Assault support capability to replace our extant platforms.

Force Design 2030 has expanded, optimized, and enhanced Marine Aviation's ability to provide unique and unmatched lethal, sustainable, and fiscally responsible capabilities to the MAGTF, JFMCC, and Joint Force.

The Marine Corps Program of Record (POR) for F–35 is 420, and 200 for CH–53Ks. Over the last two future-years defense programs (FYDP), these numbers have not changed. Nothing in the Force Design 2030 modernization efforts, changes these programs of record and we have no plan to reduce the total number of aircraft.

Historically, the number of squadrons (organizational construct) and aircraft (composition) within aviation units has always evolved inside the Program of Records (POR) to ensure the Marine Corps remains the Nation's crisis response force while modernizing and optimizing the fleet to meet the challenges of the future operating environment. To provide examples of this evolution, between 1990 and 2016:

- Between 1990 and 2015, CH–53 Active component Marine Heavy Lift Helicopter Squadrons (HMH) fluctuated from nine to ten, to nine, to ten, to eight.
- Between 1990 and 2016, H–1 Active component Marine Light Attack Helicopter Squadrons (HMLA) fluctuated from six to eight, to nine, to eight, to seven.
- Between 2011 to 2014, MV–22 Active component Marine Medium Tiltrotor Squadrons (VMM) fluctuated from 18 to 16 to 18.
- F/A–18 squadrons changed organizational construct or composition nine times between 1990–2016.
- In 1992, the Marine Corps had only one 18 plane EA–6B Prowler squadron which disaggregated into four squadrons with five planes each.
- In 2007, the Marine Corps planned an all F–35B fleet consisting of 14 squadrons of 10 aircraft and seven squadrons of 14 aircraft. o In 2009, we increased seven of the squadron's allocations to 16 aircraft.
- In 2011, F–35C was incorporated.
- In 2013, the plan changed to nine squadrons of 16 aircraft and nine squadrons of 10 aircraft.
- All these changes were done without adjusting the Program of Record.

Force Design 2030 modernization optimized Marine Aviation to operate from austere, distributed locations and across extended distances while providing cutting-edge advantages to the naval expeditionary force through the six functions of Marine Aviation, which consists of: Offensive Air Support, Anti-Air Warfare, Assault Support, Air Reconnaissance, Electronic Warfare, and Control of Aircraft and Missiles. Marine Aviation is manned, trained, and equipped to conduct the six functions and is integral to tomorrow's Marine Air-Ground Task Force (MAGTF), bringing lethal, agile, and sustainable capabilities to compete with, deter, and—if necessary—defeat our Nation's adversaries. These functions have not changed as a result of Force Design 2030.

111. Senator SULLIVAN. General Berger, the Marine Corps' divestment of its tanks and assault breaching, route clearance, and bridging assets raises concerns about

the Marine Corps' ability to meet its Title X requirement to organize, train and equip fleet marine forces "—for the conduct of such land operations as may be essential to the prosecution of a naval campaign." The Commandant has stated previously that the Marine Corps will get these items from the Army. Was an agreement in place with the Army when the Marine Corps began Force Design 2030 divestments?

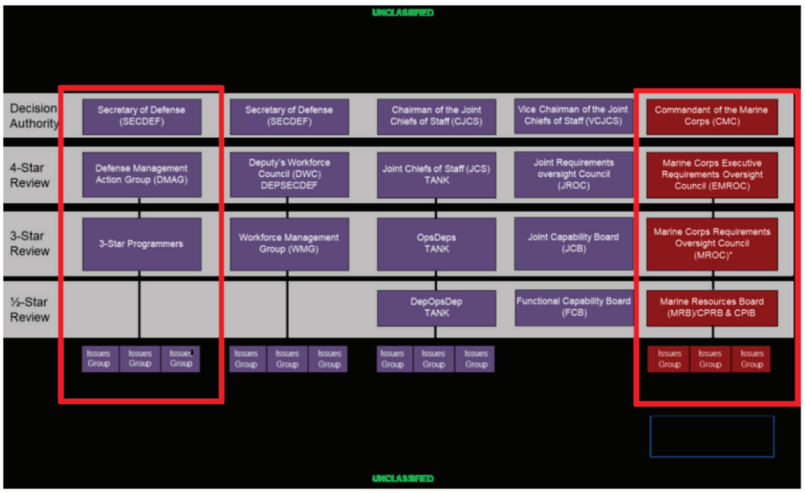
General BERGER. Force Design intends to ensure that the Marine Corps remains a highly capable and responsive force that can effectively fulfill its obligations under Title 10 and other statutory and regulatory requirements that state:

> *"The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign."*

The Marine Corps' Expeditionary Advanced Based Operations and Stand-In Forces (SIF) concepts are two of our primary modernization efforts that focus on distributed forces that can operate inside adversaries' weapons engagement zone, sense and make sense of the environment, and contribute to the joint kill web. Both concepts directly support the Marine Corps' title 10 requirements as an expeditionary force-in readiness in support of the overall naval campaign. After two decades of engaging in a prolonged land campaign in the Middle East, the 2018 and 2022 National Defense Strategies (NDS) redirect the services' focus toward Great Power Competition. After detailed planning, historical analysis, and a rigorous Campaign of Learning informed by multiple wargames it was determined that the Marine Corps was not prepared to support the naval campaign in the 21st Century threat environment. Platforms that were heavy, difficult to sustain, and provided less relevancy to an expeditionary environment were determined to be a lower priority for investments. Furthermore, decisions to divest were supported by the inherently joint nature in which the services are employed by combatant commanders while forward deployed.

There was no formal agreement with the U.S. Army when the Marine Corps began Force Design modernization efforts. After multiple iterations of wargaming, analysis, and strategic guidance, heavy land-combat capabilities were determined to not be a high priority for prosecuting the landward portion of a naval campaign in the areas prioritized to the naval Services in the NDS. This is especially true in the modern threat environment that is characterized by advanced technological capabilities that operate in multi-domain formations with long-range precision fires platforms creating an anti-access, area-denial (A2/AD) dilemma for the surface naval fleet. The Marine Corps divested of tanks, route clearance, assault breaching, etc. to invest in new capabilities more readily applicable to the future joint maritime operating environment.

Furthermore, the Marine Corps follows the Planning, Programming, Budgeting, Execution, and Analysis (PPBEA) process for all divestment and investment decisions. Within this process the Marine Corps develops its investment plans and balances those against available resources which feed the Department of the Navy's (DON) Program Objective Memorandum (POM). As part of PPBEA, the Marine Corps' budget request is adjudicated and scrutinized at all levels of leadership prior to its final submission to the Office of Management and Budget. Below is a graphical depiction of the DOD deliberation and decision bodies:



The two most relevant decision bodies are the Marine Corps' Executive Requirements Oversight Council (E-MROC) and the Defense Management Action Group (DMAG). Were the Marine Corps to pursue further divestments, they would be identified during investment planning as potential offsets. The final decision on any divestment would be made by the Commandant during an E-MROC on the Marine Corps investment plan. Marine Corps investment planning is a holistic service-wide effort. This includes the Marine Corps component commands to the joint force, i.e. Marine Forces Pacific, Marine Forces North, Marine Forces Europe/Africa, etc. These commands represent the service and advise their respective geographic combatant commands on potential force offerings and capabilities provided by the Marine Corps. The Commandant of the Marine Corps is the approving authority for the service's investment plan and its subsequent POM submission to the DON. Prior to being submitted to OSD via the DMAG, the Marine Corps' POM is briefed at the Naval Integration Planning and Programming Board which is chaired by the Secretary of the Navy. Once the SECNAV approves the Navy and Marine Corps POMs, they are submitted to the Office of the Secretary of Defense. Within OSD the primary office that reviews and scrutinizes submissions is the OSD Cost Assessment and Program Evaluation (CAPE). After being thoroughly reviewed, the service chiefs then brief the DMAG, chaired by the Secretary of Defense. The final output of this process is included within the Department of Defense portion of the President's Budget Request. Ultimately, the service is a force provider to the geographic combatant commands. Through the use of component commands, the Commandant of the Marine Corps, under his Title 10 authorities, mans, trains, and equips, the service based on the needs of the joint force.

112. Senator SULLIVAN. General Berger, are there any current agreements with the Army or other services on these divested or reduced capabilities?

General BERGER. No. While there are formal joint agreements for capabilities such as aerial refueling, theater level logistics, etc. there is no formal agreement with the other services concerning these capabilities divested of or reduced as a part of Force Design modernization efforts. It is worth repeating that any future fight will inherently be a joint fight. In that fight, we, as services, are tasked with manning, training, and equipping our respective forces to provide those forces to a Joint Force Commander who will have the authority to employ those forces with mutually supporting joint capability without the need for formal agreements or MOUs.

The Marine Corps is organized, trained, and equipped to fight as a Marine Air Ground Task Force (MAGTF). The most common MAGTFs in the Marine Corps is the Marine Expeditionary Unit (MEU) which is organized across the three ship Amphibious Ready Group (ARG) based on the threat environment and historical trends of Combatant Commander mission assignments to the ARG/MEU team. The ARG/MEU team remains a tailorable and integrated tool for the joint force that is already working in that capacity.

Given its modular organization, the MAGTF remains tailorable, able to receive attached units from other services or nations, such as naval construction battalions, or infantry/armor brigades. In 2016, the 26th MEU with the Kearsarge ARG was operating in the Central Command (CENTCOM) area of operations when the Combined Joint Task Force-Operation Inherent Resolve (CJTF-OIR) was exploring different options for fire support accelerants in support of the fight against Islamic State of Iraq and Syria (ISIS) forces in Northern Iraq. The CJTF-OIR tasked the 26th MEU with sending an artillery battery ashore to provide an Indirect Fire (IDF) capability to support Iraqi Forces in offensive operations to regain control of Mosul. The 26th MEU rapidly tasked organized a force that was comprised of an artillery battery, a reduced infantry company, and critical enablers that would provide specific capabilities for the unit. However, the artillery battery did not have a robust counter fire radar system that was critical for the threat environment. The Army had a AN/TPQ–53 radar system in Kuwait that accurately detects mortars, rockets, and artillery point of origins (POO) and expected point of impact (POI) to rapidly develop a counter-fire mission. The Army also had a Counter-Rocket, Artillery, and Mortar (CRAM) system in Kuwait that provides force protection measures to ground force units from enemy IDF. Both the AN/TPQ–53 and the C-RAM assets were attached to the task organized force that the 26th MEU assigned to the mission. This is just one small example of the MEU's capacity to rapidly task organize for an assigned mission and integrate within the Joint Force to meet the operational requirements of the Combatant Command.

113. Senator SULLIVAN. General Berger, has the Marine Corps formalized any agreement with the Army to provide equipment or capabilities since 2019?

General BERGER. No; however, should Marine Corps forces find themselves in a land campaign requiring the use of heavy armor, and if said armor is available within the theater of operations, the Joint Force Commander has the authority to task organize by pairing Marine Corps infantry formations with U.S. Army armored formations.

The Marine Corps and the U.S. Army regularly train alongside one another employing the full spectrum of the respective service's capabilities. Once forward deployed in response to crisis or contingency, it is the Joint Force Commander's responsibility and prerogative to task organize his U.S. Army and Marine Corps formations in such a way that make sense to accomplish the mission. It is worth repeating that any future fight will inherently be a joint fight. In that fight, we, as services, are tasked with manning, training, and equipment our respective forces to provide those forces to a Joint Force Commander who will have the authority to employ those forces with mutually supporting joint capability.

114. Senator SULLIVAN. General Berger, what assurances has the Marine Corps received from the U.S. Army about the availability of these units or assets for training and integrating with marine formations during combat operations?

General BERGER. The Marine Corps and the U.S. Army regularly train alongside one another employing the full spectrum of the respective service's capabilities. Once forward deployed in response to crisis or contingency, it is the Joint Force Commander's responsibility and prerogative to task organize his U.S. Army and Marine Corps formations in such a way that make sense to accomplish the mission. It is worth repeating that any future fight will inherently be a joint fight. In that fight, we, as services, are tasked with manning, training, and equipment our respective forces to provide those forces to a Joint Force Commander who will have the authority to employ those forces with mutually supporting joint capability.

115. Senator SULLIVAN. General Berger, during the May 2022 Department of the Navy posture hearing, I asked you to "provide to this Committee a timeline and a chart that anticipates year by year between now and 2030, or maybe even looking back when Force Design 2030 began, to what we are divesting and what we are gaining and how will that make sure that the gap in the trough between divestment in combat capability is not so big that it poses risk to the force or mission." You answered "I can absolutely do that. And that is the rationale that is the reason behind publishing each year, this is where we are with Force Design, this is what we have learned today, the actions taken, this is the plan ahead, which we published last month for this year." It has been almost a year since you made that commitment. Please provide the information requested in 2022 in a detailed format that clearly visualizes when capabilities have been divested or reduced since 2019?

General BERGER. The product you are referring to is the Force Design 2030 Annual Report. Since becoming Commandant, I have published an unclassified report to update the service and our various stakeholders about where we are it in our

modernization. These reports capture and provide rationale to all decisions related to divestment. The 2022 report was released in May 2022.

The 2023 Force Design 2030 annual report was released on 5 June. The annual reports from 2020–23 are included as enclosure 2 "FD 2030 Annual Update 2020–2023" (please see Appendix).

116. Senator SULLIVAN. General Berger, can you provide a timeline that indicates which Marine Corps capabilities, including equipment, Military Occupational Specialties, and number of personnel, have been divested or reduced because of Force Design 2030, as requested in Section 1023 of the fiscal year 2023 NDAA?

General BERGER. Over the past five President's Budget cycles from fiscal year 2020 through fiscal year 2024, the Marine Corps divested $18.2 billion of legacy equipment and invested $15.8 billion in modernization. The Marine Corps adopted a funding strategy based on investing in capabilities to maintain operational relevance, budget constraints, and compliance to strategic guidance. The following table shows the amount of funding divested and invested over the Future Years Defense Program (FYDP) in each of the five most recent budget cycles:

USMC DIVEST TO INVEST (PB-20 TO PB-24)						
($B)	PB-20	PB-21	PB-22	PB-23	PB-24	Total*
Divestment	0.7	1.8	5.9	8.7	1.1	18.2
Investment	0.7	1.2	5.9	7.0	1.1	15.8

*Note: Numbers may not add due to rounding

With the drawdown of forces supporting operations in CENTCOM in 2014, the Marine Corps identified the necessity to transition from sustaining a land campaign to modernizing the force in support of maritime campaigning inherent in our Title 10 requirements. To maintain operational and tactical relevance on a modern battlefield due to the evolution of technology, the Marine Corps divested of legacy force structures that were of lesser relevance for a naval expeditionary service. Additionally, budget constraints were identified by NDS architects and Marine Corps' Force Design 2030 planners with the underlying assumption that the department's topline budget would grow modestly at a 2 percent inflation rate. Furthermore, the Marine Corps' divestment strategy followed the 2018 and 2022 NDS and the associated Defense Planning Guidance that directed the divestment of legacy capabilities and modernization at the speed of the pacing threat.

In the President's Budget 2020 cycle, the Marine Corps reallocated $0.7 billion by divesting of the AN/TPS–59 Air Defense Radar, AAV7A1 Project Improvement Program, and the MV–22 Aerial Refueling System (VARS). These funds were used to invest in such programs as Ground Based Air Defense (GBAD), F–35 spares and Block 4 modification, nascent Command-and-Control systems, sensors, and communications platforms.

In the President's Budget 2021 cycle, we reallocated $1.8 billion by divesting of certain ground programs such as the Light Armored Vehicle Program Improvement Project (LAV PIP) and M1A1 Weapons and Combat Vehicle Modification Kits. The Marine Corps also made a 2.3K Active Component reduction in end-strength, and unit modifications of Fleet Anti-terrorism teams and Combat Logistics Battalion. The Marine Corps used $1.2 billion of these funds to invest in Strike/Anti-surface warfare capabilities, network, sensors, intelligence platforms, Air Defense, Ground Combat lethality modernization, and S&T programs.

In the President's Budget 2022 cycle, as part of the overall Force Design 2030 investment strategy, the Marine Corps made our second largest divestment of $5.9 billion by reducing the Active Component end-strength by 5,100, completing our divestments in legacy force structure such as Tanks, Bridging Companies, and Law Enforcement Battalions in addition to reducing Active and Reserve Infantry Battalions, Cannon Artillery Batteries, and Aviation Squadrons. One hundred percent of these divestments were directly used to invest in critical ground-based fires programs such as Navy Marine Corps Expeditionary Ship Interdiction System (NMESIS) and Organic Precision Fires Family of Systems (OPF FoS). Advanced sensor investments included the MAGTF Unmanned Aircraft System Expeditionary (MUX)/Medium Altitude Long Endurance (MALE)—MQ9A, Ground/Air Task Oriented Radar (G/ATOR) and MAGTF Electronic Warfare Ground Family of Systems (MEGFoS). Furthermore, critical ground networking investments were made in our Network on The Move (NOTM) and Marine Corps Enterprise Network (MCEN).

In the President's Budget 2023 cycle, the Marine Corps made our largest divestment of $8.7 billion with a 744 reduction in Active component end-strength, as well as further reduction to legacy capabilities such as the Marine Corps Security Cooperation Group (MCSCG) and Marine Augmentation Program-Korea (MAP-K) programs and delayed procurement of Joint Light Tactical Vehicles (JLTVs), F–35B Joint Strike Fighters, CH–53K Heavy Lift Helicopters. We also took unique approaches to save resources by reducing capacity during Marine Week, made a 10 percent reduction to Permanent Change of Station (PCS) moves, and a 15 percent reduction to Headquarters Marine Corps (HQMC) staff positions to include Marine Forces Reserve (MARFORES) and the supporting establishment. Nearly all these divestments, over $7.0 billion, were directly used to modernize critical areas that enable Force Design 2030 by investing in multi-domain areas such as Command and Control (Big Data Platform), Counter Air, Counter C5ISR–T, MQ–9A Unmanned Aircraft System (UAS) sensors and enablers, and Anti-Surface Warfare capabilities.

In the President's Budget 2024 cycle, the Marine Corps reallocated over $1.1 billion from such programs as Organic Precision Fires, Amphibious Combat Vehicles, and Advanced Reconnaissance Vehicles, as well as a 15 percent reduction in the Marine Corps Bands program to eight field bands. All divested funds were directed utilized to invest in critical warfighting capabilities such as Signature Management (YETI), Secure Expeditionary Resilient Position, Navigation and Timing (SERPNT), Light Marine Air Defense Integrated System (L-MADIS), and Tactical Communication Modernization. Aviation investments were utilized to increase Flight Hour Program and the MV–22 nacelle improvement program. Additionally, several Talent Management investments were made, including increased funding for Sexual Assault Prevention and Response programs and the Marine Corps Embassy Security Guard.

After completing five budget cycles with this approach, the Marine Corps does not plan to divest any more capacity or legacy programs. As part of the modernization strategy, the CMC prioritized the identification of risk areas to mitigate near term readiness and installations. The Marine Corps understands that modernization strategies in any organization will not be successful if the Marine Corps:

- fails to resource our major initiatives;
- fails to make the hard choices to align available resources with the strategy's level of ambition;
- fails to effectively incorporate new technologies and identify, recruit, and leverage new talent; and
- fails to reduce the barriers that limit collaboration with allies and partners.

We aim to mitigate these and other risks through ruthless prioritization. The Marine Corps is now at a juncture where the service can no longer accept additional risk in readiness and installations.

The two charts below identify specific military occupation specialties (MOS) (Graph 1) and platforms (Graph 3) that the Marine Corps reduced in capacity, divested completed of, or transitioned due to modernization efforts tied to strategic guidance.

Military Occupational Specialty Changes Related to FD2030 (Graph 1)

OccFld	OccFld Name	2018	2023	Change STR	STR Growth or Reduction	2018	2023	Difference in % of total STR	Relative Growth OR Relative Reduction
						% Total STR	% Total STR		
01	Manpower and Administration	7670	7029	-641	Reduction	4.1%	3.9%	-0.172%	Reduction
03	Infantry	26014	23172	-2842	Reduction	13.9%	13.0%	-0.957%	Reduction
04	Logistics	5797	5466	-331	Reduction	3.1%	3.1%	-0.044%	Reduction
13	Engineer, Construction, Facilities, and Equipment	8399	7442	-957	Reduction	4.5%	4.2%	-0.331%	Reduction
18	Tank, AAV, and ACV	2115	1426	-689	Reduction	1.1%	0.8%	-0.334%	Reduction
21	Ground Ordnance Maintenance	3921	3522	-399	Reduction	2.1%	2.0%	-0.128%	Reduction
27	Linguist	620	479	-141	Reduction	0.3%	0.3%	-0.064%	Reduction
28	Ground Electronic Maintenance	4435	3774	-661	Reduction	2.4%	2.1%	-0.262%	Reduction
30	Suppply Administration and Operations	6454	5723	-731	Reduction	3.5%	3.2%	-0.252%	Reduction
33	Food Service	1981	1639	-342	Reduction	1.1%	0.9%	-0.143%	Reduction
34	Financial Management	1414	1338	-76	Reduction	0.8%	0.7%	-0.008%	Reduction
35	Motor Transport	13835	12051	-1784	Reduction	7.4%	6.7%	-0.662%	Reduction
41	Marine Corps Community Services	123	105	-18	Reduction	0.1%	0.1%	-0.007%	Reduction
43	Public Affiars	584		-584	Reduction	0.3%	0.0%	-0.313%	Reduction
46	Combat Camera	474		-474	Reduction	0.3%	0.0%	-0.254%	Reduction
57	CBRN	933	886	-47	Reduction	0.5%	0.5%	-0.004%	Reduction
58	Military Police	4050	3477	-573	Reduction	2.2%	1.9%	-0.222%	Reduction
60	Aircraft Maintenance	5604	4692	-912	Reduction	3.0%	2.6%	-0.374%	Reduction
61	Aircraft Maintenance (RW)	5830	4875	-955	Reduction	3.1%	2.7%	-0.392%	Reduction
63	Organizational Avionics	4076	3386	-690	Reduction	2.2%	1.9%	-0.287%	Reduction
64	Intermediate Avionics	2538	2054	-484	Reduction	1.4%	1.1%	-0.209%	Reduction
65	Aviation Ordnance	2658	2462	-196	Reduction	1.4%	1.4%	-0.045%	Reduction
66	Aviation Logistics	2243	2052	-191	Reduction	1.2%	1.1%	-0.052%	Reduction
70	Airfield Services	2338	2080	-258	Reduction	1.3%	1.2%	-0.087%	Reduction
73	Navigators and Unmanned Aircraft System Officers/Operators	462	428	-34	Reduction	0.2%	0.2%	-0.008%	Reduction
75	Pilots	4852	4121	-731	Reduction	2.6%	2.3%	-0.291%	Reduction
81	MISC	4250	3925	-325	Reduction	2.3%	2.2%	-0.078%	Reduction
86	Small UAS Specialist	251	237	-14	Reduction	0.1%	0.1%	-0.002%	Reduction

The Marine Corps regularly assesses its force structure, capabilities, and readiness to ensure that it can fulfill its obligations as outlined in title 10. Force Design 2030 seeks to optimize the Marine Corps' force structure to meet the demands of modern warfare. With the reduction in capacity in specific Military Occupation Specialties (MOS), Force Design 2030 acted on the necessity to train and equip critical enablers that enable the Marine Corps and forward deployed formations to operate in multi-domain environments. As a result, the Marine Corps invested in critical MOS that were either non-existent pre-Force Design 2030 or in need of acceleration. The increased investment in critical enablers such as intelligence, networks, communications, space, and cyber have accelerated the ability of the Marine Corps to operate in multi-domain operations at the tactical level.

Military Occupational Specialty Changes Related to FD2030 (Graph 2)

OccFld	OccFld Name	2018	2023	Change STR	STR Growth or Reduction	2018	2023	Difference in % of total STR	Relative Growth OR Relative Reduction
						% Total STR	% Total STR		
02	Intelligence	4898	4936	38	Growth	2.6%	2.8%	0.141%	Growth
05	MAGTF Planners	707	751	44	Growth	0.4%	0.4%	0.042%	Growth
08	Field Artillery	4611	4617	6	Growth	2.5%	2.6%	0.116%	Growth
09	Instructor	2823	5173	2350	Growth	1.5%	2.9%	1.384%	Growth
17	Cyberspace Operations		1936	1936	Growth	0.0%	1.1%	1.084%	Growth
23	Ammunition and EOD	2272	2341	69	Growth	1.2%	1.3%	0.094%	Growth
26	Signals Intelligence/Ground Electronic Warfare	2308	2765	457	Growth	1.2%	1.5%	0.312%	Growth
31	Distributed Management	588	808	220	Growth	0.3%	0.5%	0.137%	Growth
44	Legal Support	1033	1131	98	Growth	0.6%	0.6%	0.080%	Growth
45	COMSTRAT		1271	1271	Growth	0.0%	0.7%	0.711%	Growth
48	Recruiting and Retention	446	475	29	Growth	0.2%	0.3%	0.027%	Growth
55	Music	862	867	5	Growth	0.5%	0.5%	0.024%	Growth
59	C2 Electronics Maintenance	1512	1798	286	Growth	0.8%	1.0%	0.197%	Growth
62	Aircraft Maintenance (FW)	3530	3539	9	Growth	1.9%	2.0%	0.091%	Growth
68	Meteorology and Oceanography	414	438	24	Growth	0.2%	0.2%	0.024%	Growth
72	Air Control/Air Support/Anti-Air Warfare/Air Traffic Control	2824	3523	699	Growth	1.5%	2.0%	0.460%	Growth
80	MISC MOS	10764	11237	473	Growth	5.8%	6.3%	0.527%	Growth
82	Regional/Foreign Affiars	137	145	8	Growth	0.1%	0.1%	0.008%	Growth
87	Ground Operations Specialist	126	274	148	Growth	0.1%	0.2%	0.086%	Growth
88	Special Education Program	313	336	23	Growth	0.2%	0.2%	0.020%	Growth
89	Sergeant Maj/1stSgt	1356	1407	51	Growth	0.7%	0.8%	0.062%	Growth
06	Communications	14804	14617	-187	Reduction	7.9%	8.2%	0.256%	Growth
11	Utilities	2793	2687	-106	Reduction	1.5%	1.5%	0.009%	Growth

Reductions of Legacy Platforms by Year (FY24-28) (Graph 3)

System	Total Fielded	FY24	FY25	FY26	FY27	FY28
M1A1	452	Divestment Complete				
AVLB	28	Divestment Complete				
LAV	1,055	~40-50	~40-50	No further reductions planned		
MRAP	3391	176	174	Divestment Complete		
HMMWV	11043	1220	572	715	817	920
MTVR	6582	1050	431	29	53	0
LVSR	1681	181	304	46	13	0
AAV	1,074	79	106	116	46	

An important aspect to distinguish in the Marine Corps' modernization is the distinct difference between a divestment in a platform compared to a transition or modernization in a platform. Based on analysis, wargaming, and experimentation the Commandant concluded in 2020 that the Marine Corps' inventory of bridging platforms—Armored Vehicle Launched Bridge (AVLB), Medium Girder Bridges (MGB), and Improved Ribbon Bridges (IRB), were best suited for land operations ashore. For reference, the AVLBs, MGBs, and IRBs all require large black-bottom commercial sealift or Maritime Prepositioning Ships to get to the fight, requiring permissive offload at seaports and significant preparation time to prepare for onward movement to support maneuver. Even when permissive offloads are conducted, mobility mismatch between maneuver forces and engineering and breaching capabilities can pose tactical challenges. During the opening land conflict of the 2003 invasion of Iraq, maneuver forces routinely outpaced supporting assets such as heavy logistical assets, bridging, and breaching capabilities. The tempo and threat environment of the future operating environment makes these heavy capabilities irrelevant, particularly considering the limited quantity of systems and the significant requirements for large shipping and aircraft to move these capabilities into position across a maritime theater.

However, many of the above platforms are currently being transitioned to modernized platforms. The Amphibious Assault Vehicle (AAV) is transitioning to the Amphibious Combat Vehicle (ACV). The Marine Corps will have 168 ACVs fielded by June 2023. This equates to 27 percent of the 632-vehicle acquisition objective. These ACVs will equip seven Fleet Marine Force ACV Platoons, a training allocation at the Assault Amphibian School, and a test set at the Amphibious Vehicle Test Branch. Additionally, the High Mobility Multipurpose Wheeled Vehicles (HMMWV) have begun a programmatic sunset synched with the fielding and complete service transition to the Joint Light Tactical Vehicles (JLTV). The Marine Corps will have 3,867 JLTVs and 332 JLTV trailers fielded by June 2023. This equates to 31 percent of the 12,500 vehicle fiscal year 2030 acquisition objective and 8.3 percent of the 4,000 JLTV trailer fiscal year 2030 acquisition objective. 84 percent of these vehicles will be fielded to I, II, and III Marine Expeditionary Forces. The remaining vehicles will be allocated to Marine Special Operations Command, Training and Education Command, and supported specialty truck programs (i.e., the Network on the Move and Marine Air Defense Integrated System programs).

117. Senator SULLIVAN. General Berger, which of the capabilities being divested or reduced under Force Design 2030 will be provided by other services?

General BERGER. The primary capability divested by the Marine Corps as part of Force Design 2030 is the M1A1 main battle tank. Given that the Marine Corps has historically and by U.S. Code been responsible for the "conduct of such land operations as may be essential to the prosecution of a naval campaign" and informed by warfare trends, the Marine Corps divested tanks with the understanding that

the Army possesses adequate armor capacity to respond to the demands of the joint force.

Through detailed operational planning, historical analysis, and a rigorous Campaign of Learning we made some hard decisions regarding engineering and breaching capabilities. Consequently, the Marine Corps divested its inventory of bridging platforms to include the Armored Vehicle Launched Bridge (AVLB), Medium Girder Bridges (MGB), and Improved Ribbon Bridges (IRB) which are too heavy and slow to be relevant in modern operations. The Marine Corps and Army are working collectively with industry to develop a more suitable lightweight, scalable tactical bridging platform that can be transported on current Joint Light Tactical Vehicles (JLTVs). The Marine Corps is currently awaiting delivery of three test vehicles for experimentation within our engineer formations. In the meantime, the Marine Corps retains its capability to do nonstandard bridging. On a frequent basis marine engineers are used for theater security cooperation and for support to other government agencies to construct non-standard bridges, which continues to build their experience with the use of local materials

The Marine Corps also totally divested of its Active component law enforcement (LE) battalions; the Marine Corps retains one Reserve component LE battalion, 4th LE Battalion. The Marine Corps is confident that most LE battalion mission sets and requirements can be fulfilled by other Marine Corps formations during the conduct of a naval campaign. Any additional requirement for law enforcement exceeding what might be handled by organic Marine Corps units or by activating components of 4th LE Battalion will have to be handled by the Army.

The Marine Corps has already effectively integrated with Army units and Army armor formations during past joint exercises. Examples include:

1. BALIKATAN 23: I MEF units and 25th Combat Aviation Brigade conducted a combined, joint all-domain rehearsal exercise with the Armed Forces of the Philippines and Australian Defense Forces to enhance warfighting advantage, strengthen alliances and partnerships, reorient theater posture, dominate the information environment, and ensure a free and open IndoPacific in April 2023.
2. TALISMAN SABER 21: 31st MEU, MRF-D, and 94th Army Air and Missile Defense Command units conducted a biennial combined exercise with Australian Defense Forces to enhance interoperability at the tactical level through a bilateral field training exercise and improve warfighting lethality by training in a high end, high-intensity environment under real-world threat conditions in July 2021.
3. REDLEG TEMPEST 21: SPMAGTF-CR-CC and 130th Field Artillery Brigade participated in a joint, bilateral exercise with the Royal Jordan Armed Forces at Muwaffaq Salti Air Base in Jordan focused on fire support coordination, mortar employment, and increasing interoperability among participants in August 2021.
4. SABER STRIKE 18: USAREUR led company level FTX/LFX and Brigade/Battalion level CPX/CAX designed to sustain U.S. and Baltic Partner interoperability in the area of ISAF/OCO support focusing on counterinsurgency operations. Tank Plt from 4th Tank BN, 4th MARDIV. Latvia, June 2018.
5. NORTHERN STRIKE: National Guard Exercise in Michigan; typically supported by 4th MARDIV, tank platoon from 4th Tank Bn, 4th MARDIV; Michigan, August 2018
6. JOINT WARFIGHTING ASSESSMENT 19.1: An annual exercise that provides participating organization the opportunity to conduct joint operations in a realistic and large scale live/virtual/constructive training environment. Trains Army units below the corps level, services, SOF, and multinational participants. Marine forces attached to the CFLCC to simulate the expansion of the lodgment. Tank Co from 4th Tank BN, 4th MARDIV; FT Bliss, TX April—May 2019.

Moreover, the Marine Corps, organized as a MEU has routinely integrated with the Joint Force to provide increased capabilities. In 2016, the 26th MEU with the Kearsarge ARG was operating in the Central Command (CENTCOM) area of operations when the Combined Joint Task Force-Operation Inherent Resolve (CJTF-OIR) was exploring different options for fire support accelerants in support of the fight against Islamic State of Iraq and Syria (ISIS) forces in Northern Iraq. The CJTF-OIR tasked the 26th MEU with sending an artillery battery ashore to provide an Indirect Fire (IDF) capability to support Iraqi Forces in offensive operations to regain control of Mosul. The 26th MEU rapidly tasked organized a force that was comprised of an artillery battery, a reduced infantry company, and critical enablers that would provide specific capabilities for the unit. However, the artillery battery

did not have a robust counter fire radar system that was critical for the threat environment. The Army had a AN/TPQ–53 radar system in Kuwait that accurately detects mortars, rockets, and artillery point of origins (POO) and expected point of impact (POI) to rapidly develop a counter-fire mission. The Army also had a Counter-Rocket, Artillery, and Mortar (CRAM) system in Kuwait that provides force protection measures to ground force units from enemy IDF. Both the AN/TPQ–53 and the C-RAM assets were attached to the task organized force that the 26th MEU assigned to the mission.

118. Senator SULLIVAN. General Berger, does the Marine Corps have any formal agreement or plan with other services to provide capabilities being divested or reduced under Force Design 2030 such as bridging or assault breaching?

General BERGER. While there are no formalized agreements for other services to provide capabilities divested or reduced under Force Design 2030, it is important to note that any future fight will be a joint fight. In such a joint fight, we, as a service, are tasked with manning, training, and equipping our respective forces provide those forces to a Joint Force Commander who will have the authority to employ those forces with mutually supporting joint capability without the need for formal agreements or MOUs. It is highly unlikely that the Marine Corps will deploy as a stand-alone force to fight against a peer adversary for an extended periods absent support from the other services or the militaries of allied and partner nations.

Force Design intends to ensure that the Marine Corps remains a highly capable and responsive for the Joint Force that can effectively fulfill its obligations under title 10 and other statutory and regulatory requirements that state:

"The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign."

The Marine Corps' *Expeditionary Advanced Based Operations and Stand-In Forces* (SIF) concepts are two of our primary modernization efforts that focus on distributed forces that can operate inside adversaries' weapons engagement zone, sense and make sense of the environment, and contribute to the joint kill web. Both concepts directly support the Marine Corps' title 10 requirements as an expeditionary force-in readiness in support of the overall naval campaign. After two decades of engaging in a prolonged land campaign in the Middle East, the 2018 and 2022 National Defense Strategies (NDS) redirect the services' focus toward Great Power Competition. After detailed planning, historical analysis, and a rigorous Campaign of Learning informed by multiple wargames it was determined that the Marine Corps was not prepared to support the naval campaign in the 21st Century threat environment. Platforms that were heavy, difficult to sustain, and provided less relevancy to an expeditionary environment were determined to be a lower priority for investments. Furthermore, decisions to divest were supported by the inherently joint nature in which the services are employed by combatant commanders while forward deployed.

FORCE DESIGN 2030 INVESTMENT

119. Senator SULLIVAN. General Berger, can you provide a timeline that indicates which Marine Corps capabilities, including equipment and Military Occupational Specialties, have been added because of Force Design 2030, including when they will achieve Initial Operational Capability and Full Operational Capability?

General BERGER. The Marine Corps regularly assesses its force structure, capabilities, and readiness to ensure that it can fulfill its obligations as outlined in Title 10. Force Design 2030 seeks to optimize the Marine Corps' force structure to meet the demands of modern warfare. With the reduction in capacity in specific Military Occupation Specialties (MOS), Force Design 2030 acted on the necessity to train and equip critical enablers that enable the Marine Corps and forward deployed formations to operate in multi-domain environments. As a result, the Marine Corps invested in critical MOS that were either non-existent pre-Force Design 2030 or in need of acceleration. The increased investment in critical enablers such as intelligence, networks, communications, space, and cyber have accelerated the ability of the Marine Corps to operate in multi-domain operations at the tactical level.

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With the drawdown of forces supporting operations in CENTCOM in 2014, the Marine Corps identified the necessity to transition from sustaining a land campaign to modernizing the force in support of maritime campaigning inherent in our Title 10 requirements. To maintain operational and tactical relevance on a modern battlefield due to the evolution of technology, the Marine Corps to divest of legacy force structures that were of lesser relevance for a naval expeditionary service. Additionally, budget constraints were identified by NDS architects and Marine Corps' Force Design 2030 planners with the underlying assumption that the department's topline budget would grow modestly at a 2 percent inflation rate. Furthermore, the Marine Corps' divestment strategy followed the 2018 and 2022 NDS and the associated Defense Planning Guidance that directed the divestment of legacy capabilities and modernization at the speed of the pacing threat.

In the President's Budget 2020 cycle, the Marine Corps reallocated $0.7 billion by divesting of the AN/TPS–59 Air Defense Radar, AAV7A1 Project Improvement Program, and the MV–22 Aerial Refueling System (VARS). These funds were used to invest in such programs as Ground Based Air Defense (GBAD), F–35 spares and Block 4 modification, nascent Command-and-Control systems, sensors, and communications platforms.

In the President's Budget 2021 cycle, we reallocated $1.8 billion by divesting of certain ground programs such as the Light Armored Vehicle Program Improvement Project (LAV PIP) and M1A1 Weapons and Combat Vehicle Modification Kits. The Marine Corps also made a 2,300 Active Component reduction in end-strength, and unit modifications of Fleet Anti-terrorism teams and Combat Logistics Battalion. The Marine Corps used $1.2 billion of these funds to invest in Strike/Anti-surface

warfare capabilities, network, sensors, intelligence platforms, Air Defense, Ground Combat lethality modernization, and S&T programs.

In the President's Budget 2022 cycle, as part of the overall Force Design 2030 investment strategy, the Marine Corps made our second largest divestment of $5.9 billion by reducing the Active Component end-strength by 5,100, completing our divestments in legacy force structure such as Tanks, Bridging Companies, and Law Enforcement Battalions in addition to reducing Active and Reserve Infantry Battalions, Cannon Artillery Batteries, and Aviation Squadrons. One hundred percent of these divestments were directly used to invest in critical ground-based fires programs such as Navy Marine Corps Expeditionary Ship Interdiction System (NMESIS)and Organic Precision Fires Family of Systems (OPF FoS). Advanced sensor investments included the MAGTF Unmanned Aircraft System Expeditionary (MUX)/Medium Altitude Long Endurance (MALE)—MQ9A, Ground/Air Task Oriented Radar (G/ATOR) and MAGTF Electronic Warfare Ground Family of Systems (MEGFoS). Furthermore, critical ground networking investments were made in our Network on The Move (NOTM) and Marine Corps Enterprise Network (MCEN).

In the President' Budget 2023 cycle, the Marine Corps made our largest divestment of $8.7 billion with a 744 reduction in Active Component end-strength, as well as further reduction to legacy capabilities such as the Marine Corps Security Cooperation Group (MCSCG) and Marine Augmentation Program-Korea (MAP-K) programs and delayed procurement of Joint Light Tactical Vehicles (JLTVs), F–35B Joint Strike Fighters, CH–53K Heavy Lift Helicopters. We also took unique approaches to save resources by reducing capacity during Marine Week, made a 10 percent reduction to Permanent Change of Station (PCS) moves, and a 15 percent reduction to Headquarters Marine Corps (HQMC) staff positions to include Marine Forces Reserve (MARFORES) and the supporting establishment. Nearly all these divestments, over $7.0 billion, were directly used to modernize critical areas that enable Force Design 2030 by investing in multi-domain areas such as Command and Control (Big Data Platform), Counter Air, Counter C5ISR-T, MQ–9A Unmanned Aircraft System (UAS) sensors and enablers, and Anti-Surface Warfare capabilities.

In the President's Budget 2024 cycle, the Marine Corps reallocated over $1.1 billion from such programs as Organic Precision Fires, Amphibious Combat Vehicles, and Advanced Reconnaissance Vehicles, as well as a 15 percent reduction in the Marine Corps Bands program to eight field bands. All divested funds were directed utilized to invest in critical warfighting capabilities such as Signature Management (YETI), Secure Expeditionary Resilient Position, Navigation and Timing (SERPNT), Light Marine Air Defense Integrated System (L-MADIS), and Tactical Communication Modernization. Aviation investments were utilized to increase Flight Hour Program and the MV–22 nacelle improvement program. Additionally, several Talent Management investments were made, including increased funding for Sexual Assault Prevention and Response programs and the Marine Corps Embassy Security Guard.

IOC & FOC Projections Program/System	**IOC (Y/N)**	**Projected FOC**
MAGTF Unmanned Aerial System Expeditionary / Medium Altitude Long Endurance Increment I	Y	FY25
MAGTF Unmanned Aerial System Expeditionary / Medium Altitude Long Endurance Increment II	N	FY27
Long Range/Long Endurance Small UAS	Y	FY28
Medium Range/Medium Endurance Small UAS	Y	FY28
Short Range/Short Endurance Small UAS	Y	FY30
CH-53K	Y	FY29
KC-130J	Y	FY27
F-35	Y	FY30
Common Aviation Command and Control Small Form Factor	N	FY29
Medium Range Intercept Capability	N	FY28
Marine Air Defense Integrated System	N	FY28
Light-Marine Air Defense Integrated System	N	FY28
Installation Counter Small UAS	N	FY34
Ground/Aviation Task Oriented Radar	Y	FY25
Medium Range Air Defense Radar	N	TBD

Cryptologic Technician Networks	Y	FY26
High Mobility Artillery Rocket System	Y	FY24
Navy Marine Corps Expeditionary Ship Interdiction System	N	FY30
Long Range Unmanned Surface Vessel	N	FY31
Joint Light Tactical Vehicle	Y	FY30
Amphibious Combat Vehicle Family of Vehicles	Y	FY28
All-Domain Reconnaissance Vehicle	N	TBD
Littoral Explosive Ordinance Neutralization Family of Systems	N	FY27
EOD Robotics	N	FY26
Ordinance Exploitation Modernization	N	FY26
Render Safe/Access Tool Modernization	N	FY27
Mounted Explosive Hazard Defeat	N	FY26
Operational Command Post	N	FY26
MAGTF Common Handheld – Dismounted	Y	FY25
Network on the Move-Ground	Y	FY26
Defense Advanced Global Positioning System Receiver with M-Code replacement	Y	FY27
Advanced Electronic Warfare Digital Payload	N	FY26
Constructive Electromagnetic Spectrum Operational Environment System	N	FY25
Spectrum Services Framework	Y	FY27
Multi-Function Electronic Warfare	Y	FY24
Multi-Function Electromagnetic Warfare Ground Family of Systems	N	FY29
Signature Management	Y	FY26
Maritime Targeting Cell Expeditionary	Y	FY25
UH-1Y	Y	FOC ACHIEVED
AH-1Z	Y	FOC ACHIEVED
MV-22B	Y	FOC ACHIEVED
Full-sized Common Aviation Command & Control System	Y	FOC ACHIEVED
Communication Emitter Sensing and Attacking System II	Y	FOC ACHIEVED
Engineer Reconnaissance	Y	FOC ACHIEVED
Family of Medium/Heavy Tactical Trailers & Ancillary Equipment	Y	FOC ACHIEVED
Joint Battle Command Platform	Y	FOC ACHIEVED
Network on the Move-Air	Y	FOC ACHIEVED

RESPONDING ACROSS THE SPECTRUM OF CONFLICT

120. Senator SULLIVAN. General Berger, the Marine Corps you inherited in 2019 and the Marine Corps the next Commandant will inherit in 2023 look significantly different. In responses provided to my office by the Marine Corps following an April 14, 2023 brief on Section 1023 of the fiscal year 2023 NDAA, the Marine Corps reported:

- A 56 percent reduction in the number of 155mm howitzers
  - o Pre-Force Design: 126 howitzers (21 x 6-gun batteries)
  - o Force Design: 56 howitzers (7 x 8-gun batteries)
- A 100 percent reduction in armor and associated assault bridging
- A 100 percent reduction in assault breaching with the total divestment of the M1150 Assault Breaching Vehicle fleet
- A 12 percent reduction in the number of infantry battalions (24 to 21) and a 9 percent reduction in the number of marines in each infantry battalion for a total of a 21 percent reduction of infantry marines which corresponds to one out of five in the Marines Corps.

Are these numbers accurate?

General BERGER. The composition of the Marine Corps that the 39th Commandant will inherit will not look entirely different and the capabilities that have modernized our forces will ultimately increase the lethality of the Joint Force. The Marine Corps will still maintain three Marine Expeditionary Force (MEF) Headquarters (Command Element—CE) comprised of a combat division (Ground Combat Element—GCE), an aviation wing (Aviation Combat Element), and a logistics Group (Logistics Combat Element—LCE). This structure and composition of the Marine

Air Ground Task Force (MAGTF) will not change, nor will the mission of the Marine Corps to provide an expeditionary force in readiness to fleet commanders in support of the naval campaign. Furthermore, the Marine Corps will continue to maintain seven Marine Expeditionary Units (MEUs) as the service continues to modernize. The 22d, 24th, and 26th MEUs will continue to garrison and deploy from Marine Corps Base (MCB) Camp Lejeune in North Carolina. The 11th, 13th, and 15th MEUs will continue to garrison and deploy from MCB Camp Pendleton in California. Last, the 31st MEU will continue to garrison and deploy from MCB Butler in Okinawa, Japan.

However, the capability and capacity gains within the MAGTF have significant increases in lethality. The Pre-Force Design 2030 MAGTF was capable of fighting in three domains—land, air, and sea. Today, the MAGTF is capable of fighting in all five domains with the investments in space and cyber capabilities. The Marine Corps has primarily invested in these capabilities at the Command Element (CE) level with the increase in cyber and space military occupation specialties and the establishment of the Marine Information Group (MIG) (a product of Future Force 2025) within the MEF. Furthermore, we have significantly increased the lethality of the Ground Combat Element (GCE) with precision fires platforms with increased ranges and sensor capabilities to track and detect adversary targets at distance. The Aviation Combat Element (ACE) has increased both operational reach and lift capacity with investments in the CH–53K, MV–22B, and an increase in Active component KC–130C squadrons. The ACE has also increased in our ability to sense and make sense of the environment with fifth generation F–35 platforms. As the pacing function the Logistics Combat Element (LCE) is developing new concepts for afloat and shore sustainment capabilities that are tethered within a network of appropriate command arrangements that expedite logistics in a contested environment.

The increased lethality of the core infantry battalion is improved through increased manning. From 1995 until now, Battalion T/Os have gotten slightly smaller (from 904 to 897), *but the manning percentage has increased, and the unit-to-unit variances have decreased. The higher manning level allows commanders to train as they will fight." For Infantry battalions, the manning as a percent of T/O is 97 percent now; up from 89 percent in 1995 (all battalions aggregated). In 1995 only 5 of 24 battalions were manned above 100 percent of T/O while 12 were below 90 percent of T/O, compared to that to 2023 where 10 battalions are above 100 percent and only 5 are below 90 percent.*

- A 56 percent reduction in the number of 155mm howitzers
  - o Pre-Force Design 2030: 126 howitzers (21 x 6-gun batteries)
  - o Force Design 2030: 56 howitzers (7 x 8-gun batteries)
  - o Both are accurate. Pre-Force Design 2030, the Marine Corps maintained 21 cannon artillery batteries organized with 6 howitzers for a total of 126 howitzers. In fiscal year 2027, the Marine Corps will retain 7 batteries organized with 8 howitzers for a total of 56 howitzers, a roughly 56 percent reduction. *The Marine Corps is transitioning 14 cannon artillery batteries to 14 Medium-Range Missile (MMSL) Batteries, which will be capable of employing multiple precision fire missiles, including Naval Strike Missiles and the MLRS Family of Munitions.* Additionally, the Marine Corps will retain 6 Reserve component batteries, which will also increase to 8 howitzer batteries in fiscal year 2025. *Since 2019, the lethal capacity of the Marine Divisions has increased. As measured by crew served weapons (in the graph below), to include artillery firing systems, combat vehicles, and infantry weapons systems, the Marine Corps possesses more combat power. By 2030 towed artillery, rockets, and missiles more than double (132 percent) since 2019. NMESIS platform will also be able to fire MLRS FoM.*

Active Marine Division Firepower			
Combined Firepower of 1st, 2D, and 3D Marine Divisions	2019	2023	2030
Towed Artillery/Rockets/Missiles	**156**	**198**	**362**
HOWITZER, LTWT, TOWED, 155MM	132	132	62
LONG RANGE FIRES (LRF) LAUNCHER		16	48
NAVY MARINE CORPS EXPEDITIONARY SHIP INTERDICTION SYSTEM (NMESIS) LAUNCHER		8	252
ROCKET SYSTEM, ARTY, HIGH MOB (HIMARS)	24	42	
Infantry Weapons	**6958**	**6852**	**7123**
HEAVY MACHINE GUN, 40MM	711	996	936
JAVELIN	288	202	221
LAUNCHER, ROCKET, ASSAULT, 83MM	501	498	483
MACHINE GUN, HEAVY, CAL .50	2354	1148	1124
MACHINE GUN, MEDIUM, 7.62MM	2556	2628	2964
MORTAR, LW COMPANY, 60MM, M224A1	216	198	198
MORTAR, MEDIUM, 81MM, EXTENDED RANGE	210	186	192
MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM (MAAWS)		820	829
SABER SYSTEM	122	176	176
Combat Vehicles	**742**	**624**	**801**
AMPHIBIOUS COMBAT VEHICLE	0	183	362
ASSAULT AMPHIBIOUS VEHICLE	373	127	4
LIGHT ARMORED VEHICLE	267	309	390
LONG RANGE UNMANNED SURFACE VESSEL		5	45
TANK, COMBAT, FT, 120MM GUN	102		
Air Defense Systems		**30**	**26**
GUIDED MISSILE BATTERY CONTROL CENTRAL, VEHICLE MOUNTED (ADVANCED MANPADS)		30	0
MARINE AIR DEFENSE INTEGRATED SYSTEM (MADIS) MK1		0	13
MARINE AIR DEFENSE INTEGRATED SYSTEM (MADIS) MK2		0	13

- A 100 percent reduction in armor and associated assault bridging
  - o *Both are accurate.* The divestment of M1A1 Main Battle Tanks also nullified the requirement for the 85-ton load capacity of the Armored Vehicle-Launched Bridge (AVLB). The subsequent divestment of all AVLBs and associated force structure removed an assault bridging capability to accommodate the Marine Corps ground combat and tactical vehicle inventory. As a result, Marine Corps combat developers are now working with Army researchers and industry to develop a lightweight, scalable tactical bridging solution to accommodate all current (and planned) Marine Corps ground combat and tactical vehicles. That is, the Marine Corps has divested of non-expeditionary armor and associated assault bridging, capabilities that that are not optimized for maritime campaigning and instead seeks to generate expeditionary solutions to existing and emerging capability gaps.
- A 100 percent reduction in assault breaching with the total divestment of the M1150 Assault Breaching Vehicle fleet
  - o *Mostly accurate.* The weight and size of the M1150 Assault Breaching Vehicle (ABV) makes it incompatible for amphibious landings and littoral operations. However, the divestment of this armored breaching system including its twin M58 Mine Clearing Line Charges (MICLIC), remote firing machine gun, heavy armor protection, proofing and clearing attachments (i.e., mine plow, rake, and blade), and associated force structure does limit the Marine Ground Combat Element's ability to conduct protected and in-stride assault breaching. Dismounted marines continue to train with and utilize the Anti-Personnel Obstacle Breaching Systems (APOBS) to blast 45-meter-long paths through anti-personnel mine and wire obstacles to enable foot-mobile movement. Marine Combat Engineers also continue to train with and employ the trailer-mounted MICLIC for mounted operations for breaching 100-meter-long vehicle lanes through mines and other obstacles.
- A 12 percent reduction in the number of infantry battalions (24 to 21) and a 9 percent reduction in the number of marines in each infantry battalion for a total of a 21 percent reduction of infantry marines which corresponds to one out of five in the Marines Corps.
  - o Total force structure allocated to infantry battalions reduces until 2029, when the IBX–30 reorganization is complete. Force Structure reductions occur in two phases. Phase 1 included divestment of three infantry battalions; 3d Battalion 8th Marines in Camp Lejeune, 2d Battalion 3d Marines, and 3d Battalion 3d Marines in Hawaii along with the reorganization of 1st Battalion, 3d Marines into 3d Littoral Combat Team (LCT). Phase 2 of reductions is IBX–30 reorganization, which reduced the size of each infantry battalion by 9.4 percent, from 894 to 811 marines (Marine Structure only—Does not in-

clude Navy structure within infantry battalions). *The combination of reducing from 24 to 21 Infantry Battalions and the IBX–30 reorganizations result in a 19.4 percent reduction in infantry Battalion structure due to FD2030.*

- o However, both the Littoral Combat Team and the modernized IBX–30 infantry reduction of marines within infantry battalions do not provide the necessary context to understand the increased lethality these formations have gained by investments in capabilities such as loitering munitions, advanced sensor assets, and critical communications equipment to synthesize targeting. There are more killing assets per infantry marine in 2030 than in 2019. Infantry battalion lethality, as measured by share of crew-served weapons per marine assigned to infantry battalion, increased by 28 percent from 2019 to 2030. These smaller formations support Marine Corps concepts of Expeditionary Advanced Base Operations (EABO) and Stand-in Forces (SIF) that are capable of persisting inside an adversaries' weapons engagements zone during competition, responding to crises, and seizing and defending key maritime terrain during conflict.
- o *Inaccurate* Combining the 12 percent reduction of infantry battalions and 9 percent reduction of marines within infantry battalions to equate to a 21 percent total loss does not provide the accurate context for the gain in capabilities. *The manning percentage has increased substantially (89 percent to 97 percent) while working to achieve 100 percent manning.* The 21 marine infantry battalions are still sufficient to meet operational commitments while maintaining a 1:3 deployment to dwell ratio. These smaller formations support Marine Corps concepts of Expeditionary Advanced Base Operations (EABO) and Stand-in Forces (SIF) that are capable of persisting inside an adversaries' weapons engagements zone during competition, responding to crises, and seizing and defending key maritime terrain during conflict.
- o As noted above these raw numbers do not provide the necessary context to understand the increased lethality these formations have gained by investments in capabilities such as precision fires, advanced sensor assets, and critical communications equipment to synthesize targeting. Moreover, as a combined arms force, the Marine Corps will retain 7 Active component and 6 Reserve component tube-artillery batteries and 14 Medium Range Missile (MMSL) batteries and 3 Long Range Missile (LMSL) batteries. While initially fielded with an anti-ship missile, the MMSL will incorporate the MLRS Family of Munitions (MFOM) allowing a wider array of effects. In aggregate, we have increased our ground indirect fires capability.

Overall, the Marine Corps remains a combined arms force that can operate across multiple domains. Combined arms in the 21st century now encompasses additional domains such as space, cyber, and information, and new capabilities in each of these domains must be integrated within our combined arms approach. Additionally, the Marine Corps will still sense, communicate, and fire—just in new ways that are effective against technologically advanced peer adversaries.

121. Senator SULLIVAN. The new Marine Littoral Regiments (MLRs), three of which will be established within III Marine Expeditionary Force (III MEF), will not have the minimum number of LSMs they need to execute Expeditionary Advanced Base Operations (EABO)/Stand-In Forces (SIF) for at least 5 years according to the Navy's shipbuilding plan, robbing them of intra-theater mobility. Will the MLRs be able to execute combat operations in the intervening years before they receive LSMs?

General BERGER. This is why it is important to acquire amphibious lift, 31 amphibious warships and 35 LSMs as quickly as possible. We appreciate your continued support to achieve this floor requirement. This is not a limitation MLRs created. All forces are dependent on Joint, Naval, and organic mobility assets to maneuver throughout the battlespace. However, the current programmatic timeline for Medium Landing Ships (LSMs) does not support delivery to support (1) MLR until fiscal year 2033. But the MLR has more access to lift than a current regiment does or 3d Marine Regiment did for combat operations. Prior to the creation of 3d MLR, infantry regiments in general required numbered fleet support for lift in support of combat operations, just as they do now. Until the LSM becomes fully operational, the service has explored other interim solutions to support SIF. The interim planned composition is (2) T-EPFs, (5) stern landing vessels (SLVs), and (5) LCUs until the LSM becomes available to support (1) Marine Regiment in fiscal year 2033. T-EPF is a Military Sealift Command (MSC) operated vessel with capabilities comparable to LSM during competition (speed and lift capacity) but faces challenges in higher sea states and has no shore-to-shore capability. SLVs operated by contracted civilian crews provide shore-to-shore capabilities comparable to LSM during competition.

Moreover, emerging platforms such as the SLV and ancillary surface connectors (ASC) will be experimented with to determine the tactics, techniques, and procedures needed to best support the Stand In Force (SIF). LCUs provide marine elements of the SIF with proven tactical mobility that does not necessitate T-EPF or SLV but will face adequate crewing and maintenance challenges.

Once LSMs are available in fiscal year 2033, the Marine Corps current requirement is (35) LSMs. The LSM requirement stems from a minimum of (9) LSMs required to support (1) Marine Regiment. Our SIF required maritime mobility for (3) Regiments. To ensure (27) LSMs are available for these forces at any given time, procurement includes (8) additional LSMs due to routine maintenance cycles at an 80 percent readiness rate. The LSM provides the Stand-in Forces (SIF) maneuver options and connect logistics webs within contested spaces. The LSM will be an important littoral maneuver platform that supports the SIF while forward deployed, engaging in campaigning activities that assure integrated deterrence. The LSM is capable of transporting personnel and equipment within an archipelagic environment such as the first island chain (FIC) where there is limited access to ports or runways.

III Marine Expeditionary Force (MEF), as the service's only forward postured MEF, is uniquely suited to validate new concepts such as Expeditionary Advanced Based Operations (EABO) and Stand-in Forces (SIF). As an element of the SIF, III MEF supports naval, joint, and allied and partnered forces with agile, capable, and lethal forces able to operate across the competition continuum. Forces Stand in during competition alongside partners and allies, are forward postured to respond during crisis, and are capable of seizing and defending key maritime terrain during conflict while maintaining critical target data and maritime domain awareness for the Joint Force to project fires into the battlespace.

Although III MEF demonstrates the ability to operate as a SIF without the Medium Landing Ship (LSM), the service and III MEF have registered the requirement for both inter-(operational) and intra-(tactical) mobility.

122. Senator SULLIVAN. Last year during your posture hearing we discussed a risk trough, the time between when existing Marine Corps combined capabilities are divested or reduced and new capabilities come on line to replace them. The world is a dangerous place and the Marine Corps seems to be firmly in the risk trough. This seems like the period of maximum danger. We are no longer the legacy Marine Corps yet the new capabilities promised with Force Design 2030 are not arrived. How is the force the next Commandant inherits better positioned to respond to contingencies across the conflict spectrum than the Marine Corps you inherited?

General BERGER. The composition of the Marine Corps that the 39th Commandant will inherit will not look entirely different and the capabilities that have modernized our forces will ultimately increase the lethality of the Joint Force. The Marine Corps maintains three Marine Expeditionary Force (MEF) Headquarters (Command Element—CE) comprised of a combat division (Ground Combat Element—GCE), an aviation wing (Aviation Combat Element), and a logistics Group (Logistics Combat Element—LCE). This structure and composition of the Marine Air Ground Task Force (MAGTF) will not change, nor will the mission of the Marine Corps to provide an expeditionary force in readiness to fleet commanders in support of the naval campaign. Furthermore, the Marine Corps will continue to maintain seven Marine Expeditionary Units (MEUs) as the service continues to modernize. The 22d, 24th, and 26th MEUs will continue to garrison and deploy from Marine Corps Base (MCB) Camp Lejeune in North Carolina. The 11th, 13th, and 15th MEUs will continue to garrison and deploy from MCB Camp Pendleton in California. Last, the 31st MEU will continue to garrison and deploy from MCB Butler in Okinawa, Japan.

However, the capability and capacity gains within the MAGTF have significant increases in lethality. The Pre-Force Design 2030 MAGTF was capable of fighting in three domains—land, air, and sea. Today, the MAGTF is capable of fighting in all five domains with the investments in space and cyber capabilities. The Marine Corps has primarily invested in these capabilities at the Command Element (CE) level with the increase in cyber and space military occupation specialties and the establishment of the Marine Information Group (MIG) (a product of Future Force 2025) within the MEF. Furthermore, we have significantly increased the lethality of the Ground Combat Element (GCE) with long range precision fires, and sensor capabilities to track and detect adversary targets at distance. The Aviation Combat Element (ACE) has increased both operational reach and lift capacity with investments in the CH–53K, MV–22B, and an increase in Active component KC–130C squadrons. The ACE has also increased in our ability to sense and make sense of the environment with fifth generation F–35 platforms. As the pacing function the

Logistics Combat Element (LCE) is developing new concepts for afloat and shore sustainment capabilities that are tethered within a network of appropriate command arrangements that expedite logistics in a contested environment.

Today, the Marine Corps is better prepared as a naval expeditionary force-in-readiness and to operate inside actively contested maritime spaces in support of fleet operations and joint campaigns. The Marine Corps is already standing-in alongside allies and partners within reach of enemy weapon systems during competition. During crisis the Marine Corps also continues to be the premiere global crisis response force. Critical to this is maintaining no less than 31 L-Class amphibious warfare ships and delivering 35 Medium Landing Ships (LSMs) to posture forces forward to provide the Marine Corps the required maritime maneuver and mobility. During conflict the SIF is prepared to seize and defend key maritime terrain, support sea control and denial operations, and maintain custody of maritime targets in support of projecting combat power from the Joint Force back into an anti-access, area denial environment.

Additionally, while there is work needs to be done, our initial investments in lethality are already bearing fruit. With the support of congress, III Marine Expeditionary Force will be receiving the first delivery of the Navy Marine Corps Expeditionary Ship Interdiction System (NMESIS). This is a significant milestone, as within 3 years since Force Design 2030 started, we will be operationalizing a new capability we did not have before—a ground-based anti-ship capability.

123. Senator SULLIVAN. General Berger, in answers provided by the Marine Corps staff to questions from my office, the Marine Corps frequently stated that divested combat capabilities were "incompatible for amphibious shipping and littoral operations." But not all future Marine Corps missions will be focused on littoral operations. How does Force Design 2030 support operations outside the littorals?

General BERGER. It is clearly understood that we are a naval force and are focused on the littorals. As you have pointed out from Title X, "the Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign."

But the Marine Corps is also capable of land operations as needed by our Nation. The Marine Corps' premier Service Level Training Exercises is in the deserts of Twenty-nine Palms in the Marine Corps Air Ground Combat Training Center (MCAGCC). Typically, every infantry battalion conducts its predeployment training and certification in either the Marine Corps Mountain Warfare Training Center (MCMWTC) or MCAGCC.

The plan for light, lethal, and distributed forces would be successful in other Combatant Commands (COCOMs), such as European Command (EUCOM) or Central Command (CENTCOM)—and have shown to be successful. On 16 March 2022, TF 61/2, led by a Marine General Officer with a task-organized staff was integrated into the United States 6th Fleet Headquarters in Naples, Italy, and executed a combined joint exercise, planned operations for various ARG/MEU teams in multiple locations throughout the theater, and improved Maritime Domain Awareness for the Fleet Commander and partners and allies. Task Force 61/2 executed a proof of concept during 2022 in which they provided 6th Fleet Headquarters with real-time Maritime Domain Awareness (MDA). In that effort, marine forces tested, refined, and validated concepts of employment for MDA and closing kill webs, while also conducting real-world, time sensitive reconnaissance-counter reconnaissance missions. These efforts continue to support 6th Fleet operations as well as nested within EUCOM and Africa Command (AFRICOM) priorities and have since turned into a rotational force.

Throughout history the military and national security experts have rarely—if ever—made accurate predictions about the next conflict. The same could be said about the current threat environment and the past two National Defense Strategies and Intelligence Communities (IC) Annual Threat Assessments that have emphasized an era of great power competition and the threat that Russia and China present to United States interests. However, over history we have always modernized, trained, and equipped our forces for the most dangerous threat which has enabled our flexibility to respond to global crises. As Force Design 2030 is threat-informed, the IC assess that the transition from ambiguous and unambiguous warning will happen within compressed timelines relative to decades before. Because of that, the Marine Corps cannot rely upon a Time Phased Force Deployment Data-approach to buildup capabilities, in permissive environments, to stock-pile capabilities. Non-expeditionary form factors only exasperate that problem. As such, the concern is not about one domain, but the threat and temporal estimates of transitions

from ambiguous to unambiguous warning. Hence, the Marine Corps' value to the Joint Force is to be expeditionary and forward, to be credible, and to contribute not just to Combatant Commanders operations, activities, and investment (OAI), but to increase their flexible deterrence options (FDOs) and flexible response options (FROs). Capabilities that impede or frustrate our ability to be forward and to leverage sea-space for maneuver have not been prioritized as part of the Marine Corps' Redesign efforts Force Design 2030 continues to keep these factors in the forefront of our modernization efforts and maintain the ability to respond to any crisis around the globe. Specifically, the Marine Corps' Expeditionary Advanced Base Operations (EABO) and Stand-in Forces (SIF) concepts meet the 2022 National Defense Strategy (NDS) intent and are theater agnostic.

This has also been demonstrated in the Indo-Pacific with a Navy-Marine team of 7th Fleet and III MEF embarking on an 18-month experiment through the establishment of Task Force 76/3, which combines approximately 11,500 marines and sailors of Expeditionary Strike Group (ESG) 7 and 3d Marine Expeditionary Brigade (MEB) into a single command focused on campaigning inside the contested areas of the western Pacific. Furthermore, the Commandant in his 2022 annual Force Design 2030 update directed the service to develop another JTF-HQ in II MEF to enhance our force offerings to the Combatant Commands.

The Marine Corps still maintains all organic crisis response capabilities that enable the forward posture and rapid deployment of flexible and tailorable forces to the needs of the Combatant Commanders (COCOMs). The Amphibious Ready Group (ARG) and Marine Expeditionary Units (MEU) are the most common Navy-Marine Corps tactical units that are forward deployed at the operational level and can accomplish strategic level engagements.

The Marine Corps routinely trains to forcible entry operations in several joint and service-level exercises to include, but not limited to, Talisman Saber, Cold Response, and various Marine Expeditionary Force exercises and Marine Warfighting Exercises (MWXs).

Furthermore, the Marine Corps continues to train for all crisis response missions during the MEUs pre-deployment training period (PTP). Training consists of afloat and ashore training environment that require the synchronization of assets across the MAGTF to accomplish an assigned objective. Our Training and Education 2030 publication describes the investment in Live, Virtual, and Constructive training environment (LVC-TE) that is inherently joint and enables the simultaneous training of geographically dispersed units. This capability will replicate, to the greatest extent possible, the conditions and threats that a commander will experience on tomorrow's battlefield.

When the Marine Corps was completing the withdrawal from Afghanistan and there was a need for forces to support the embassy and non-combatant evacuation operations, the ARG/MEU was a key component of those operations. At a moment's notice, the Marine Corps was able to hold a defensive perimeter and process evacuees while providing a variety of aviation and other assets to support the broader evacuation.

A heel-to-toe ARG/MEU provides the Nation a mobile, multi-mission force that is forward deployed and able to quickly move to any number of crises around the world. A naval crisis response force is significantly more flexible than other land-based crisis response forces because it is less restricted by issues of access, basing, and overflight. The ability to maneuver by sea to the point of crisis makes the ARG/MEU critical to our Nation's ability to demonstrate resolve in a HA/DR mission or to project power in a limited conflict. Another reason we appreciate your support in obtaining he floor requirement of amphibs, 31, and a healthy maintenance posture. In recent crises, like the earthquake in Turkey and the non-combatant evacuation (NEO) in Sudan, the Marine Corps had the ready-trained force with the right equipment; however, the readiness of amphibious shipping was not available.

In the next two to 5 years, many of our amphibious ships will reach the end of their service life and will cause delays in ARG/MEU deployments. When there are gaps in global ARG/MEU coverage, the Nation risks not having the right assets capable of getting to the crisis in time. If the U.S. is not able to perform this role, our adversaries would be happy to step in with their forces and their messaging. The best way for marines to address complex situations in chaotic areas around the world is to maintain a minimum of 31 amphibious ships to support our ARG/MEU deployments.

The Marine Corps, more than any other service, has a unique nature regarding essential requirements that are subject to the Naval Service budgetary process. For example, the amphibious warfare ship (AWS) statutory requirement includes capabilities that are critical for amphibious ships such as connectors, C4I afloat capabilities, preposition afloat assets, and the Next Generation Logistics Ship (NGLS). All

of these are essential to the Stand-in Forces (SIF) and crisis response operations, yet all fall outside the Marine Corps Total Obligation Authority (TOA). We identify the Marine Corps' dependency on the Navy to champion naval requirements. Our nation is a maritime nation that requires a modern, ready, and forward postured naval force that can deter war and prevail in conflict if deterrence fails.

124. Senator SULLIVAN. General Berger, for decades the Marine Corps has provided the hedge the U.S. military needs for unexpected contingencies. As the other Services focused on the Soviet military the Marine Corps honed its capabilities as the Nation's rapid global response force. One criticism of Marine Corps Force Design is that in reorienting on the "pacing threat"—the Chinese People's Liberation Army (PLA)—the Marine Corps has given up much of its 9–1–1 capabilities. Does Force Design 2030 retain the weapons and equipment that enabled the Marine Corps to hedge as the other Services turn their attention to China?

General BERGER. The most common MAGTFs in the Marine Corps is the Marine Expeditionary Unit (MEU). However, the composition of how the MEU is spread across the three ship Amphibious Ready Group (ARG) and what capabilities that are within it will be tailored to the threat environment and historical trends of Combatant Commander mission assignments to the ARG/MEU team. Prior to deployments, the ARG/MEU will conduct a 9-month pre-deployment training period (PTP) with various at sea exercises that allow the two commands to build and work on Standard Operating Procedures (SOPs) for assigned Mission Essential Tasks (METs). During at sea periods the ARG/MEU commanders, staff, and major subordinate commands will execute a variety of full mission profile exercises such as amphibious raids, amphibious assaults, non-combat evacuation operations (NEO), etc. The two commands will also coordinate with Fleet and Joint headquarters in the Combatant Commands that the ARG/MEU is expected to be assigned to during the deployment to coordinate Theatre Security Cooperation (TSC) exercises and receive intelligence briefs to understand the threat environment. Through the combination of the at sea training periods, development of SOPs, understanding of anticipated assigned missions, and the threat environment, the ARG/MEU team tailors what assets are assigned to each amphibious warfare ship within the ARG to be appropriately organized for operational deployment. As such, MAGTFs can and will vary in size and capability according to their assigned or likely missions.

The Marine Corps has not divested any equipment or structure that prevent the service from still being the premier global crisis response force. The Marine Corps still maintains seven MEUs. The 22d, 24th, and 26th MEUs will continue to garrison and deploy from Marine Corps Base (MCB) Camp Lejeune in North Carolina. The 11th, 13th, and 15th MEUs will continue to garrison and deploy from MCB Camp Pendleton in California. Last, the 31st MEU will continue to garrison and deploy from MCB Butler in Okinawa, Japan. The structural organization of our MEUs will also remain the same and will be comprised of a Command Element (CE), a Battalion Landing Team (BLT) as the Ground Combat Element (GCE), a Composite Aviation Squadron as the Aviation Combat Element (ACE), and a Combat Logistics Battalion (CLB) as the Logistics Combat Element (LCE)

Currently, the 26th MEU is conducting their Pre-Deployment Training Period (PTP) with the Bataan Amphibious Ready Group (ARG) in preparation for their upcoming deployment this Summer. The Artillery Battery within the BLT for the MEU will be organized with a traditional M777 Howitzers platoon and a Force Design 2030 incorporated High Mobility Artillery Rocket System (HIMARS) platoon. Throughout the PTP, the battery has been training on new Tactics, Techniques, and Procedures (TTPs) for HIMARS-Tactical Insertion Dynamic Employment (HI-TIDE) that will enable the rapid employment of long-range precision fires after ship-to-shore connectors have maneuvered the assets. This employment concept is an aspect that supports the ability of expeditionary units that can contribute to sea-denial and sea-control operations. Maintaining control of Sea Lines of Communication (SLOC) and the race for key maritime terrain is critical in the current operating threat that has created an Anti-Access, Area-Denial (A2AD) environment through the proliferation of low-cost long-range fires, sensors, and a communications architecture that place U.S. assets at risk. Although Force Design 2030 is modernizing, the capabilities resident within the MEU has increased lethality while the core structure and organization of the MEUs remain the same.

The Marine Corps continues to have capacity for seven MEUs. That is, regardless of the availability or readiness of amphibious warfare ships, the Marine Corps has and will continue to field the same number of MEU even as the service continues to modernize. For the foreseeable future, the Marine Corps will maintain seven MEUs. Force Design 2030 has not changed the number of MEUs the Marine Corps

can field; in fact, Force Design 2030 reinforces the need for the continued global employment of this versatile and highly capable unit.

However, unrelated to the Marine Corps modernization efforts with Force Design 2030, the Navy's readiness and inventory of amphibious warfare ships do impact the ability of the MEUs to be forward postured and available for Combatant Commander requirements. Over the past 10 years the average operational readiness or availability of amphibious warfare ships has been 46 percent. This challenges the ARG/MEU team to adequately conduct critical pre-deployment training requirements and qualifications to conduct day and night operations at sea. This not only decreases the safety of our forces by reducing proficiency, but also decreases the Flexible Response Options (FDOs) and Flexible Deterrence Options (FDOs) of the Combatant Commanders to have ready and available forces for operational requirements.

During the 1990's the amphibious warfare ship inventory exceeded operational employment allowing adequate time for maintenance, and more materially available ships to surge when required. For example, in 1991 the Department of the Navy maintained roughly 60 amphibious warfare ships while only 37 percent were deployed. However, in the early 2000's the amphibious warfare ship inventory decreased by nearly half while the operational requirements maintained the same. Overtime as the operational demand remained consistent to historical baselines while inventory decreased, the material condition of amphibious warfare ships has been strained. This has led to common delays of ARG/MEU deployments and provides fewer ready ships to surge if directed.

Finally, offered in attempt to add clarity to this QFR, multiple Administrations, multiple National Defense Strategies, and a half-dozen sets of associated Defense Planning Guidance, as informed by the broader Intelligence Community (IC), direct the Marine Corps to pace to the principal threat and focus on the principal theater. The Marine Corps does not have the authority—nor a differing understanding of the threat environment—to deviate from those threat-informed sets of strategy. The Marine Corps has complied with political leadership's overarching guidance and decisions—while retaining its ability to respond to crisis globally—as that same guidance charges the Navy and Marine Corps to retain response capabilities. In fact, a forward and credible, lethal and resilient, Stand-in Force does just that—it creates Flexible Deterrence Options and Flexible Response Options to Combatant Commanders in the face of emerging crises.

125. Senator SULLIVAN. General Berger, you and LtGen Heckl have testified that the Marine Corps is fully capable of meeting all global commitments. Nearly 60 percent of the Maritime Prepositioning Forces required to sustain marines have been cut, the Marine Expeditionary Unit (MEU) Augmentation Program-Kuwait has been eliminated, and prepositioned equipment in Norway has been reduced. Do these reductions or eliminations or pre-positioned equipment impact the Marine Corps' ability to meet global commitments?

General BERGER. The Service remains fully capable of meeting all global commitments but due to the Navy's reduction of operational MPS ships, closing the force for some OPLANs will take longer. The Service's elimination of the MEU Augmentation Program—Kuwait supporting CENTCOM was due to it being purpose built to support marines deployed to and engaged in that region, and with the strategic guidance focusing the Marine Corps on the INDOPACOM theater, that purpose was no longer a priority based on available resources. The reduction in Marine Corps Prepositioning—Norway was of legacy equipment, which is no longer needed for a crisis response in EUCOM. However, with 5 additional Maritime Prepositioning Ships (MPS) in Reduced Operating Status (ROS), it will take longer for Combatant Commands to close the force. This increase in time to close the force highlights the need to fully fund our prepositioning program.

Current Impact: Placing 5 additional MPS in ROS will not only diminish the ability to forward position and sustain these additional forces required to counter aggressive People's Republic of China (PRC) actions, but also increase the strain on III MEF forces, allies, and partners in the FIC, and limited organic and joint air and maritime transportation assets.

Future Impact: This impact will be felt most acutely in a crisis where the ability to close forces will be diminished by the requirement to use other assets to sustain already forward-postured forces.

Additionally, MPF is tied to every Operation Plan (OPLAN), not just the Indo-Pacific ones. Placing Maritime Prepositioning Ships in a Reduced Operating Status delays the U.S. Marine Corps' responses in all OPLANs.

Due to placing the 5 MPS in ROS, for MARFORPAC Crisis Response, MPS arriving in theater went from C+25 to now between C+60 and C+75. Sustainment will

be late to need, resulting in critical risk to mission and force in terms of consequence.

The Service is developing a Global Positioning Network (GPN) as a recognition that we need to think differently about how to preposition assets around the globe to support our Stand-in Forces across the full range of military operations.

126. Senator SULLIVAN. General Berger, has the Marine Corps' capability to meet all global commitments been exacerbated by the admitted shortage of amphibious shipping?

General BERGER. Yes. A shortage of amphibious shipping has exacerbated the Marine Corps capability to meet global commitments.

The decrease in the overall Amphibious Warfare Ships (AWS) inventory, combined with consistent/constant Global Force Management (GFM) demand and longer than planned maintenance availabilities have resulted in an overworked AWS fleet with no "ready bench" and insufficient numbers to fulfill Secretary of Defense directed GFM requirements, delayed ARG/MEU deployments (slower response), and reductions in amphibious training & certification periods (warfighting proficiency).

Even at the current inventory of 31 AWS, fulfilling GFM requirements has been a struggle with 4 of our last 5 MEU/ARG deployments being delayed due to failing material readiness, and the 5th one immediately having to return one of its ships to homeport due to material readiness issues.

However, despite this challenge, the Marine Corps still maintains all organic crisis response capabilities that enable the forward posture and rapid deployment of flexible and tailorable forces to the needs of the Combatant Commanders (COCOMs). The Amphibious Ready Group (ARG) and MEU are the most well-known naval expeditionary Navy-Marine Corps tactical units that are forward deployed at the operational level and can accomplish strategic level engagements.

The Marine Corps still possesses (7) Marine Expeditionary Units (MEU). Additionally, III MEF is capable of being employed as Joint Task Force headquarters (JTF-HQ) for various missions to include a forcible entry operation. Furthermore, the Commandant in his 2022 annual Force Design 2030 update directed the service to develop another JTF-HQ in II MEF to enhance our force offerings to the Combatant Commands.

The Marine Corps routinely trains to forcible entry operations in a number of joint and service-level exercises to include, but not limited to, exercises Talisman Saber, Cold Response, and various Marine Expeditionary Force exercises and Marine Warfighting Exercises (MWXs).

Furthermore, the Marine Corps continues to train for all crisis response missions during the MEUs pre-deployment training period (PTP). Training consists of afloat and ashore training environment that require the synchronization of assets across the MAGTF to accomplish an assigned objective. Our Training and Education 2030 publication describes the investment in Live, Virtual, and Constructive training environment (LVC-TE) that is inherently joint and enables the simultaneous training of geographically dispersed units. This capability will replicate, to the greatest extent possible, the conditions and threats that a commander will experience on tomorrow's battlefield.

When the Marine Corps was completing the withdrawal from Afghanistan and there was a need for forces to support the embassy and non-combatant evacuation operations, the ARG/MEU was a key component of those operations. At a moment's notice, the Marine Corps was able to hold a defensive perimeter and process evacuees while providing a variety of aviation and other assets to support the broader evacuation.

A heel-to-toe ARG/MEU provides the Nation a mobile, multi-mission force that is forward deployed and able to quickly move to any number of crises around the world. A naval crisis response force is significantly more flexible than other land-based crisis response forces because it is less restricted by issues of access, basing, and overflight. The ability to maneuver by sea to the point of crisis makes the ARG/MEU critical to our Nation's ability to demonstrate resolve in a HA/DR mission or to project power in a limited conflict.

In the next two to 5 years, many of our amphibious ships will reach the end of their service life and will cause delays in ARG/MEU deployments. When there are gaps in global ARG/MEU coverage, the Nation risks not having the right assets capable of getting to the crisis in time. If the U.S. is not able to perform this role, our adversaries would likely step in with their forces and their messaging. The best way for marines to address complex situations in chaotic areas around the world is to maintain a minimum of 31 amphibious ships to support our ARG/MEU deployments.

In recent crises, like the earthquake in Turkey and the non-combatant evacuation (NEO) in Sudan, the Marine Corps had the ready-trained force with the right equipment; however, the readiness of amphibious shipping was not available.

The Marine Corps, more than any other service, has a unique nature regarding essential requirements that are subject to the Naval Service budgetary process. For example, the amphibious warfare ship (AWS) statutory requirement includes capabilities that are critical for amphibious ships such as connectors, C4I afloat capabilities, preposition afloat assets, and the Next Generation Logistics Ship (NGLS). All of these are essential to the Stand-in Forces (SIF) and crisis response operations, yet all fall outside the Marine Corps Total Obligation Authority (TOA). We identify the Marine Corps' dependency on the Navy to champion naval requirements. Our nation is a maritime nation that requires a modern, ready, and forward postured naval force that can deter war and prevail in conflict if deterrence fails.

The next two forecasted ARG/MEUs to deploy have already been delayed due to extended Chief of Naval Operations Maintenance Availabilities and Material issues.

The 31st MEU's last patrol (23.1) began as a 2-Ship Amphibious Task Force due to an emergent drydock for shafting issues on Dock Landing Ship (LSD) 47, which led to LSD 48 covering down late into the patrol and delaying her homeport shift back to the United States.

Forward Deployed Naval Forces—Japan inventory will drop from 4 ships to 3 ships in fiscal year 2025 when the USS *Rushmore* (LSD 47) is planned to decommission, years prior to her projected end of service life. This will reduce lift capacity and prevents embarking an entire MEU, creating risk to performance of all designed missions.

Per the Chief of Naval Operations Instruction 3501.216C *Force Composition of Afloat Navy and Naval Groups,* a minimum of three ships comprises an ARG and a minimum of four ships is required in Forward Deployed Naval Forces—Japan (four ships to make three due to maintenance requirements). Additionally, (82) total incidents in Calendar Year 2021–2022 have impacted Amphibious Warfare Ship operational readiness. As our Amphibious Warfare Ship fleet ages, and our current ships retire faster than new ships are being delivered, we anticipate that material readiness impacts to national security will only worsen.

WAR GAMES

127. Senator SULLIVAN. General Berger, were the studies, war games, or analysis that informed your decision on the Marine Corps force structure briefed to the Secretary of Defense, Secretary of the Navy, Combatant Commanders, or Member of the Senate and House Armed Services Committees?

General BERGER. No one wargame, study, or live-force experimentation event was sufficient to prompt the service to undergo significant service-level changes to force structure. Instead, the body of evidence resulting from many wargames and experiments over the course of several years, which when aggregated, forced the service to admit change was necessary and thus provoked action. A collection of the most significant influencing events is included below.

There are currently unclassified and secret wargame reports and experimentation reports that have been produced that either identified the need for Force Design 2030 or have resulted from wargames conducted to aid Force Design 2030 decisions.

Reports are available for the following wargames and experimentation events which pre-dated FD2030:

Advanced Naval Technology Exercise 2017, April 2017
- Purpose: Examine ship to shore maneuver, amphibious fire support and effects, amphibious C4, clearing amphibious assault lanes, and information warfare.
- Reports available: unclassified final report

MAGTF Warrior 17 Wargame, 12–16 Jun 2017
- Purpose: Define Marine Corps capabilities required to conduct sea control and power projection within a joint campaign against a peer adversary.
- Reports available: Secret final report.

Dawn Blitz 2017, Oct 2017
- Purpose: Examine EAB concepts such as naval integration, maritime strike, sea control, EAB development, and F–35 integration with Advance Field Artillery Tactical Data System (AFATDS)
- Reports available: unclassified report

Expeditionary Warrior 18 Wargame, 2–6 April 2018
- Purpose: Examine operational level logistics support to marine expeditionary forces in the western Pacific in an anti-access/area denial environment.
- Reports available: Secret final report.

Naval Services Game 18, 9–12 July 2018
- Purpose: Explore command relationships, tasking, capabilities, and employment implications of Marine Corps and Navy forces task-organized for littoral combat across the full range of naval missions.
- Reports available: Secret final report.

MAGTF Warrior 18 Wargame, 17–21 Sep 2018
- Purpose: Inform future logistics operating concepts of support and how the MEF will be organized, trained, and equipped to support and sustain operations as part of an inside force.
- Reports available: Secret final report.

Within Sea Dragon Phase II initiative, Trident Juncture 2018, Oct-Nov 2018
- Purpose: To test hybrid logistics, particularly data-driven logistics systems and additive manufacturing with CLB–2 as the assigned experiment force
- Reports available: unclassified final report

After the Commandant's Planning Guidance (CPG) was released in the summer of 2019 and Force Design 2030 modernization began, the Marine Corps has conducted over 400 congressional engagements with Members, Professional Staff Members, and staff from personal offices. We received extensive feedback from these engagements that helped inform follow-on experimentation. Marine Corps leadership values and honors the need for congressional oversight and has actively supported that lawful requirement.

From January 2020 to April 2023, Headquarters Marine Corps, Combat Development and Integration (CD&I), alone has conducted 209 of those engagements. Of those 209 engagements roughly 30 percent were classified briefs at the secret level and above, we must respect the threat and the associated security classification protocols to safeguard critical capabilities. The remaining 70 percent of those engagements were at the unclassified level to be as transparent as possible in our modernization efforts. Combatant Commanders have been given advanced copies of Force Design products for comment. Several Combatant Commanders have testified with positive comments about he Marine Corps' modernization efforts.

128. Senator SULLIVAN. General Berger, when did the Marine Corps determine its current amphibious shipping requirement of 31 ships?

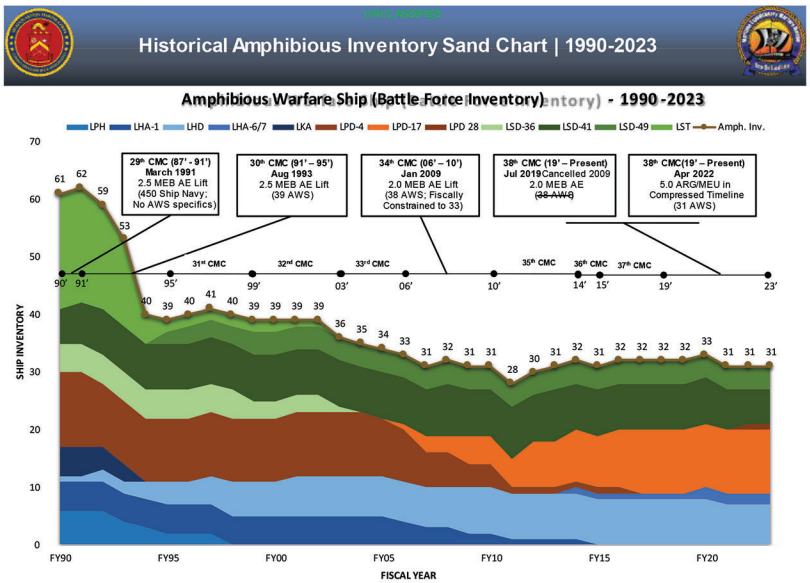
General BERGER. The Marine Corps has a requirement for no less than 31 amphibious warfare ships 10 LHA/LHD and 21 LPDs. Since 2019, three DON studies have examined amphibious warfare ship force structure requirements. The requirement was informed by combining the findings of those studies, the most recent being the SecNav directed Amphibious Fleet Requirement Study (AFRS) in 2022, with amphibious warfare ship readiness trends over the past 10 years. AFRS was a threat informed, scenario directed, model driven, multiple phase event executed by the analytic arms of the Navy and the Marine Corps. The findings of AFRS were briefed to the Service Chiefs and Secretary of the Navy; 31 amphibious warfare ships were reported as the minimum required. This finding is consistent with 11 amphibious warfare ship inventory studies completed over the last 14 years.

The readiness and inventory of amphibious warfare ships does impact the ability of our Marine Expeditionary Units (MEUs) to be forward postured and available for Combatant Commander requirements. Over the past 10 years the average operational readiness or availability of amphibious warfare ships has been 46 percent. This reduces the readiness of the Amphibious Ready Group (ARG)/MEU team from completing critical pre-deployment training period (PTP) qualifications to conduct day and night operations at sea. This not only decreases the safety of our forces by reducing proficiency, but also decreases the Flexible Response Options (FDOs) and Flexible Deterrence Options (FDOs) of the Combatant Commanders to have ready and available forces for operational requirements.

During the 1990's the amphibious warfare ship inventory exceeded operational employment allowing adequate time for maintenance, and more materially available ships to surge when required. For example, in 1991 the Department of the Navy maintained 63 amphibious warfare ships while only 37 percent were deployed. In the early 2000's the amphibious warfare ship inventory decreased to 39 with the operational lift requirement shifting to 2.5 Marine Expeditionary Brigades (MEBs). However, the operational requirements for deployed amphibious warfare ships maintained the same. As the operational demand remained consistent to historical baselines while inventory decreased by nearly 50 percent, the material condition of amphibious warfare ships began to degrade. Between 2007 and 2020 the amphibious warfare ship inventory has fluctuated between 28 (low point in 2011) and 33 (high point in 2019). The decrease in amphibious warfare ship inventory has created significant delays in our ability to maintain the material availability of ships and led

to common delays of ARG/MEU deployments and provides fewer ready ships to surge if directed. As a result, we have not been able to maintain a consistent heel-to-toe ARG/MEU in our two primary theatres, EUCOM and INDOPACOM. Historically, the outgoing and incoming ARG/MEU units conduct a turnover while forward deployed providing the Combatant Commanders with a consistent ARG/MEU presence which eliminates any gap in a maritime crisis response force. The fiscal year 2023 NDAA mandates an inventory of no less than 31 amphibious warfare ships which enables a forward deployed presence of ARG/MEUs for competition, campaigning, crisis response and contingency response for Combatant Commanders while having the ability to surge up to a total of five ARG/MEUs if required. However, this is only achievable if the availability and material readiness of amphibious warfare ships is maintained with consistent procurement of new ships to replace aging ships that are currently at the end of their service life.

To be clear, critics of Force Design 2030 suggest that Force Design 2030 has resulted in the drastic reduction in amphibious warfare ship capabilities and capacities. The critics' assertions are false. The slide below demonstrates a precipitous drop in the mid–90's when the Navy reduced the total fleet size post-cold war. That inventory was only exasperated due to nearly 2 decades of Middle East Campaigning, in which the Navy's Fleet was under——



Capitalized as the DOD prioritized sustained Middle East Land Campaigning. Several Commandants before General Berger have, too, worked to inform naval requirements, resourcing, and risk decisions. Ultimately, Force Design 2030 is not the cause of declining Amphibious Warfare Ship capabilities and capacities, and, in fact, Force Design 2030 with its focus on naval campaigning should be credited sharpening DOD level deliberations regarding naval requirements.

129. Senator SULLIVAN. General Berger, in what documents was 31 amphibious shipping requirement communicated to the OPNAV staff, Secretary of the Navy, Secretary of Defense, and Members of Congress?

General BERGER. Please see Question for the Record #128. USMC General Officers have repeatedly testified in Congress to 31 Amphibious ships being the minimum requirements. This is echoed in CAPE, OSD, DPG, and NDS meetings. Since 2019, three DON studies have examined amphibious warfare ship force structure requirements. The requirement was informed by combining the findings of those studies, the most recent being the SecNav directed Amphibious Fleet Requirement Study (AFRS) in 2022, with amphibious warfare ship readiness trends over the past 10 years. AFRS was a threat informed, scenario directed, model driven, multiple phased events, executed by the analytic arms of the Navy and the Marine Corps. The findings of AFRS were briefed to the Service chiefs, SecNav, and components

of the Office of the Secretary of Defense (OSD), specifically reporting that 31 amphibious warfare ships as the minimum required. Congressional interest in the AFRS prompted OSD to submit a Report to Congress. On 27 December 2022, findings were submitted Members of Congress which modified the original AFRS by introducing a range of 25–31 as the requirement.

130. Senator SULLIVAN. General Berger, the Center for Strategic and International Studies' recent war game "First Battle of the Next War" found MLRs could contribute to the fight on a limited basis but were largely nonfactors as political assumptions and China's defensive capabilities prevented them from being close enough to the fight. In fact, in several instances of the game, United States players tried to move an MLR onto Taiwan by air or sea, but in all cases the unit and transportation assets were destroyed trying to do so. Ultimately, the CSIS war game found one squadron of bombers alone had more impact on the battlespace than an MLR. What is your assessment of this war game and its conclusions?

General BERGER. The CSIS war game report on "First Battle of the Next War" provides an in-depth analysis of the challenge, the methods utilized, and key results. With additional context in the level of planning that went into the war game to include the players that were involved and the extent to which they were making decisions, based on operational contingency plans, more substantial feedback on the wargames report can be provided. Also, this wargame was unclassified using unclassified ranges of munitions. A secret or top-secret wargame and next generation munitions could alter the findings. The CSIS wargame summary emphasized:

First, the criticality of employing a whole-of-government approach to prioritizing the deepening of diplomatic and military ties with regional allies and partners, especially Japan. The MLR placement and access to key maritime terrain in order to enable joint force maneuver is the basis of the entire idea of the Stand-in Force. The placement and access necessary to assure allies and partners, to deter adversaries, and to pose a credible threat in the event of armed conflict is contingent upon strong international ties developed through application of all the instruments of national power.

The second point is that the United States cannot wait when deciding what to do in the event of a crisis. Should the PRC give indications and warnings of a cross-channel invasion of Taiwan and thereby escalate from competition to crisis, it is crucial for U.S. political leadership to act quickly to provide the Marine Corps with the time necessary to reposition forces on key maritime terrain where they can be optimally employed in support of the Joint Force. The longer the United States delays entering a potential future war, the more difficult the fight.

While there are multiple points of agreement with the CSIS study and the Marine Corps' vision for the anticipated future operating environment, there were two areas of disagreement that must be highlighted:

First, regarding the difficulties associated with resupplying missiles to an MLR while engaged in conflict, it is important to emphasize the MLR's kinetic fires capability is a secondary function. While the MLR certainly maintains a robust fires capability, its primary role is to function as part of an integrated and redundant network of expeditionary sensors at key battlespace chokepoints, providing situational awareness, targeting data, and Command & Control (C2) for the naval, joint, and coalition force. By combining Marine Corps sensors with joint kinetic and non-kinetic fires and effects, the stand-in force can hold key adversary assets at risk and disrupt adversary decisionmaking, thereby enabling the rapid deployment of naval, joint, and coalition forces in theater. The MLR provides combatant commanders with both optionality and improved information upon which to interpret and manage their decisionmaking space.

Second, the MLR is also designed to deter and defeat strategic competitors through strengthening crucial relationships with allies and partners, reassuring them of U.S. security commitments, and to foster access in times of crisis or conflict. MLR is designed to be capable of interoperability with joint or coalition forces in the contact and blunt layers. In crisis, the MLR's forward posture and access enable it, in coordination with coalition forces, to hold adversary assets at risk, contribute to coalition forces' sea denial and sea control operations via organic lethality, and to close coalition kill webs and provide other critical enabling actions.. The MLR is purpose-built and designed to rapidly transition from competition, to conflict, and back to competition as escalatory dynamics dictate in support of either a joint or coalition force.

131. Senator SULLIVAN. General Berger, was the Marine Corps involved in the execution of this CSIS war game?

General BERGER. The Marine Corps did not participate in the planning or execution of this event. Additionally, no personnel from the Marine Corps Warfighting Lab's Wargaming Division, which is responsible for our force design wargaming, was asked to participate or was otherwise involved.

The Marine Corps continues to employ wargames, incorporating joint and allied partners, as an integrated component of the analytical processes necessary for force modernization. Through our Campaign of Learning (CoL) and modernization efforts, the Marine Corps has conducted (26) studies, (35) wargames, (19) experiments, and (40) integrated planning teams in support of Force Design 2030. The CoL informs modernization by providing a structured mechanism for evaluation, continuing the effort to be as efficient and effective as possible.

The Marine Corps' experimentation plan and wargaming efforts for fiscal year 2023 are focused on identifying solutions to logistics and littoral maneuver challenges, optimizing infantry battalion and MLR structure and equipment, and identifying critical Marine Corps contributions to the Joint Force in competition and conflict. Examining Marine Corps concepts for reconnaissance/counter-reconnaissance and identifying capability strengths and gaps will also be a key part of our wargaming program. These efforts support a family of threat-informed naval concepts that are well nested with joint warfighting approaches and are written to provide the basis for subsequent force design and development decisions. These Service-approved operating concepts call for enabling units with next-generation, uncrewed intelligence, surveillance, and reconnaissance (ISR) and weaponized systems, enhanced situational awareness tools, communication infrastructure, and enhanced prototypes for littoral maneuver.

132. Senator SULLIVAN. General Berger, has the Marine Corps discussed this war game with CSIS?

General BERGER. I can say with certainty that no personnel from the Marine Corps Warfighting Lab's Wargaming Division, which is responsible for our force design wargaming, was asked to participate or was otherwise involved. My staff did reach out to Mr. Mark Cancian to discuss the results of the wargame, he did not respond.

133. Senator SULLIVAN. General Berger, how does the Marine Corps respond to this CSIS assessment of the MLR's effectiveness? Please do not contend that the Marine Corps has access to classified information and CSIS does not.

General BERGER. The CSIS assessment of the MLR is largely based on using it to provide kinetic fires. While the MLR has the capability to provide these fires, its strongest contribution to the Joint Force is its ability to find, fix, and track adversary ships and aircraft, make sense of what will likely be a confusing and cluttered operating environment, and provide targeting information to other elements of the Joint Force to increase their effectiveness, efficiency, and survivability. At the same time, the MLR will contribute to denying or degrading an opponent's ability to do the same.

During the campaign in the Solomon Islands during 1942 and 1943, Australian, British, and American coast watchers provided advanced warning of Japanese ship movements and aerial strike packages that enabled Allied ships and aircraft to position themselves for optimal intercepts, allowing our comparatively meager forces to prevent effective Japanese reinforcement of Guadalcanal and prevent effective Japanese attacks on United States land-based and naval forces. These small teams of personnel were extremely difficult to locate, tied down much larger Japanese forces intent on finding them, and had a massive impact in enabling the defeat of Japanese forces in the Solomon Islands without ever firing upon an aircraft or ship.

The MLR is designed to perform many of these same functions. We understand the speed with which near-peer adversaries can target and engage our forces. The MLR's small operational footprint and mobility will allow it to survive in this highly contested and information saturated environment. If the enemy wants to expend an exquisite munition on a small number of marines—only to find they moved in the time it took the missile to arrive at its planned target—then that is one less exquisite missile bound for an aircraft carrier or key base. These forces will provide targeting-level information to the rest of the Joint Force, so that the 200 missiles a bomber squadron can carry are directed against the right targets in the right place, despite the fact that those targets may have moved hundreds of miles during the interval between launch of the aforementioned bombers and their arrival at their weapons release points.

The CSIS report notes the difficulty associated with deploying an MLR to Taiwan after the start of hostilities. While an MLR could certainly be employed on the island of Taiwan, in the context of a western Pacific conflict it provides more value

to the Joint Force by positioning on key pieces of maritime terrain and limiting an opponent's freedom of maneuver, east of the first island chain. When other targeting systems are degraded or denied, the MLR will leverage multi-domain communications pathways to provide targeting information to the Joint Force. In turn, this will limit other critical asset's exposure to threats while leveraging their larger weapons magazines and capabilities to attrite enemy forces. The

MLR further supports the Joint Force by conducting sea denial operations through the prosecution of enemy forces with their own organic fires capabilities.

Additionally, the MLR is intended to be partially deployed at all times, conducting exercises with allied and partner nations, bolstering their capabilities and interoperability. This creates uncertainty for potential adversaries as they will not know what they will be forced to contend with, should they choose to engage in armed conflict. Further, the MLR's partial deployment reduces the portion of the MLR that will need to be re-positioned in the event armed conflict commences. The Marine Corps recognizes that strategic lift is a vulnerable resource, and that it will be heavily employed by other Services in the event of significant U.S. force deployments. This is a large part of the reason the Marine Corps is seeking a light amphibious ship capability to deploy and sustain portions of the stand in force.

It is also worth noting that the MLR tends to be perceived as a unit that is only useful in a western Pacific conflict. This is not the case. The capabilities of the MLR have proven useful in the Baltic during multi-lateral exercises, tracking real-world unfriendly contacts in multiple domains and providing that information to combined forces. There are numerous other maritime chokepoints around the world where the MLR can provide utility in ensuring friendly freedom of maneuver, while denying the opponents ability to maneuver.

134. Senator SULLIVAN. General Berger, what is the Marine Corps doing to assure access to terrain where MLRs are likely to operate in a contingency involving China or Russia?

General BERGER. "Admiral Aquilino, when you look at the broader China threat in terms of our allies and partners, can you sort of walk us through that world of those partners?

Admiral Aquilino responded with the following statement:

"Certainly, foundational to our strategic deterrence approach and integrated deterrence is the allies and partners and it's an asymmetric advantage. Let me just say that the strategy and approach is competition, not containment. And the five treaty allies of Japan, Korea, Australia, Philippines and Thailand are foundational, right. Those are mutual defense treaties that stand through Senate ratification and are truly important. But our approach is to pull in as many additional allies through a set of layers of many and multilateral engagements, operations and work we do together for a variety of reasons. Number one, we are like minded nations with common values. We have deep ties and that's beyond just the treaty allies. Indonesia, Malaysia, Bangladesh, all the nations in the region. And we operate and exercise with them frequently, 120 exercises a year, deep engagements in the form of key leader and other events. So, pulling that layer together, Congressman, is really important. And it is the asymmetric advantage because it's the one thing China doesn't have and that's partners."

During crisis and conflict, the ability for the Joint Force to gain and maintain access, basing, and overflight from our partners and allies are critical to projecting combat power in support of the combatant commanders. This is one of the significant advantages that the Amphibious Ready Group (ARG) / Marine Expeditionary Unit (MEU) provides to combatant commanders in terms of Flexible Response Options (FROs) and Flexible Deterrence Options (FDOs). However, it is necessary to build and sustain those relationships during competition.

During competition, the Marine Corps' Stand-In Forces (SIF) are executing this strategy by being forward postured with our partners and allies in support of the broader strategy of integrated deterrence. With the latest change to the international agreement with the Government of Japan, 12th MLR will provide a ready and capable stand-in force in the First Island Chain, prepared to support the United States and allied nations by bolstering our ability to support deterrence efforts and respond to contingencies. The 2+2 agreement enhances stand-in force capability within the First Island chain which ensures these forward-deployed marines are ready to support our Allies amidst evolving regional and global security challenges. Today, there are more than 20,000 marines forward-postured west of the International Date Line. They live in our priority theater, assuring allies and partners, and working daily to respond to crisis, deter conflict and support a free and open Indo-Pacific. Should deterrence fail, our forward posture places forces already inside

a potential Weapons Engagement Zone as a survivable and credible threat to our adversaries.

Access for unit employment is largely within the remit of combatant commanders, but the Marine Corps works with combatant commanders and our allies and partners to establish relationships that are the foundation for future access. Some examples of this include scheduled bilateral and multilateral exercises like Balikatan and Nordic Response (formerly Cold Response), key leader engagements, high-level diplomatic meetings like the recent 2+2 with Japan, and humanitarian assistance/disaster relief (HA/DR) support. Security agreements also play an important role in providing the legal and administrative framework for Marine Corps presence, while respecting the sovereignty and interests of U.S. allies and partners.

135. Senator SULLIVAN. General Berger, the Marine Corps has previously conducted its own war games as part of the Force Design 2030 development effort. Will the Marine Corps release classified or unclassified versions of these war game conclusions to my office?

General BERGER. Yes.

Reports are available for the following wargames:

MAGTF Warrior 17, 12–16 June 2017 (pre-FD 2030)
- Purpose: Define Marine Corps capabilities required to conduct sea control and power projection within a joint campaign against a peer adversary.
- Reports available: Secret final report.

Expeditionary Warrior 18, 2–6 April 2018 (pre-FD 2030)
- Purpose: Examine operational level logistics support to marine expeditionary forces in the western Pacific in an anti-access/area denial environment.
- Reports available: Secret final report.

Naval Services Game 18, 9–12 July 2018 (pre-FD 2030)
- Purpose: Explore command relationships, tasking, capabilities, and employment implications of Marine Corps and Navy forces task-organized for littoral combat across the full range of naval missions.
- Reports available: Secret final report.

MAGTF Warrior 18, 17–21 September 2018 (pre-FD 2030)
- Purpose: Inform future logistics operating concepts of support and how the MEF will be organized, trained, and equipped to support and sustain operations as part of an inside force.
- Reports available: Secret final report.

POM22, 7–11 October 2019
- Purpose: Identify capability roadmap changes required to support Force Design 2030.
- Reports available: Unclassified summary.

Strategy 2030, 16–17 October 2019
- Purpose: Inform CMC Force Design 2030 construct and identify potential service-level risks associated with directed force reductions and reorganizations.
- Reports available: Unclassified summary.

Pacific Surprise, 21–31 October 2019 (MLR-focused)
- Purpose: Operational level test of Force Design 2030 force in context of extended joint, maritime campaign against the pacing threat.
- Reports available: Unclassified summary, Secret final report.

Ghost Fleet 1, 14–17 January 2020 (MLR-focused)
- Purpose: Examine the extent to which proposed FD 2030 MLR and MEU can support a given sea denial mission within the context of JFOS 2.2
- Reports available: Unclassified summary, Secret final report.

Black Sheep Squadron, 31 December 2019–28 January 2020
- Purpose: Explore concepts of employment and capabilities for manned and unmanned Marine Corps aviation assets to inform future force design and development.
- Reports available: Unclassified summary.

Ender's Shadow, 15 April and 21 August 2020 (MLR-focused)
- Purpose: Inform FD 2030 decisions and the development of the Tentative Manual for Expeditionary Advanced Base Operations (TM-EABO) through tactical employment of and MLR capabilities as part of a joint maritime campaign conducted in the SCS.
- Reports available: Unclassified summary, two Secret final reports.

Ghost Fleet 2, 20–24 July 2020

- Purpose: Examine the value of proposed sustainment vessels and existing Military Sealift Command ships in sustaining the Joint Force during a joint maritime campaign.
- Reports available: Unclassified summary.

Provident Forge, 23 September–6 October 2020
- Purpose: Evaluate the FD 2030 infantry battalion against selected mission requirements to assess capability when executing global crisis response and contingency missions.
- Reports available: Unclassified summary, Secret final report.

Naval Services Game 20, 18–23 October 2020
- Purpose: Explore fleet integration of Navy and Marine Corps force design initiatives to inform command and control relationships to fight effectively.
- Reports available: Unclassified summary, Secret final report.

Crown Jewel, 2 February–23 April 2021
- Purpose: Evaluate proposed FD2030 MEU construct and concept of employment against selected missions to gauge the formation's ability to execute proposed mission essential tasks.
- Reports available: Unclassified summary, Secret final report.

ENIGMA, 21 February–18 April 2021
- Purpose: Explore design and development considerations of Marine Information Detachments in support of forces operating in the information environment.
- Reports available: Unclassified summary, Secret final report.

Stand-in Force, 29 March –2 April 2021 (MLR-focused)
- Purpose: Inform design of a Stand-in Force that is optimized to conduct reconnaissance and counter-reconnaissance as part of a Joint Force campaign in SCS that can transition seamlessly between competition and conflict.
- Reports available: Unclassified summary.

Ender's Rise, three-game series between February–25 July 2021 (MLR-focused)
- Purpose: Inform revisions and enhancements to the TM-EABO and recommend DOTMLPF-P actions to support organizing, training, and equipping Marine Littoral Regiments and Littoral Maneuver Squadrons in preparation in competition.
- Reports available: Unclassified summary, Secret "quicklook" report.

Littoral Logistics (Expeditionary Warrior 21), 9–13 August 2021
- Purpose: Inform the development of concepts required to posture and sustain a naval force-in-readiness executing theater-level expeditionary advanced base operations in a contested environment.
- Reports available: Unclassified summary, Secret final report.

Littoral Maneuver, 30 August–3 September 2021
- Purpose: Develop and assess boat capabilities and concepts of employment in order to inform requirements documents.
- Reports available: Unclassified summary, Secret final report.

Ground Warrior 22, 7 October 2021–17 February 2022
- Purpose: Refine and clarify the concept of employment for, and examine the composition of, the FD 2030 infantry battalion set against global mission requirements.
- Reports available: Unclassified summary, secret "quicklook" report.

Aviation Wargame, 13–17 December 2021
- Purpose: Review and refine marine aviation requirements in support of the Stand-in Force of 2030 and beyond.
- Reports available: Unclassified summary, TS/SCI final report.

Expeditionary Warrior 22.1, 7–11 March 2022 (MLR-related)
- Purpose: Explore Marine Corps means of contributing to naval, joint, and national objectives in competition below the threshold of major armed combat.
- Reports available: Unclassified summary, Secret "quicklook" report.

Expeditionary Warrior 22.2 / Global 15, 16–20 May 2022 (MLR-related)
- Purpose: Examine Navy and Marine Corps afloat and ashore integration opportunities which enable a Joint Task Force scheme of maneuver and scheme of fires in a high-end conflict against a peer threat.
- Reports available: Unclassified summary, TS/SCI report (under classification review)

MLR Game 2022 Agile Competition/Agile Response (collaboration w/SAW), 23–27 May 2022 (MLR-focused)

- Purpose: Assess concepts related to the employment of Stand-in Forces and the Marine Littoral Regiment at the operational level of war during transition from competition to conflict.
- Reports available: Unclassified final report published in United States Naval Institute journal Proceedings

MLR Game 2023 (collaboration w/Krulak Center), 17 January and 24 March 2023, (MLR-focused)

- Purpose: Identify alternative COAs to the current Littoral Combat Team construct.
- Reports available: Secret

Azure Dragon, 9–13 January 2023 (MLR-related)

- Purpose: Explore III MEF ability to transition from day-to-day operations to major armed combat operations and explore MEF Major Subordinate Commands' ability to serve as Naval Task Group Headquarters.
- Reports available: Secret "quicklook" report, Secret final report (final review).

Ground Warrior 23, 13 December 22–6 January 23

- Purpose: Explore employment of the FD2030 infantry battalion in offensive operations and assess the sufficiency of the battalion's composition.
- Reports available: Secret final report (in review).

Other wargames have been conducted since January 2023, but those reports were not yet available at the time of responding to this QFR. Similar to the above, wargames (and other Campaign of Learning activities)—at the classified and unclassified level—will be made available on a need-to-know basis.

MEU CAPABILITIES

136. Senator SULLIVAN. General Berger, the most visible component of the Marine Corps' crisis response capability is the MEU. The 2,200 marines on a MEU, divided between a Battalion Landing Team, a Composite Helicopter Squadron, and a Combat Logistics Battalion, bring organic capabilities that a combatant commander can employ. Force Design 2030 changes the type and amount of equipment available to the MEU as well as the structure and composition of units assigned to the Command Element (CE), Ground Combat Element (GCE), Aviation Combat Element (ACE), and Logistics Combat Element (LCE). Can you provide a detailed breakdown of the composition of the 31st MEU and the 13th MEU in 2018 and 2023, including any changes to their Mission Essential Tasks and the number of marines assigned to the CE, GCE, ACE, and LCE?

General BERGER. Force Design 2030 has not changed the number of Marine Expeditionary Units (MEUs) the Marine Corps can field; in fact, Force Design 2030 reinforces the need for the continued global employment of this versatile and highly capable unit. The Marine Corps continues to have capacity for seven MEUs. That is, regardless of the availability or readiness of amphibious warfare ships, the Marine Corps has and will continue to field the same number of MEU even as the service continues to modernize. In the late 1980's, the Marine Corps changed the nomenclature of the Marine Amphibious Units to become the MEU. Since then, and for the foreseeable future, the Marine Corps will maintain seven MEUs.

However, unrelated to the Marine Corps modernization efforts with Force Design 2030, the Navy's readiness and inventory of amphibious warfare ships do impact the ability of the MEUs to be forward postured and available for Combatant Commander requirements. Over the past 10 years the average operational readiness or availability of amphibious warfare ships has been 46 percent. This challenges the Amphibious Ready Group (ARG)/MEU team to adequately conduct critical pre-deployment training requirements and qualifications to conduct day and night operations at sea. This not only decreases the safety of our forces by reducing proficiency, but also decreases the Flexible Response Options (FDOs) and Flexible Deterrence Options (FDOs) of the Combatant Commanders to have ready and available forces for operational requirements.

During the 1990's the amphibious warfare ship inventory exceeded operational employment allowing adequate time for maintenance, and more materially available ships to surge when required. For example, in 1991 the Department of the Navy maintained roughly 60 amphibious warfare ships while only 37 percent were deployed. However, in the early 2000's the amphibious warfare ship inventory decreased by nearly half while the operational requirements maintained the same. Overtime as the operational demand remained consistent to historical baselines while inventory decreased, the material condition of amphibious warfare ships has been strained. This has led to common delays of ARG/MEU deployments and provides fewer ready ships to surge if directed.

The 22d, 24th, and 26th MEUs will continue to garrison and deploy from Marine Corps Base (MCB) Camp Lejeune in North Carolina. The 11th, 13th, and 15th MEUs will continue to garrison and deploy from MCB Camp Pendleton in California. Last, the 31st MEU will continue to garrison and deploy from MCB Butler in Okinawa, Japan.

The structural organization of our MEUs will also remain the same and will be comprised of a Command Element (CE), a Battalion Landing Team (BLT) as the Ground Combat Element (GCE), a Composite Aviation Squadron as the Aviation Combat Element (ACE), and a Combat Logistics Battalion (CLB) as the Logistics Combat Element (LCE)

Currently, the 26th MEU is conducting their Pre-Deployment Training Period (PTP) with the Bataan Amphibious Ready Group (ARG) in preparation for their upcoming deployment this Summer. The Artillery Battery within the BLT for the MEU will be organized with a traditional M777 Howitzers platoon and a Force Design incorporated High Mobility Artillery Rocket System (HIMARS) platoon. Throughout the PTP, the battery has been training on new Tactics, Techniques, and Procedures (TTPs) for HIMARS-Tactical Insertion Dynamic Employment (HI-TIDE) that will enable the rapid employment of long-range precision fires after ship-to-shore connectors have maneuvered the assets. This employment concept is an aspect that supports the ability of expeditionary units that can contribute to sea-denial and sea-control operations. Maintaining control of Sea Lines of Communication (SLOC) and the race for key maritime terrain is critical in the current operating threat that has created an Anti-Access, Area-Denial (A2AD) environment through the proliferation of low-cost long-range fires, sensors, and a communications architecture that place U.S. assets at risk. Although Force Design is modernizing, the capabilities resident within the MEU has increased lethality while the core structure and organization of the MEUs remain the same.

A. 13th MEU Summary. The Service has increased its number of F–35s from 6 to 10. This is only feasible in a 2x LPD class ship composition as executed in 2023 unless other aviation assets are reduced. The divestment of heavy main battle tanks has resulted in an increase in ashore mobility of personnel and cargo via additional All-Terrain Vehicles (ATVs), 7-tons, and Joint Light Tactical Vehicles (JLTVs). The temporary reduction in AAVs has allowed additional engineer equipment and containerized cargo to be embarked. The vertical takeoff and landing—unmanned aerial system (V-BATs) have begun fielding, placing an additional aviation capability with the medium deck ships during disaggregated operations. Personnel composition remains similar across the MAGTF.

B. 31st MEU Summary. F–35s were slated to deploy in 2018, however were land-based for operational considerations. The homeport shift of LHA–6 USS *America* replacing LHD–1 USS *Wasp* in Forward Deployed Naval Forces—Japan (FDNF-J) has brought an F–35 certified flight deck into 7th Fleet resulting in regular 5th Gen TACAIR presence with the MEU. Some traditional towed artillery has been replaced with HIMARS rocket artillery. As with 13th MEU, V-BATs have begun fielding with very positive feedback from our commanders, and personnel composition remains consistent.

C. Detailed composition of MEU capabilities in 2018 and 2023 is provided below and is displayed in two columns (column 1 represents 2018 and column 2 represents 2023).

13th MEU Aircraft and UAS: MV–22: 10/10. CH–53: 4/4. AH–1: 4/4. UH–1: 3/3. F–35: 6/10. V-BAT: 0/3.

13th MEU Vehicles and Equipment: M777: 6/4. M1A1 Main Battle Tank: 4/0. M88 Tank Retriever: 1/0. AAV: 15/0. LAV: 20/20. 7-Ton: 41/45. HMMWV/JLTV: 84/94. ATV: 7/17. Engineering equipment: 5/7. Containerized cargo: 468/548.

31st MEU Aircraft and UAS: MV–22: 10/10. CH–53: 4/4. AH–1: 4/4. UH–1: 3/3. F–35: 0/6. V-BAT: 0/3.

31st MEU Vehicles and Equipment: M777: 6/4. HIMARS: 0/2. AAV: 15/0. LAV: 5/11. 7-Ton: 37/30. LVSR: 3/0. HMMWVs/JLTV: 85/49. ATV: 11/15. Engineering equipment: 5/2. Containerized cargo: 367/357.

The Mission Essential Task List (METL) for both the 31st and 13th Marine Expeditionary Units (MEUs) have experienced some changes between 2018 and 2023. These changes included the removal of four METs:

- Conducting Theater Security Cooperation Activities
- Conducting Aviation Operations from Expeditionary Shore-Based Sites
- Performing Enabling Operations
- Conducting Airfield Seizure Operations

While adding one new MET: Establishing and Operating Expeditionary Advanced Bases.

Now, both MEUs are expected to be capable of the following:

- Establishing an expeditionary site to support naval operations, which may include ports, airfields, Forward Arming and Refueling Points (FARPs), forward operating bases, and firing areas
- Conducting enabling operations as required for naval operations
- Establishing and maintaining operations at a site until it is either disestablished or control is transferred to another entity
- Reducing pockets of resistance, securing the area, and defending the site against company-level threats.

While the METL for the 31st and 13th MEUs are identical, there is a minor difference in the baseline and advanced standards for Maritime Interception Operations (MIO). The primary difference is the specified ability to conduct daytime bottom-up entry, which is a baseline standard for the 13th MEU, but is an advanced standard for the 31st MEU.

137. General Berger, the MEU GCE is based on a Battalion Landing Team (BLT) with three rifle companies. The standard attachments to form the BLT have been an artillery battery (6 x M777 lightweight howitzers), an assault amphibious vehicle (AAV) platoon (18–21 AAVs), a light armored reconnaissance platoon or company (6–25 Light Armored Vehicle variants), and engineer platoon, and a reconnaissance platoon. The composite squadron in the ACE traditionally deploys with the following mix of airframes and detachments: medium tiltrotor (VMM) squadron (10–12 x MV–22s), heavy helicopter squadron (HMH) detachment (4 x CH–53E/K), light attack helicopter squadron (HMLA) detachment (4 x AH–1Z and 3 x UH–1Y), marine attack squadron (VMA or VMFA) detachment (6 x AV–8B or F–35B), aerial refueler transport squadron (VMGR) detachment (2 x KC–130's), Marine Air Control Group (MACG) detachment, Marine Wing Support Squadron (MWSS) detachment, and a Marine Aviation Logistics Squadron (MALS) detachment. Typical MEU LCE equipment includes 15 MTVR, 18 HMMWVs, 2 M36 wreckers, 2 D–7 bulldozers, 3 forklifts/front-loaders, 4 bulk fuel vehicles, 2 water vehicles, 1 recovery AAV, and 1 noncombatant evacuation operations (NEO) tracking system. Are MEUs deploying in 2023 deploying with organizational structures like that described above?

The organizational structure described above remains similar across all Marine Expeditionary Units (MEUs), except for the use of assault amphibious vehicles (AAV), and HIMARS. Currently, the force is transitioning to the Amphibious Combat Vehicle (ACV) and divesting of AAVs. The Service is currently on track to deploy the first ACV platoon via an ARG/MEU in fiscal year 2024 to fiscal year 2025, which is a change to the above organizational structure as described. MEUs will task organize based off assessments conducted by the MEF Commanders and the MARFORs. In some cases, a MEU may deploy with HIMARS (HIMARS Platoon has 2x Launchers) vice deploying with an artillery battery (6x M777 lightweight Howitzers). In this case, the Service's 31st MEU deploys with HIMARS as opposed to East and West Coast MEUs. Task Organization is driven by many factors such as the deployment schedule, forces available, pre-planned partnered exercises, and adversarial actions. The stated changes to Task Organization (T/O) and Table of Equipment (T/E) do not prevent the execution of any assigned Mission Essential Tasks (METs).

138. General Berger, if MEUs deploying in 2023 will be organized differently that described above, please provide a detailed comparison of how they deviate from the standard MEU load out, including the number of personnel assigned to each unit within the CE, GCE, ACE, and LCE.

See Question for the Record #137. The structural organization of our MEUs also remain the same and will be comprised of a Command Element (CE), a Battalion Landing Team (BLT) as the Ground Combat Element (GCE), a Composite Aviation Squadron as the Aviation Combat Element (ACE), and a Combat Logistics Battalion (CLB) as the Logistics Combat Element (LCE)

The composition of how the MEU is spread across the three ship Amphibious Ready Group (ARG) and what capabilities are within it will be tailored to the threat environment and historical trends of Combatant Commander mission assignments to the ARG/MEU team. Prior to deployments, the ARG/MEU will conduct a 9-month pre-deployment training period (PTP) with various at sea exercises that allow the two commands to build and work on Standard Operating Procedures (SOPs) for assigned Mission Essential Tasks (METs). During at sea periods the ARG/MEU commanders, staff, and major subordinate commands will execute a variety of full mission profile exercises such as amphibious raids, amphibious assaults, non-combat evacuation operations (NEO). The two commands will also coordinate with Fleet and Joint headquarters in the Combatant Commands that the ARG/MEU is expected to be assigned to during the deployment to coordinate Theatre Security Cooperation

(TSC) exercises and receive intelligence briefs to understand the threat environment. Through the combination of the at sea training periods, development of SOPs, understanding of anticipated assigned missions, and the threat environment, the ARG/MEU team tailors what assets are assigned to each amphibious warfare ship within the ARG to be appropriately organized for operational deployment. As such, MAGTFs can and will vary in size and capability according to their assigned or likely missions.

FORCE DESIGN 2030 TRANSPARENCY

139. Senator SULLIVAN. General Berger, it has been reported that senior marine officers were required to sign non-disclosure agreements after working on Force Design 2030. Is this accurate?

General BERGER. Prior to the public release of information and decisions made, regarding Force Design 2030, the Marine Corps provided Non-Disclosure Agreements (NDA) to a select number of officers and staff. These NDAs were provided in an effort to minimize incorrect information and guidance from being publicly shared while Force Design 2030 was in its developmental stage. These officers and staff were members of a select, core group who were instrumental in the decision-making process. The NDAs were provided and signed on a voluntary basis, whereby if a member of the group did not desire to sign the NDA, they were not forced to sign and participate.

This practice of non-disclosure agreements is not uncommon—in the private nor in the public sector—where organizations are considering change-at-scale. The Service relied upon a small group of hand-selected, senior planners, to include a number of retired General Officers, that spanned the MAGTF and possessed a diverse experience base. They helped to craft General Berger's Commandant's Planning Guidance and the initial framework of Force Design, not a part of a public forum, but as a small team of critical thinkers, helping the Service mature its Force Design initiative. Subsequently, using a concentric-circles approach to implementing change-models, during the first year of planning, in which the foundations of Force Design were matured, a broader population of senior planners and subject matter experts were selected to support Service-level planning efforts—and were subject to non-disclosure agreements—so as to (a) afford the planners with the opportunity to creatively think absent limitations or pressures of "sustaining status quo" while (b) allowing nascent ideas to be discussed, developed, and matured before they were made public. Simply put—this is responsible planning. In the second year of planning, better matured ideas that required further examination, to include understanding their broader Service-level implications across the Fleet, the Supporting Establishment, and the Service's Headquarters, allowed for the concentric circle of planners to be further expanded. Twelve to 24 months later, outputs such a Talent Management 2030, Training and Education 2030, and Installations and Logistics 2030—all institutional enablers to a redesigned Marine Corps—were generated. Simply put, this process of change—the use of concentric circles of planners—to include the temporary use of non-disclosure agreements—is not unique to Force Design and, in fact, in the private and public sector, is a well-recognized technique to implement change.

140. Senator SULLIVAN. General Berger, if senior Marine Officers were required to sign non-disclosure agreements after working on Force Design 2030, why was that necessary?

General BERGER. See Questions for the Record #139. It was determined that those involved be restricted from discussing the topic with those not read in to prevent the disclosure of anything pre-decisional. Select personnel were subject to non-disclosure agreements so as to (a) afford the planners with the opportunity to creatively think absent limitations or pressures of "sustaining status quo" while (b) allowing nascent ideas to be discussed, developed, and matured before they were made public.

141. Senator SULLIVAN. General Berger, you indicated that the Marine Corps has conducted over 400 engagements with Congress to discuss Force Design 2030. Can you provide a list of those engagements specifying whether they were meetings, briefs, or hearings with Members of Congress to discuss Force Design 2030 or other issues within the Marine Corps?

General BERGER. When the Marine Corps first undertook Force Design 2030, we assessed that the Congress would be a key partner in the development and execution. We understood that to move at the necessary speed that the pacing threat re-

quired, we would need to capitalize on the wisdom and perspectives of both Members and staff of the Congress. They were an essential source of information on our Campaign of Learning—where we sought to rapidly inject lessons learned, wargaming and experimentation into our decisions. We sought congressional oversight at the start—so as to take advantage of the invaluable perspective of Congress.

In 2019, the Service released the Commandant's Planning Guidance, setting forth the intent and direction for the Force Design 2030 initiative. The document emphasized the need to reallocate resources and shift the Marine Corps' focus toward future conflict scenarios, such as great power competition and naval integration. It was recognized we need to provide regular updates, engage in briefings, and seek congressional feedback to ensure that the Force Design 2030 aligned with national security objectives and received appropriate oversight.

Following the release of the Planning Guidance, the Service actively engaged with Congress to facilitate a robust and ongoing dialog. Marine Corps leaders conducted multiple office calls and briefings to provide in-depth insights into the Force Design 2030, be available to address any concerns, and solicit feedback from Members of Congress, as well as personal and professional staff. From 2019 until the release of Force Design 2030 in March 2020, the staff participated in 31 engagements (office calls, breakfasts, briefings, phone calls, and events) with Members of Congress, committee personnel, and personal.

These engagements spanned comprehensive classified and unclassified presentations on force structure changes, acquisition plans, projected budgets, and anticipated timelines. The program briefs were especially detailed to ensure projected investments remained on cost, on schedule, and within performance parameters. During these briefs and office calls, the marine briefers welcomed rigorous scrutiny and worked closely with congressional committees, so as to take full advantage of their experience.

As Force Design 2030 plans began implementation, the Service remained committed to transparency by sharing progress reports, conducting site visits, and facilitating access to classified and unclassified information related to the Force Design 2030. Regular updates and consultations with relevant committees were established to maintain a continuous flow of information, enabling Congress to effectively exercise its oversight responsibilities.

Since 2020, the Service has increased congressional engagements upon the release of Force Design 2030 and in subsequent years.

**Each items listed reflects a separate, distinct engagement.*

2020
Office Calls with Members: 35
]Briefings to Members: 13
Briefings to Professional or Personal Staff: 37
Other (breakfasts, etc.): 6
Total Engagements: 91

2021
Office Calls with Members: 56
Briefings to Members: 19
Briefings to Professional or Personal Staff: 39
Other (breakfasts, etc.): 13
Total Engagements: 127

2022
Office Calls with Members: 69
Briefings to Members: 19
Briefings to Professional or Personal Staff: 64
Other (breakfasts, etc.): 29
Total Engagements: 181

2023
Office Calls with Members: 32
Briefings to Members: 10
Briefings to Professional or Personal Staff: 26
Other (breakfasts, etc.): 6
Total Engagements: over 70 to date

Hearings and Questions for the Records: Separately (and not counted in the above totals), the Marine Corps' Force Design 2030 concept was addressed on the record (either during testimony or questions for the record) in over 41 hearings from March

2020 until February 2023 and responding to Questions for the Record from all defense committees.

Force Design 2030, initiated in 2019, represents a transformative effort aimed at ensuring the Marine Corps remains prepared for the challenges of the future. As the Force Design 2030 continues to be implemented, the Service remains committed to maintaining open lines of communication with Congress and upholding the principles of transparency and accountability, thus strengthening the Marine Corps and the Nation's defense capabilities for the future.

142. Senator SULLIVAN. General Berger, the Goldwater-Nichols Department of Defense Reorganization Act of 1986 provides Service Chiefs the responsibility to man, train, and equip personnel for the unified commands. Did you consult with any combatant commander prior to embarking on Force Design 2030 in 2019 or during initial Force Design efforts in 2020?

General BERGER. Yes.

As the Commandant of the Marine Corps, per Title X, I, along with my fellow Service Chiefs, am responsible for the development of requirements for the equipping of my respective Service's forces. Additionally, as the Marine Corps falls within the purview of the Department of the Navy, I am subject to the authority, direction, and control of the Secretary of the Navy (SECNAV). It is my responsibility to transmit the plans and recommendations of my Headquarters to the SECNAV. Should the Secretary approve those plans and recommendations, I am then required to act as the agent of the Secretary in carrying out those plans and recommendations.

Force Design 2030 was a process of modernization, designed to refocus the Marine Corps on the pacing threat as identified in the 2018 National Defense Strategy (NDS), which was then reiterated in the 2022 NDS. Based on the Intelligence Communities assessment of adversaries' capabilities, the Marine Corps evaluated what was needed to support the fleet and Joint Force in accordance with the service's Title X requirements. In consultation with Navy partners, specifically the 7th Fleet Commander and his staff, it was determined that the Navy needed the Marine Corps to support and conduct sea denial in and around maritime choke points. This initial input was a critical driver in our early modernization efforts as the Marine Corps had nothing in its inventory to provide that capability to the Navy. By the end of this year, it will. III Marine Expeditionary Force, which is assigned to the Commander for U.S. Indo-Pacific Command, will be capable of conducting sea denial with the Navy Marine Corps Expeditionary Ship Interdiction System, or NMESIS. This new capability will be complimentary to other services capabilities such as the Army's Precision Strike Missile and will directly impact the needs of the Navy and by extension, Combatant Commanders.

While the 2018 and 2022 National Defense Strategies clearly State the case for change by identifying the Indo-Pacific as the priority theater, from a competition and threat perspective, the Marine Corps has implemented threat-driven and concept-based changes that will support more than one Fleet or Combatant Commander. The Marine Corps' Expeditionary Advanced Base Operations (EABO) and Stand-in Forces (SIF) concepts are aligned to both NDSs and are theater agnostic. The plan for light, lethal, and distributed forces is applicable in any Combatant Command, such as U.S. European Command (EUCOM) or U.S. Central Command—and have shown to be successful. For example, Task Force 61/2 (TF 61/2) executed a proof of concept in 2022 in which they provided the 6th Fleet Headquarters with real-time Maritime Domain Awareness (MDA). In that effort, marine forces tested, refined, and validated concepts of employment for MDA and for closing kill webs, while also conducting real-world, time sensitive reconnaissance-counter reconnaissance missions. These efforts continue to support 6th Fleet operations, which directly support EUCOM and United States Africa Command priorities. Since those proofs of concept in 2022, TF 61/2 has become a standing force within the U.S 6th Fleet, sourced by a marine rotational force.

143. Senator SULLIVAN. General Berger, if you did consult with combatant commanders, can you provide details about which combatant commanders and when you consulted with them?

General BERGER. As the Commandant of the Marine Corps, per title X, I, along with my fellow Service Chiefs, am responsible for the development of requirements for the manning, training, and equipping of my respective Service's forces. Additionally, as *the Marine Corps falls within the purview of the Department of the Navy, I am subject to the authority, direction, and control of the Secretary of the Navy (SECNAV). It is my responsibility to transmit the plans and recommendations of my Headquarters to the SECNAV. Should the Secretary approve those plans and rec-*

ommendations, I am then required to act as the agent of the Secretary in carrying out those plans and recommendations.

Conversely, Combatant Commanders' responsibilities include producing the plans for the employment of their assigned forces. Those plans are then carried out, as appropriate to accomplish the Combatant Command's assigned missions.

During the *U.S. European Command's (EUCOM)* posture hearing on 30 March 2022, General Wolters was asked how new concepts such as Expeditionary Advanced Based Operations (EABO) and Stand-In Forces (SIF), along with the advanced sensing capabilities that marines from Task Force 61/2 operate with, enhanced his options as a Combatant Commander.

> *"They dramatically enhance our options, Congressman. and as you know, we have exercise Cold Response ongoing as we speak, and the Commandant just paid a good visit. What we're seeing is doing exactly just what you alluded to, a brown water force that can shoot, move, and communicate and is very, very expeditionary is priceless for 21st century security. All of that is ongoing in all domains . . . And you can't succeed if you just occupy one domain and attempt to achieve effects in one domain. So, the marines are doing a fantastic job of leading from the front and showing the rest of us how to do it right, especially in the brown water environment."*

Later, on 18 April 2023, *Admiral John C. Aquilino, Commander, U.S. Indo Pacific Command* provided the following response when asked about the Marine Littoral Regiment in his theatre of operations.

> *" . . . General Berger who came out of MARFORPAC, as you know, I think was pretty understanding of the threat, the scenario, and what was needed. So, I appreciate his effort to focus on the Indo Pacific problem set. That said, we need to deliver that organization with the capabilities to deliver effects to surface-to-air, surface-to-surface, and surface-to-ship. When that force is armed and prepared with that set of capability, it's exactly what we need in the Indo-Pacific to support the fight."*

The Marine Corps' Expeditionary Advanced Base Operations (EABO) and Stand-in Forces (SIF) concepts meet the 2022 National Defense Strategy (NDS) intent and are theater agnostic. The plan for light, lethal, and distributed forces would be successful in other Combatant Commands (COCOMs), such as European Command (EUCOM) or Central Command (CENTCOM)—and have shown to be successful. For example, Task Force 61/2 executed a proof of concept during 2022 in which they provided 6th Fleet Headquarters with real-time Maritime Domain Awareness (MDA). In that effort, marine forces tested, refined, and validated concepts of employment for MDA and closing kill webs, while also conducting real-world, time sensitive reconnaissance-counter reconnaissance missions. These efforts continue to support 6th Fleet operations as nested within EUCOM and Africa Command (AFRICOM) priorities and have sense turned into a rotational force.

144. Senator SULLIVAN. General Berger, you and Lieutenant General Heckl have testified that the Marine Corps is fully capable of meeting all global commitments. Were Force Design 2030 related divestments coordinated with the Commander, United States Forces—Korea before they were implemented? Please provide the documentation in support of your answers.

General BERGER. No, but Combatant Commanders were given advanced copies of Force Design documents for comment.

As the Commandant of the Marine Corps, per Title X, I, along with my fellow Service Chiefs, am responsible for the development of requirements for the manning, training, and equipping of my respective Service's forces. Additionally, as the Marine Corps falls within the purview of the Department of the Navy, I am subject to the authority, direction, and control of the Secretary of the Navy (SECNAV). It is my responsibility to transmit the plans and recommendations of my Headquarters to the SECNAV. Should the Secretary approve those plans and recommendations, I am then required to act as the agent of the Secretary in carrying out those plans and recommendations.

The Marine Corps overall Indo-Pacific posture is nested within the INDOPACOM Theater Posture Plan. Our stand-in forces within the first island chain offer advanced capabilities and serve as integrated deterrent forces in support of Joint, Interagency, and multinational missions. When not in direct conflict, these forces continuously strive for interoperability with foreign security forces and improve civilian-military relations with partners while serving as a deterrent force against potential adversaries.

MARINE CORPS AS A STAND IN FORCE

145. Senator SULLIVAN. General Berger, it will be many years before the Marine Corps has sufficient missiles to engage in a prolonged fight with the PLA. How will Stand-in Forces operate after they have exhausted their missile inventories?

General BERGER. The Marine Corps' forward presence within a potential adversary's weapons engagement zone enables the service to emplace an integrated and redundant network of expeditionary sensors at key maritime chokepoints to provide situational awareness, targeting data, and Command & Control (C2) for naval, joint, and coalition forces. The employment of kinetic fires is a secondary role of the Stand-in Force (SIF). By combining Marine Corps sensors with joint kinetic and non-kinetic fires and effects, stand-in forces can hold key adversary assets at risk and disrupt adversary decisionmaking, thereby enabling the rapid deployment of naval, joint, and coalition forces in theater while providing additional options for commanders and senior leaders. Additionally, by holding adversary assets at risk, the Stand in Force is able to provide commander and national leaders with off-ramps from conflict, ideally, preventing the escalation of competition to crisis and beyond.

The SIF will also enable strategic messaging to our allies and partners, as well as the adversary, that our actions are defensive in nature, demonstrate resolve, and would be costly to effectively counter. The Stand-in Force integrates with coalition forces and stiffens the resolve of allies and partners while influencing adversary risk calculations. SIF daily interactions and operations with the nations and communities of our allies and partners strengthen U.S. alliance networks while simultaneously allowing opportunities for de-escalation should competition escalate above the threshold of violence.

While magazine depth of various elements within the SIF will vary depending on element size, location, and mission, the SIF will also be able to sustain itself inside the adversary's weapons engagement zone with missile and other aerial defense capabilities. To counter these, the Marine Corps has invested in the Marine Air Defense Integrated System (MADIS) to counter drones and aircraft. The Marine Corps is also developing Medium-Range Intercept Capability (MRIC) to defend forward-deployed forces against cruise missiles. Our premier joint-capable aviation command and control platform is the Common Aviation Command and Control System (CAC2S). CAC2S possesses the tactical data links and communication paths needed to quickly alert the Joint force when any data on a hypersonic launch is classified by our sensor network. These capabilities provide the Joint force with the ability to detect and see the hypersonic threats within the fleet and Joint force commanders' theater.

146. Senator SULLIVAN. General Berger, why is the Marine Corps redesigning and restructuring itself to conduct sea denial operations that can already be performed by other Services, for example, Navy attack submarines, Air Force long-range missiles, and Army Multi-Domain Task Forces (MDTFs)?

General BERGER. Part of the Marine Corps' Title X responsibilities are to "provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign." It is inherent in the Marine Corps' Title X responsibilities to provide an expeditionary force in readiness that can provide combat credible forces that can operate across the conflict continuum in support of naval campaigns. Force Design has enhanced the Marine Corps' ability to support naval campaigns and fleet commanders by equipping formations with the necessary capabilities to enable sea control and denial operations as required to seize or defend advanced naval bases.

Furthermore, the Force Design process is not seeking to restructure the Marine Corps to be solely responsible for sea denial and control operations. These capabilities will be inherent in our Marine Littoral Regiments (MLRs) and other elements of the Stand-in Force, and are complementary to other Service's capabilities, within the joint warfighting construct. Moreover, the Marine Corps' sea-denial capabilities are not redundant to joint and coalition force capabilities but are a complimentary collection of combined arms capability options for Combatant Commanders. Marine Corps Doctrine Publication 1 defines combined arms as the "synchronized and simultaneous application of different arms and elements of combat power to achieve an effect greater than if each element were used separately or sequentially."

One of the Marine Corps' capstone research and development projects in Force Design is the family of integrated targeting cells. The effort accelerates the evolution of combined arms multi-domain formations by fusing operations, intelligence, and fires functions (i.e., Combined Arms) together in a single center, creating the

means for marine units to participate in and control joint fires, while also gaining and maintaining persistent custody of adversary targets. The Marine Corps today now has the ability to fight and contest in all five warfighting domains to include space and cyber. The integration of advanced technological capabilities has increased the lethality of the Marine Air Ground Task Force (MAGTF) to deter, but also contend against our adversaries in these domains with combat credible formations and capabilities that can provide precision fires at range. Additionally, Force Design investments have prioritized sensing and communication capabilities that enable forward postured formations to detect and track adversaries' and provide the Joint Force with the necessary target data to project combat power into an Anti-Access/Area Denial environment. While these efforts will enable maneuver of units, more importantly they will enable the maneuver of Joint Force and naval units in and around the maritime domain.

Last, while the MLR is a tailored MAGTF, specifically designed to support operations across the conflict continuum, it is not a Marine Infantry Regiment. The MLR and Marine Infantry Regiment differ based on the unique mission, task organization, and the equipment of each organization. The MLR is a key Force Design output with global applicability, although based in the Indo-Pacific. Alternatively, the Marine Infantry Regiment exists within all three Marine Divisions and remains tailorable and scalable to support operations across the conflict continuum, globally.

Marine Corps Aviation under Force Design 2030

147. Senator SULLIVAN. General Berger, the Marine Corps has stated that the key to sustaining Stand-in Forces is the Landing Ship Medium augmented by aviation support, buying from local inhabitants, and "foraging" for food. The decision to divest critical logistics capabilities was made several years ago, but testimony by marine leaders has also admitted that the logistics support concept has not been solved. If marines are deployed today under the SIF concept, how would they be sustained with all classes of supply, medical/casualty evacuation, and required maintenance capabilities?

General BERGER. As stated in our recently released I&L 2030 we clearly recognize that "the Marine Corps Installations and Logistics Enterprise is not yet organized, trained, or equipped to sustain expeditionary forces across all domains as envisioned by A Concept for Stand-In Forces (SIF), Littoral Operations in a Contested Environment, and Expeditionary Advance Base Operations, nor in traditional crisis response scenarios. Year after year, exercises, wargames, and experiments have demonstrated and validated this assessment." Stand-in Forces today are currently operating in this environment and are relying on a mix of legacy and new capabilities.

Primary classes of supply such as class I/III are established through pre-existing procurement methods with the Defense Logistics Agency (DLA). Class V supportability is related to registered operational plans in support of Combatant Commander requirements. Initial ground sustainment for Class V is coordinated and distributed from forward prepositioned stocks. Medical support for SIF is sustained through on scene organic capabilities within battalion aid stations for Class VIII requirements. The level of care that is required organically depends on the size, capabilities, and mission of the unit supporting the SIF. The Marine Corps is not resourced or authorized to provide all required medical services, such as theater hospitalization and aeromedical evacuation out of theater and must rely on Joint Force support. Required maintenance support for the SIF is currently being sustained through standard DLA coordination and routine sustainment methods. For larger maintenance requirements or exercises with allies and partners, one of our various Maritime Preposition Squadrons (MPSRONs) could be employed to support the SIF with the necessary capabilities. Smaller maintenance requirements can be supported through a variety of methods. For example, the Marine Corps' aviation capabilities routinely conduct Passengers, Mail, and Cargo (PMC) requirements from both ashore and afloat platforms to transport the necessary support.

However, the Marine Corps understands that enabling flexible and responsive sustainment in a contested environment requires a broad mix of ashore and afloat platforms and an integrated logistics network to support the SIF. This is the reason we are pursuing modernization across our entire logistics enterprise. We intend to transition our logistics from a capability optimized for supporting sustained operations ashore to a maritime capability capable of supporting operations in austere, expeditionary, and littoral environments that are contested across all domains. The centerpiece of this concept of support is the development of an integrated ashore and afloat sustainment network that can support marine forces globally. This network would be capable of generating multiple logistics webs that provide options to commanders, creates resiliency, contributes to deterrence, and overcomes the precision lethality of the modern battlefield. To do this, this network would seek to inte-

grate naval, joint, Allied and Partner capability based on the operational requirement.

From a resourcing perspective, this network requires four critical capabilities: multi-capable distribution platforms, increased and diversified forward positioning of sustainment, installations that are prepared for operations in a contested environment, and improved logistics command and control. As noted previously and as seen in the activation of the new Marine Aerial Refueler/Transport Squadron in Hawaii, the Marine Corps is working to establish multi-capable distribution platforms to enable our modernized logistics efforts. As for increasing and diversifying the forward positioning of sustainment—we will achieve this through the Global Positioning Network (GPN) which consists of a dynamic, integrated, afloat and ashore networks, to support the Stand-in-Force and global crisis response. The Marine Corps will make our installations ready for the contested environment by transforming our Indo-Pacific installations into advanced bases capable of serving as vital nodes in the logistics network, while our CONUS-based installations are made more efficient, resilient, and capable. Last, the Marine Corps will enhance its logistics command and control to enable better logistics decisionmaking. For additional details, I offer two key sources of information to further inform your team. First, is DC, CD&I's recently released Contested Logistics video at: *https://www.youtube.com/watch?v=478rCQCzuoUn.* The recently relesed Installations and Logistics 2023 is enclosure 3. [The enclosure has been retained in Committee files.]

MARINE CORPS AVIATION UNDER FORCE DESIGN 2030

148. Senator SULLIVAN. General Berger, several weeks ago LtGen Heckl affirmed that the Marine Corps was not diminishing a single aviation POR. That just means that the Marine Corps is going to buy the amount of aircraft it planned on buying. There is a delta between the number of aircraft the Marine Corps will require in each POR and the number of operational aircraft in the total force based on the number of squadrons and the number of aircraft per squadron. Can you provide a detailed accounting of this delta, including any aircraft that will be in storage, inventory management, available for Foreign Military Sales, or otherwise divested from the Marine Corps inventory?

General BERGER. As a result of Force Design 2030, no aviation programs of record were reduced. Marine Aviation capabilities have expanded since Force Design 2030 efforts began in 2019. Today, Marine Aviation consists of fifth generation F–35s, tiltrotor MV–22s, the only marinized heavy lift helicopter in the U.S. arsenal—the CH–53K, H–1s that have been upgraded in lethality and survivability, the venerable C–130J, new MQ–9As, the Ground/Air Task Oriented Radar (G/ATOR) and the Marine Air Defense Integrated System (MADIS). Across all platforms, modernization efforts have integrated readiness initiatives, incorporated advanced technologies, and ensured the capabilities procured meet or exceed those of their preceding platform. Force Design 2030 has expanded, optimized, and enhanced Marine Aviation's ability to continue to deliver more lethal, effective, and survivable capabilities to enable naval and joint campaigning in all domains across the continuum of conflict.

Force Design 2030 brings significant additional capabilities to the Aviation Combat Element. Force Design 2030 efforts have expanded Marine Aviation with modernized capabilities, increased readiness, and enhanced lethality across all platforms to meet the demands of global force management, rapidly changing technology, and the ever-changing operating environment. Historically, the number of squadrons (organizational construct) and aircraft (composition) within aviation units has always evolved inside the Program of Records (POR) to ensure the Marine Corps remains the Nation's crisis response force while modernizing and optimizing the fleet to meet the challenges of the future operating environment.

The Marine Corps POR for F35 is 420; the POR for CH–53K is 200; the POR for MV–22 is 360 (final procurement in fiscal year 2023); the POR for H–1s is 389 (procurement completed in fiscal year 2019).

- F–35: The Marine Corps is procuring 353 F–35B and 67 F–35C, a total of 420 aircraft at the rate of roughly 20 aircraft per year. Force Design 2030 modernization directing an organizational construct change to 18 squadrons of 10 F–35 aircraft allows the Marine Corps to deploy 10 F–35Bs aboard our MEUs compared to the traditional six AV–8B TACAIR contingent. After completing the F–35 transition, 18 Active component operational squadrons will enable Marine Corps TACAIR to meet steady-State Global Force Management requirements.
- CH–53K: The CH–53K POR has remained at 200. A CH–53 squadron is designed to be task organized and is manned, trained and equipped in the fol-

lowing manner: 16-aircraft squadron (1.0) Primary Mission Aircraft Authorization (PMAA), 12-aircraft temp squadron (.75) Primary Mission Aircraft Inventory (PMAI), 8-aircraft squadron minus (.5), 4-aircraft detachment (.25). In accordance with Force Design 2030, the heavy lift community will support the Marine Corps with 5.25 Active squadrons x 16 CH–53, 1 Reserve squadron x 16 CH–53, 1 fleet replacement squadron x 17 CH–53.

- MV–22: The Marine Corps is procuring 360 MV–22Bs in the following squadron bed-down: 14 Active squadrons x 12 MV–22B, 2 Reserve squadrons x 12 MV–22B, 1 fleet replacement squadron x 27 MV–22B. The Marine Corps is complete with the medium lift transition. Force Design 2030 has reduced the total squadron end strength from 18 squadrons to 14 squadrons. Force Design 2030 modernization from a 12 to 10-aircraft squadron enables the Marine Corps to extend the service life of this unmatched capability from the mid–2030's to the early 2050's.
- H–1: The H–1 POR is 349. Force Design 2030 directed the deactivation of two HMLA squadrons. By the end of fiscal year 2024, Active component squadrons will be reduced from 7 to 5. Force Design 2030 modernization increases the H–1s readiness and provides flexibility for our operational commanders for decades to come The Total Active Inventory required will be 284 H–1 aircraft. Four west coast squadrons will support global force commitments and MEU detachments operations for the 11th, 13th, 15th, and 31st MEU (Okinawa) as well as the Unit Deployment Program (Okinawa) while one east coast squadron will support the 22d, 24th, and 26th MEU.

Current Force Primary Aircraft Authorization:

- 7 AC HMLA Squadrons 15 AH–1Z, 12 UH–1Y
- 1 RC HMLA Squadron 15 AH–1Z, 12 UH–1Y
- 1 RC HMLA Squadron (-) 10 AH–1Z, 8 UH–1Y
- 1 Fleet Replacement Squadron 15 AH–1Z, 12 UH–1Y

Future Force Primary Aircraft Authorization (Fy25):

- 5 AC HMLA Squadrons 15 AH–1Z, 12 UH–1Y
- 1 RC HMLA Squadron 15 AH–1Z, 12 UH–1Y
- 1 RC HMLA Squadron (-) 10 AH–1Z, 8 UH–1Y
- 1 Fleet Replacement Squadron 15 AH–1Z, 12 UH–1Y

149. Senator SULLIVAN. General Berger, in responses to Requests for Information from my office, the Marine Corps indicated that varying numbers of aircraft in the Marine Corps inventory would go into storage or inventory management extend the service life of MV–22s, AH–1Zs, UH–1Ys, CH–53Ks, and F–35s. In fact, according to the information the Marine Corps provided me, a significant amount of aircraft—as many as 60 MV–22s, 30 AH–1Zs, 24 UH–1Ys, 48 CH–53Ks, and 54 F–35Bs will go into storage, or inventory management as the Marine Corps calls it, by 2030. When I read you these numbers at a closed session following the April 18, 2023 hearing, you said they were not accurate even though they had been provided to my office by the Marine Corps. What are the accurate numbers of aircraft the Marine Corps is putting into storage or inventory management?

General BERGER. Before discussing inventory management, it is important to understand all elements that comprise the Program of Record (POR). When the Service determines a POR, three primary categories are calculated to ensure the Service procures the exact number of aircraft needed to support the operational forces over the aircraft's lifetime. The three primary categories are:

- Primary Aircraft Inventory (PAI). PAI ensures operational, training, testing, and reserve squadrons maintain their full complement of aircraft (defined as Primary Aircraft Authorization (PAA)) on a day-to-day basis.
- Backup Aircraft Inventory (BAI). BAI are backup aircraft that ensure when operational, training, testing, and reserve squadrons aircraft undergo long-term planned maintenance or modification pipelines; there is no degradation in readiness on our flightlines (defined as Backup Aircraft Authorization (BAA)).
- Attrition Reserve (ATT). ATT aircraft ensure that if an operational, training, testing, or reserve squadron loses an aircraft due to a mishap or damage, we can immediately replace it to ensure there is no degradation in readiness of the Marine Corps' ability to respond to crises.

Aircraft inventory management for the Marine Corps is defined by SECNAVINST 5442.3, which provides the framework for how the Service determines the appropriate quantities of BAI and ATT aircraft. Each airframe type uses different per-

centages based on historical data to calculate BAI and ATT. The Marine Corps, like every other Service, manages aircraft inventory through a variety of means; we place BAI and ATT aircraft in our Fleet Replacement Squadrons (FRS), into storage at the Aerospace Maintenance Aircraft Regeneration Group (AMARG), or into preservation on the flight line, depots, or contracted facilities. For the purposes of answering this question, we will cover storage and preservation.

Storage:

Aircraft storage occurs primarily at the 309th AMARG and at the Depots. In 1964, the Secretary of Defense designated AMARG as the sole storage, reclamation, and disposal manager for the DOD. Naval aircraft stored at 309th AMARG fall under six sections, and Sections 1–3 bear review in further detail.

- Section 1—War Reserve and Force Level Assurance Storage. Aircraft designated for retention in Section 1 shall not have any components removed from them without HQMC/OPNAV approval. Aircraft in section 1 are not stricken from the inventory and are counted in TII. The Marine Corps has the following aircraft in Section 1.
- Section 2—CNO Special Program Storage. Stricken aircraft held in storage as a hedge against future force structure and procurement uncertainties. Aircraft designated for retention in this section may be re-preserved every 4 years as determined by the strike board. The Marine Corps has the following aircraft in Section 2.
- Section 3—FMS. Stricken aircraft are on hold for FMS and SAP are CNO inviolate. Marine Corps aircraft in Section 3 are:
- Section 4—Museum. Stricken aircraft identified for donation to service museums. The "maintain-in" storage fees for these aircraft are borne by the museums.
- Section 5—Reclamation and Disposition. Stricken aircraft awaiting final reclamation and disposition.
- Section 6—Identified for Disposal. Stricken aircraft, fully reclaimed, and being prepared for final disposal.

Preservation:

There are four levels of preservation in inventory management.

- Level I. Conducted at the organizational level of maintenance. Aircraft may be maintained in Level I preservation for a maximum of 90 days.
- Level II. Conducted at the depot level of maintenance. Level II is similar to Level I. Level II preservation provides minimum protection for up to 1 year.
- Level III. Conducted at the depot level of maintenance requiring dehumidification. Level III preservation provides optimum protection for an indefinite period of time.
- Level IV. Level IV preservation is used as an umbrella term to designate the partial preservation of aircraft undergoing depot-level maintenance actions. The aircraft systems and components are preserved to the maximum extent possible; however, systems and components may be in various levels (Level I, II, or III) of preservation.

MV–22, H–1, CH–53K, and F–35 preservation numbers, along with a review of those same platforms in storage, as follows:

MV–22: POR is 360 aircraft. There are no MV–22Bs entering inactive inventory. The Inventory Management program is designed to provide aircraft capability modernization, manage the lifecycle and airframe flight hours, and ensure enough aircraft with the required capability are available to always satisfy Primary Aircraft Inventory (PAI) requirements. The aircraft in the Inventory Management program is contracted to be reconstituted within 30 days of notification, providing a rapid response capability to adjust to changing fleet needs. Beginning in fiscal year 2025, the MV–22 Inventory Management program will be resourced for the induction and maintenance activity requirements of 48 planned aircraft. The anticipated annual cost for the program is approximately $600,000 per aircraft.

H–1: POR is 349 (189 AH–1, 160 UH–1) aircraft. There are 37 aircraft that have been transferred to inactive inventory, including 19 aircraft for future uncertainty (section 2), eight aircraft for Foreign Military Sales (FMS) and Security Assistance Program (SAP), and ten stricken aircraft awaiting final reclamation and disposition. Section 2 storage is planned to increase from 19 aircraft to a total of 32 aircraft, which would result in a total of 50 aircraft in storage. The cost to store the H–1 aircraft is less than $125,000 per aircraft every 4 years. There are no reoccurring costs until the aircraft is removed from inactive inventory.

CH–53K: POR is 200 aircraft. During the transition from CH–53E to CH–53K between now and 2030, there are no plans to place any CH–53Ks into preservation and storage.

F–35: POR is 420 aircraft. The Marine Corps F–35 POR has been steady at 420 aircraft for more than two decades. How many and where we place our BAI and ATT F–35 aircraft is yet to be determined since we have not finished buying out the POR. Until then, thoughtful inventory management is the key to Marine Corps TACAIR readiness and capability.

In sum, the Marine Corps is not "divesting" of any aircraft. The Marine Corps has historically made changes in organizational construct and composition to meet mandates. Without appropriate inventory management and a backup inventory, our operational squadrons would consistently operate with fewer ready aircraft for training and tasking.

150. Senator SULLIVAN. General Berger, the Marine Corps is reportedly buying new aircraft and putting them directly in storage. Is it a good use of tax payer dollars for the Marine Corps to have a plan to purchase dozens of aircraft that it has no intention of using and will immediately put into storage?

General BERGER. Yes. The Marine Corps has historically made changes in organizational construct and composition to meet mandates. As the Marine Corps executes its Force Design efforts, the Marine Corps continually evaluates and rebalances squadrons. While there is a cost associated with inventory management, the long-term benefits of inventory management outweigh the costs and it enables the service to provide flexibility to commanders, increase readiness, and extend the service life of airframes well into the future.

H–1: There are 37 aircraft that have been transferred to inactive inventory, including 19 aircraft for future uncertainty (section 2), eight aircraft for Foreign Miliary Sales (FMS) and Security Assistance Program (SAP), and ten stricken aircraft awaiting final reclamation and disposition. Section 2 storage is planned to increase from 19 aircraft to a total of 32 aircraft, which would result in a total of 50 aircraft in storage. The cost to store the H–1 aircraft is less than $125,000 per aircraft every 4 years. There are no reoccurring costs until the aircraft is removed from inactive inventory.

MV–22: There are no MV–22Bs entering inactive inventory. The Inventory Management program is designed to provide aircraft capability modernization, manage the lifecycle and airframe flight hours, and ensure enough aircraft with the required capability are available to always satisfy Primary Aircraft Inventory (PAI) requirements. Further, the aircraft in the Inventory Management program is contracted to be reconstituted within 30 days of notification, providing a rapid response capability to adjust to changing fleet needs. Beginning in fiscal year 2025, the MV–22 Inventory Management program will be resourced for the induction and maintenance activity requirements of 48 planned aircraft. The anticipated annual cost for the program is approximately $600,000 per aircraft.

CH–53K: POR is 200 aircraft. During the transition from CH–53E to CH–53K between now and 2030, there are no plans to place any CH–53Ks into preservation and storage.

F–35: POR is 420 aircraft. The Marine Corps F–35 POR has been steady at 420 aircraft for more than two decades. How many and where we place our BAI and ATT F–35 aircraft is yet to be determined since we have not finished buying out the POR. Until then, thoughtful inventory management is the key to Marine Corps TACAIR readiness and capability.

151. Senator SULLIVAN. General Berger, in responses provided to my office by the Marine Corps following an April 14, 2023 brief on Section 1023 of the fiscal year 2023 NDAA, the Marine Corps reported that 50 aircraft will be transferred into the inactive inventory, along with an unknown number of MV–22s. What is the cost associated with the procurement and storage of these aircraft?

General BERGER.

H–1: There are 37 aircraft that have been transferred to inactive inventory, including 19 aircraft for future uncertainty (section 2), eight aircraft for Foreign Miliary Sales (FMS) and Security Assistance Program (SAP), and ten stricken aircraft awaiting final reclamation and disposition. Section 2 storage is planned to increase from 19 aircraft to a total of 32 aircraft, which would result in a total of 50 aircraft in storage. The cost to store the H–1 aircraft is less than $125,000 per aircraft every 4 years. There are no reoccurring costs until the aircraft is removed from inactive inventory.

MV–22: There are no MV–22Bs entering inactive inventory. The Inventory Management program is designed to provide aircraft capability modernization, manage

the lifecycle and airframe flight hours, and ensure enough aircraft with the required capability are available to always satisfy Primary Aircraft Inventory (PAI) requirements. Further, the aircraft in the Inventory Management program is contracted to be reconstituted within 30 days of notification, providing a rapid response capability to adjust to changing fleet needs. Beginning in fiscal year 2025, the MV–22 Inventory Management program will be resourced for the induction and maintenance activity requirements of 48 planned aircraft. The anticipated annual cost for the program is approximately $600,000 per aircraft.

In sum, the Marine Corps has historically made changes in organizational construct and composition to meet mandates. As the Marine Corps executes its Force Design efforts, the Marine Corps continually evaluates and rebalances squadrons. While there is a cost associated with inventory management, the long-term benefits of inventory management outweigh the costs and it enables the service to provide flexibility to commanders, increase readiness, and extend the service life of airframes well into the future.

152. Senator SULLIVAN. General Berger, can you provide any after action reports, war game analysis, or other evaluation or assessment mechanism that informed assault support requirements for infantry units under the Force Design 2030 force structure?

General BERGER. The Marine Corps assault support requirements are based on current and forecasted Global Force Management tasking to include, Marine Expeditionary Units (MEU), maintaining a Crisis Response Force, sustained service level training exercises, Marine Air Ground Task Force training, and Weapons and Tactics Instructor support, at a minimum. As the Marine Corps continues to assess the future operating environment, further adjustments, in line with our campaign of learning may be necessary, as seen in the modification of the size of our MV–22 Osprey squadrons. Based on a series of analysis, looking at airframe lifecycles, and training and operational requirements, it was determined that the Marine Corps' 14 MV–22 squadrons, each consisting of 12 aircraft be modified to 16 squadrons, each with 10 aircraft.

The addition of two MV–22 squadrons allows the Marine Corps to maintain its desired deployment-to-dwell ratio for pilots and crew, while simultaneously optimizing a given squadron's Primary Aircraft Authorization for deployment as the MEU Air Combat Element, supporting increased 5th generation tactical aircraft (TACAIR) operations. We will continue to assess our assault support posture to determine the most effective construct to deliver capability and capacity through wargames, service level exercises, and other analytical initiatives.

While the Force Design process has laid the foundation for a modernized roadmap for Marine Aviation, it also sets Marine Aviation on the path to look to the future. For example, Marine Aviation is teaming with U.S. Navy to develop the Marine Air Ground Task Force Unmanned Expeditionary Family of Systems (FoS). These efforts include acceleration of prototyping and experimentation of TACAIR Collaborative Combat Aircraft and building a common interoperable system control architecture for control of Joint assets. In parallel, Marine Aviation is also exploring the Vertical Takeoff and Landing Family of Systems (VTOL FoS), where the Logistics Connector is the first major effort to support the execution of the Stand-in Force (SiF) through airborne logistics in a contested environment. This portfolio also includes but is not limited to Air Loitering Munitions, an Attack/strike capability, and a future Assault support capability to replace our extant platforms.

153. Senator SULLIVAN. General Berger, can you provide any after action reports, war game analysis, or other evaluation or assessment mechanism that informed close air support requirements for infantry units under the Force Design 2030 force structure?

General BERGER. Force Design efforts have modernized Marine Aviation capabilities, increased readiness, and enhanced lethality across all platforms to meet current and future demands of global force management (GFM) requirements in support the Joint Force and Commandant Commanders (COCOM), rapidly changing technology, and the ever-changing operating environment. One of the many mission essential tasks that Marine Aviation preforms is offensive air support. As part of force modernization, Marine Aviation conducts significant integrated analysis of both weapon systems and aircraft employment techniques to ensure Marine Aviation meets sortie requirements with appropriate munitions for the best weapon-to-target match.

This analysis is captured in virtual, simulated, and live wargames and exercises throughout Headquarters Marine Corps as well as the operational fleet not only to inform and develop capabilities, but to capture and refine tactics, techniques, and

procedures for current and emerging weapon systems. As the Marine Corps continues to assess the operating environment, further adjustments in line with our campaign of learning will occur to gain and maintain the edge in lethality, readiness, while simultaneously optimizing our F–35 and H–1 fleet to support the Joint Force and Commandant Commanders (COCOM).

As we have always done, we will continue to assess and evolve our organizational construct and composition through wargames, service level exercises, and analytical initiatives to ensure the Marine Corps continues to deliver lethal capability to support the Joint Force and COCOM demands now and into the future.

MARINE AIR-GROUND TASK FORCE (MAGTF) SELF-SUSTAINABILITY

154. Senator SULLIVAN. General Berger, the MAGTF enables marines to deliver rapid, powerful, and sustainable response on a global scale. Sea-to-shore, air-to-ground, door-to-door, there isn't an organizational model more capable of quickly putting marines where they need to be in order to fight and win for our country. From the MEU to the MEF, marines are capable of self-sustaining for 15–60 days, operating without ports, airfields, or civilian infrastructure. Force Design 2030 changes the equipment and personnel available to the MAGTF, particularly the ACE. Using specific references to types and numbers equipment and personnel, describe how the MAGTF's ability to sustain itself at the MEU, MEB, and MEF level differs between 2018 and 2023.

General BERGER. Between the years 2018 to 2023, the MAGTF's ability to sustain itself remains relatively unchanged and uninterrupted. MEUs/MEBs/MEFs have deployed with largely unchanged manpower and equipment configurations.

For future MAGTF self-sustainment, we will transition from a logistics capability optimized for supporting sustained operations ashore to a maritime based support concept to serve us in contested, all domain, austere, expeditionary, and littoral environments. The centerpiece of this concept of support is the development of an integrated ashore and afloat sustainment network that can support our marine forces globally. This network will generate multiple logistics webs that provide options to commanders, enable resiliency, contributes to deterrence, and overcomes the precision driven lethality of the modern battlefield. To do this, this network integrates naval, joint, Allied and Partner capabilities based on the operational requirement. From a resourcing perspective, this network requires four critical capabilities:

1. Multi-capable distribution platforms with enough capacity to meet mission requirements.
2. Increasing and diversifying the forward positioning of sustainment—we will achieve this through the Global Positioning Network (GPN) which consists of a dynamic, integrated, afloat and ashore network to support the Stand-in Force and global crisis response.
3. Prepare our installations for the contested environment.
4. Improve our logistics command and control to enable better logistics decision-making.

The Marine Corps will create a leaner and more capable distribution element better equipped to support Force Design 2030 initiatives by combining Military Occupational Specialties, 3112 (Distribution) and 3152 (Packaging), that increases the capability of the Marine Corp's Combat Logistics Battalions (CLB) through a four-person Distribution cell. The goal of these efforts are effective capacity management (monitoring and movement execution of cargo through all available nodes and modes), asset visibility (in-transit, nodal and non-nodal), and an enterprise-level view of distribution capabilities and functions that provide near real-time situational distribution awareness (transportation and movement). Distribution flexibility will drive overall sustainment improvement in the future.

From a ground equipment perspective, changes that increased the sustainability of the MAGTF include the divesting of logistics intensive platforms such as Tanks and associated bridging. Subsequent introduction of modernized expeditionary platforms such as the ultralight tactical vehicles and Unmanned Logistics Systems—Air (ULS-A) have diversified our distribution capability. All new platforms are intentionally designed to implement predictive maintenance capabilities reducing the sustainment burden on individual units. Additionally, the introduction of advanced manufacturing capabilities that allow units to create repair parts onsite, significantly reduces the reliance of legacy supply chains.

FD modernization optimized Marine Aviation to operate from austere, distributed locations and across extended distances while providing cutting-edge advantages to the naval expeditionary force through the six functions of Marine Aviation which consists of Offensive Air Support, Anti-Air Warfare, Assault Support, Air Reconnais-

sance, Electronic Warfare, and Control of Aircraft and Missiles. Marine Aviation is manned, trained, and equipped to conduct the six functions and is integral to tomorrow's Marine Air-Ground Task Force (MAGTF), bringing lethal, agile, and sustainable capabilities to compete with, deter, and—if necessary—defeat our Nation's adversaries.

For the F–35, FD modernization directing an organizational construct change to 18 squadrons of 10 F35 aircraft allows the Marine Corps to deploy 10 F–35Bs aboard our MEUs compared to the traditional six AV–8B TACAIR contingent. This offers the Combatant Commanders (COCOMs) a 66 percent increase in TACAIR—5th Gen aircraft—forward deployed and globally engaged with our Marine Expeditionary Units (MEUs) time now. The transition to 5th Gen TACAIR provides the MAGTF, Joint Force Maritime Component Commander (JFMCC), and Joint Force enhanced situational awareness, greater freedom of maneuver, and flexible response options in what was previously considered a denied environment.

The MV–22 has revolutionized military air transport not seen before. The revolutionary capability of the tiltrotor, with the optimized and fiscally responsible and sustainable organizational construct, enables the Marine Corps to generate unprecedented tempo across our operating environment, allowing commanders to seize and retain the initiative not found in traditional rotary platforms. For the MV–22, FD modernization from a 12 to 10-aircraft squadron enables the Marine Corps to extend the service life of this unmatched capability from the mid–2030's to the early 2050's.

For the CH–53K, as the only marinized heavy-lift helicopter in the DOD in development or production, provides a greater payload capability for Assault Support than any current or emerging rotorcraft at sea level and high-altitude conditions at great ranges. Achieving Initial Operational Capability (IOC) in April 2022, the CH–53K was approved for Full Rate Production in December 2022 and plans to deploy for the first CH–53K MEU detachment in fiscal year 2025. The CH–53K provides critical expeditionary organic heavy-lift sustainment and mobility capability to the MAGTF, Joint Force, JFMCC, and COCOM.

For the AH–1Z and UH–1Y, FD modernization increases the H–1s readiness and provides flexibility for our operational commanders for decades to come. Deploying in detachments as part of the MEU onboard amphibious shipping, H–1s provide a wide variety of capabilities and mission sets and the entire spectrum of conflict.

Additionally, the post-FD force construct enables the activation of an additional KC–130J squadron in the Pacific, as well as the additional three squadrons of UAS. The KC–130J provides organic lift and tactical aerial-refueling capabilities to the Marine Corps. At the same time, MQ–9A supports the MAGTF by providing multisensor surveillance, maritime domain awareness, and enables the detection and engagement of targets during expeditionary, joint, and combined operations.

Ultimately, enhancement of the Marine Corps sustainment capability and capacity for the future operating environment through Force Design initiatives, ensures the MAGTF retains its self-sustainment capability.

A NICHE FORCE?

155. Senator SULLIVAN. General Berger, the Marine Corps divested significant components of its traditional combined-arms capability to develop capabilities specifically designed to counter China in the Indo-Pacific Command Area of Responsibility (INDOPACOM AOR). Does tailoring III MEF to fight China in the INDOPACOM AOR reduce the Marine Corps' ability to respond to contingencies around the globe? Provide specific examples in your response.

General BERGER. No, throughout the force design effort, all MEUs, without METL changes, have been prepared to deploy. When amphibious ships have been available, no MEU has missed a deployment timeline.

From the outset of our current modernization efforts, I directed the Marine Corps to design and develop a force focused on our pacing threat. Our approach to modernization has been deliberately iterative as to remain flexible to changes in the operating environment. Where feasible, we are constantly looking for opportunities to sustain or expand existing strategic competitive advantages over our adversaries. The priority being the pacing threat. There are constraints and restraints associated with modernization. Specifically, our assumption is we must continue to modernize under the existing topline budget. Additionally, we are beholden to industry's capacity to manufacture equipment as well as the maturation of certain technologies. In the case of the latter, regardless of how many resources you align to a new technology, it won't necessarily speed up its development.

The reality is that fielding new capabilities associated with Force Design 2030 is already well underway. Many of these "future" capabilities tied to Force Design

2030 are already being employed by marine forces today. Six examples from 2022 are illustrative:

TF 61.2 and Reconnaissance and Counter-reconnaissance: In March 2022, U.S. Sixth Fleet partnered with II MEF to create Task Force (TF) 61.2. TF 61.2 was designed as a joint task force crisis response capability to command and control naval forces supporting contingencies in Europe and Africa. This force was delegated tactical control of amphibious forces (ARG/MEU) in theater, allocated marine forces (Marine Rotational Force—Europe), and a task organized reconnaissance/counter-reconnaissance force. Near simultaneously, II MEF and 2d Marine Division were tasked with "accelerating experimentation with maritime, multi-domain reconnaissance constructs and activities to enhance the ability of the stand-in force to dominate the information environment, sense and make sense of the situation, and win the reconnaissance vs. counter-reconnaissance competition." Commander, Sixth Fleet, immediately volunteered TF 61.2 to support these broader Service experimentation efforts. During the next several weeks, TF 61.2 conducted training aboard both the USS *Woody Williams* (ESB–4) and USS *Georgia* (SSGN–729) and engaged in combined-arms training in both Greece and Turkey. Those initial exercises demonstrated that maritime expeditionary forces could increase surface, subsurface, and aerial domain awareness for the fleet commander—regardless of theater—and allowed us to focus on the information web required to create domain awareness in a contested space. TF 61.2 then transitioned these experimental capabilities to the Baltics, where it participated in bilateral training on maritime domain awareness with the Estonian Navy in the Gulf of Finland. During this period, TF 61.2 participated in an amphibious landing in Estonia and Exercise BALTOPS with 16 North Atlantic Treaty Organization (NATO) nations, utilizing 47 ships and 7,000 personnel. This new organization has been so successful the previous Commander, U.S. European Command (EUCOM) chose to highlight the value of the task force during his spring 2022 annual testimony. The bottom line is that your marines' ability to conduct reconnaissance and counter-reconnaissance is a current force capability that directly contributes to competition and deterrence today.

TF 76.3: Building upon the success of TF 61.2, in October 2022, the 3d Marine Expeditionary Brigade and Naval Task Force 76 staffs merged into a completely integrated naval task force in the Indo-Pacific. Over the next several months, TF 76.3 experimented with naval concepts at sea and ashore via a broad campaign of learning labeled NOBLE FUSION 22.2. TF 76.3 also participated in exercises 6 KAMANDANG in the Philippines and RESOLUTE DRAGON in Japan. Once again, marines and sailors demonstrated the ability to create advanced information webs to support maritime domain awareness across the theater. Just as importantly, they demonstrated this capability to potential adversaries.

i. The LHA's size, which closely mirrors the amphibious warfare ships of our allies, makes it an attractive partnership and learning platform. During their deployment, marines and sailors from Tripoli and the 31st MEU trained with forces from Japan, Australia, the Philippines, and Singapore.

Multifunction Air Operations Center (MAOC): In March 2022, 2d Marine Aircraft Wing (MAW) conducted the Service's first operational deployment of a multi-function air operations center (MAOC). In Lithuania, under the command of United States Air Forces Europe, the MAOC conducted air surveillance and multi-domain awareness in support of NATO operations. This is not simply an evolutionary step in fixed aviation command and control (C2) nodes, but rather, a transformational, expeditionary capability that can serve as a hub for Marine Corps, naval, and joint kill chains and webs. The MAOC provides the Marine Corps with the capability to control aircraft and missiles and enables decision superiority. It also offers the ability to gain and maintain custody of adversary targets and hold those targets at risk via fires with its organic TPS–80 Ground/Air Task-Oriented Radar (G/ATOR), Common Aviation Command and Control System (CAC2S), and highly proficient aviation C2 marines. The MAOC is scalable by task–7 organized units, small enough to support distributed teams or large enough to support a multi-MEF or Corps-level fight. This agency construct is also the model we are using for the development of all domain C2. 3d MAW is now leading the Service's MAOC experimentation efforts and employed this capability as part of Marine Rotational Force—Darwin (MRF-D), integrating C2 and sensor services for 16 allied and partner nations during Exercise PITCH BLACK. From these initial efforts, 3d MAW has matured the MAOC, creating a persistent hub to enhance the common tactical picture for I and III MEF. Recent experiments in February 2023, which included United States Indo-Pacific Command (USINDOPACOM), have further demonstrated the MAOC's ability to integrate additional capabilities from the MEF Information Group and improve the

common tactical picture for a carrier strike group, and is visible evidence of Joint All-Domain Command and Control (JADC2) in practice.

Marine Corps Information Command (MCIC): In October 2022, we streamlined and simplified much of the coordination required for space and cyberspace operations at the headquarters level, by realigning current relationships and structure at Headquarters, Marine Corps (HQMC) from a staff officer to an operational commander, to create the MCIC. The MCIC is a service-retained command designed to integrate global Marine Corps capabilities in information, intelligence, cyberspace, and space to support Fleet Marine Forces (FMF) resulting in decision advantage. This two-star command operates under Marine Forces Command (MARFORCOM) and provides critical linkages across operational level planning. It also provides task organized detachments to support the FMF commander's campaigning objectives. This allows the commander to leverage the authorities needed to synchronize global cyber, space, influence, and intelligence effects and generate multi-domain advantages in support of the commander's objectives. The MCIC achieved initial operational capability (IOC) in January 2023.

VMGR–153 and HMH–461: In January 2023, we activated Marine Aerial Refueler Transport Squadron 153 (VMGR–153) in Kaneohe Bay, Hawaii. By 2026, VMGR–153 will bring 15 KC–130J aircraft to the region, building on the organic mobility available to marines responding to crisis or conflict in the region. We are also approaching 1 year since the CH–53K program achieved IOC and are well underway transitioning Marine Heavy Helicopter Squadron 461 (HMH–461) into our first fully operational CH–53K squadron. Despite their ongoing transition, HMH–461 is already demonstrating the significant impact of this new capability, conducting heavy lift assault support missions previously impossible with legacy aircraft. In parallel, the operational test and evaluation squadron (VMX–1) continues to push the boundaries of heavy lift operations. Last December, they successfully lifted an F–35C, demonstrating the platform's utility in conducting next generation tactical recovery missions.

MARINE LITTORAL REGIMENTS

156. Senator SULLIVAN. General Berger, have any combatant commanders asked for an MLR to deploy to their theater?

General BERGER. The Service's one MLR is still in pre-FOC status and not yet ready for global operational employment; however, there are multiple theaters in which the MLR's ability to sense and make sense in the maritime domain in support of sea denial or sea control are applicable. It is not a force offering yet, but could be employed in a limited capacity if desired.

The Marine Corps activated Hawaii based 3d MLR and will reach its initial operating capability (IOC) in the 4th quarter of fiscal year 2023. Activating and reaching IOC of our MLRs are heavily reliant on the ability to be appropriately resourced. Current planning envisions the Okinawa based 12th MLR, and Guam based 4th MLR will be similar positioned in fiscal year 2025 and fiscal year 2027, respectively.

As part of the Marine Corps' Campaign of Learning, 3d MLR recently participated in Joint and Combined exercises such as Balikatan and Northern Edge. Both exercises experimented with platforms, concepts, and capabilities that the MLR formations will be employing to further enhance lethality of the Joint Force.

Although the MLRs have not reached a Fully Operational Capability (FOC) status, the experimentation and proof of concepts have demonstrated the value provided to the Joint Force.

When replying to a question during the House Armed Services Committee (HASC) hearing on the Indo-Pacific National Security Challenges. Admiral John C. Aquilino provided the following response when asked about the MLR in this theatre of operations.

"First the Marine Littoral Regiment again, General Berger who came out of MARFORPAC as you know I think was pretty understanding of the threat, the scenario, and what was needed. So, I appreciate his effort to focus on the Indo Pacific problem set. That said, we need to deliver that organization with the capabilities to deliver effects to surface to air, surface to surface, surface to ship. When that force is armed, prepared, and that set of capability, it's exactly what we need in the Indo-Pacific to support the fight."

The Marine Corps is fielding force design capabilities to MLRs today. (23) Ground/Air Task-Oriented Radars (G/ATORs) were fielded by the end of 2022, (31) will be fielded by the end of June 2023, and (57) will be in the fleet by the end of 2025. (6) Navy Marine Expeditionary Ship Interdiction System (NMESIS) medium missile batteries will be fielded in Q4 fiscal year 2023, providing 3d MLR with the capability to contribute to sea denial and control operations. (13) Marine Air Defense In-

tegrated Systems (MADIS) will begin fielding in fiscal year 2024. (31) Network on the Move (NOTM) systems will be mounted onto ultra-light tactical vehicles (ULTVs) providing 3d MLR with more resilient Satellite Communication (SATCOM) capabilities in September of this year.

However, the current programmatic timeline for the Medium Landing Ship (LSM) does not support delivery of the first (9) platforms to provide the Naval force with organic littoral mobility for one Marine Regiment until fiscal year 2033. To meet our current IOC timelines, the Marine Corps is investing in bridging solutions such as the Stern Landing Vessel (SLV) that will be delivered in Q2 FY23 for experimentation. Additionally, the Marine Corps has increased air mobility platforms such as the CH–53K, KC–130J, and the MV–22B to provide organic littoral mobility for the MLR.

157. Senator SULLIVAN. General Berger, can MLRs conduct amphibious assaults, raids, or other missions that a MEU would conduct?

General BERGER. The most common Marine Air Ground Task Force (MAGTF) in the Marine Corps is the Marine Expeditionary Unit (MEU). The composition of how the MEU is spread across the three ship Amphibious Ready Group (ARG) and what capabilities that are within it will be tailored to the threat environment and historical trends of Combatant Commander mission assignments to the ARG/MEU team. Through the combination of at sea training periods, development of Standard Operating Procedures (SOPs), understanding of anticipated assigned missions, and the threat environment, the ARG/MEU team tailors what assets are assigned to each amphibious warfare ship within the ARG to be appropriately organized for operational deployment. These tailored MAGTFs are optimized to conduct amphibious assaults, raids, and other operations that require Amphibious Warfare Ships.

Marine Littoral Regiments (MLRs) are purpose built MAGTFs that are designed to support the National Defense Strategy in achieving integrated deterrence. However, the MLR's ability to support sea denial, sense, and conduct counter-reconnaissance in support of a maritime campaign has value to all geographic combatant commands. While highly capable, the MLR is not optimized for amphibious assaults, raids, or other missions, more common to a MEU. Most notably, the MLR does not operate from or train with an ARG comprised of three Amphibious Warfare Ships, which allow it to conduct said operations.

The MLR, as part of the Stand-in-Force, disrupts the adversary in a contested littoral environment through reconnaissance, counter-reconnaissance, and sea denial operations to support the Naval Expeditionary Force's maritime campaign.

MLR Tasks:

- Conduct Expeditionary Advanced Base Operations
- Support Maritime Domain Awareness
- Conduct Reconnaissance in the Maritime Domain
- Support Littoral Targeting
- Conduct Littoral Transportation Operations
- Conduct Air Direction in Support of Expeditionary Advanced Base Operations
- Command and Control Distributed Maritime Operations
- Plan and Direct Littoral Maneuver
- Plan and Direct Sea Denial Operations
- Support Sea Denial Operations

MLRs support Stand-in Forces in a naval campaign through Expeditionary Advanced Base Operations (EABO). Expeditionary Advanced Base Operations are a form of expeditionary warfare that involves the employment of mobile, low-signature, operationally relevant, and relatively easy to maintain and sustain naval expeditionary forces from a series of austere, temporary locations ashore or inshore within a contested or potentially contested maritime area to conduct sea denial, support sea control, or enable fleet sustainment.

The MLR comprises a headquarters (Headquarters Company, Communications Company, and the Long-Range Unmanned Surface Vessel Company), and three subordinate commands—Littoral Combat Team (LCT), Littoral Anti-Air Battalion (LAAB), and Littoral Logistics Battalion (LLB), each command by a Lieutenant Colonel.

LCT Mission: The LCT conducts reconnaissance and counter-reconnaissance, employs, and enables multi-domain fires, and establishes expeditionary sites to support the maritime campaign across the competition continuum.

The LCT is composed of an infantry battalion, a medium range missile battery, and an engineer platoon. The LCT seizes, secures, controls, and defends key mari-

time terrain to allow expeditionary advanced base operations, conducts bilateral operations with the host nation, and attacks enemy maritime targets with naval strike missiles (NSM) utilizing naval and joint sensors.

LAAB Mission: The LAAB conducts anti-air warfare and enables integration of aviation operations with organic and joint fires to support the maritime campaign across the competition continuum.

The LAAB is composed of a low altitude air defense battery and an air control squadron with an air surveillance platoon and air support platoon. The battery is capable of short-range air defense and counter-unmanned aircraft systems. The squadron provides the MLR with multiple scalable command and control nodes providing air control and fires integration throughout the MLR area of operations. Additionally, the LAAB provides airspace surveillance, limited air direction, air control, air intercept control, and coordination of support anti-air and anti-surface fires. The LAAB's capabilities enable joint or combined forces to gain and maintain custody of littoral targets supporting sea denial operations.

LLB Mission: The LLB provides tactical logistics and explosive ordinance disposal support to sustain regimental operations across the competition continuum.

The LLB is composed of two direct support combat logistics companies that support the LCT and LAAB, and a general support logistics company. The direct support logistics companies support managing cache sites and connects tactical and operational logistics distribution. The support companies provide functional logistic support across all functions of logistics and classes of supply. The general support logistics company establish logistics support areas for logistics command and control to provide timely support to forward expeditionary advanced base positions.

158. Senator SULLIVAN. General Berger, how specifically do MLRs differ from the U.S. Army's MDTFs?

General BERGER. The Marine Corps' Marine Littoral Regiment (MLR) and the Army's Multi-Domain Task Force (MDTF) represent innovative and thoughtful approaches to compete and win on the modern battlefield, against peer adversaries. Both formations offer unique, yet complementary, capabilities that present multiple dilemmas for adversaries and generate options for the Joint Force commander in both competition and conflict.

The MLR is designed specifically to operate in the littorals. Its mission is, as part of the Stand-in Force, is to disrupt the adversary in a contested littoral environment through reconnaissance, counter-reconnaissance, and sea denial operations. Additionally, the MLR operates below the threshold of armed violence by strengthening relationships with allies and partners, reassuring them of U.S. security commitments, and fostering access in times of crisis or conflict. It is designed to support the Joint Force in the contact and blunt layers of the Global Operating Model. In crisis, forward posture and access enables the MLR to hold adversary assets at risk, contribute to the Joint Forces' Sea denial and sea control operations via organic lethality and the closing of joint kill webs, and provide other critical enabling actions to the naval and Joint Force. Finally, the MLR is purpose-built and designed to rapidly transition from competition, to conflict, and back to competition as escalatory or de-escalatory dynamics dictate.

The MLR is distinguished by its forward posture, its ability to rapidly deploy with organic Marine Corps and Navy assets, and its capabilities to persist within an adversary's weapons engagement zone. These capabilities are underpinned by naval concepts to include Littoral Operations in a Contested Environment, Distributed Maritime Operations, Expeditionary Advanced Base Operations, and the Concept for Stand-In Forces.

The MDTF provides complementary theater-level maneuver elements focused on anti access/area denial (A2/AD) networks through the conduct of multi-domain operations (MDO). The MDTF does not possess organic mobility, rather it relies on strategic lift and commercial vessels for inter-theater mobility within a distributed maritime environment, such as the Indo-Pacific region.

In the expansive Indo-Pacific region, a clear necessity exists for the MLR and the MDTF, particularly in time of conflict. Both units leverage a similar multi-domain approach, in some cases using like systems. However, the MLR has a unique mission requirement to operate forward postured in the Indo-Pacific region within a contested area. This necessitates balancing lethality with mobility—through lighter, expeditionary equipment and the employment of organic and Navy mobility assets.

159. Senator SULLIVAN. General Berger, as so much of the success of MLRs depend on the prepositioning of forces, what steps is the Marines Corps currently taking to ensure partner nations will allow these units to operate in their territory?

General BERGER. The Marine Corps Force Design 2030 concept, including the activation of Marine Littoral Regiments (MLRs), supports integrated deterrence with partner and allied forces to meet the pacing threat across the conflict continuum. Security cooperation is our key means of enhancing access and increasing the likelihood that this access will be permitted during a crisis.

- The Marine Corps is reinforcing traditional and developing new partnerships with numerous allied and partner (A&P) nations to build habitual, practical interaction and maintain continuing access.
- Although our main focus is on the Pacific, we maintain relationships across the globe with key A&P to ensure relevance for crises anywhere.
- Agreements play a key role by providing the legal and administrative framework for presence that respects the sovereignty and interests of our A&P. The close interaction and cooperation that accompany our presence build and maintain true partnerships.
- Key vehicles that facilitate our security cooperation include visits by deployed Marine Corps forces, key leader engagements, bilateral and multilateral exercises, and humanitarian assistance/disaster relief (HA/DR) support.
- These sustained relationships will enable the Marine Corps Stand-In Force and deter or engage common enemies alongside our allies and partners from a forward posture.

Key Points. Examples of key engagements the Marine Corps supports includes:

a. *Defense Policy Review Initiative (DPRI):* In the post-2001 era, both the United States and Japan recognized the need to adjust United States force posture to effectively fulfill the requirements of the Alliance. The DPRI laid out a future path to realign United States forces across the Indo-Pacific to meet the challenges of the future and included significant repositioning of forces from Okinawa to Guam and other locations. As a result of the 2021 Global Posture Review, the Department of Defense is engaged with our A&P across the region to advance initiatives that contribute to regional stability. Posture changes announced on January 11, 2023, by the United States and the Government of Japan Security Consultative Committee (2+2) ensures that the Marine Corps remains ready to address evolving regional and global security challenges. Specifically, a mutual agreement was reached that the 12th Marine Regiment will remain on Okinawa and will be reorganized into the 12th Marine Littoral Regiment (MLR) by 2025 in accordance with Marine Corps modernization efforts. The 12th MLR will provide a ready and capable Stand-In-Force within the first island chain, prepared to support the United States-Japan Alliance, bolstering our ability to support deterrence efforts, and respond to contingencies.

b. *Enhanced Defense Cooperation Agreement (EDCA) sites in the Philippines:* In 2014, the United States and the Philippines signed the EDCA, which bolsters the bilateral alliance by allowing extended rotational presence of U.S. forces and the establishment of facilities for joint use—these facilities are known as "EDCA sites." Marine Corps Forces, Pacific (MARFORPAC) and the Philippine Marine Corps (PMC) signed the 5-Year Integrated Readiness and Deterrence Plan 2022–2026 to advance integrated deterrence and enable the maintenance and sustainment of combat readiness. The goal is to integrate and posture PMC-MARFORPAC forces and capabilities by 2026, including persistent MLR engagement. The United States-Philippine joint development and investment within EDCA locations exemplify the necessity of the Marine Corps and United States Forces in the Philippines in order to develop Philippine bases and locations to bilaterally respond to HA/DR situations and enable combined training through scheduled exercises, like Balikatan, and engagements.

c. *Marine Rotational Force-Darwin (MRF-D) in Australia:* Per the 2023 Australian Defence Strategic Review, the Australian Army is developing a highly capable, modern amphibious fighting force. The Marine Corps and the Australian Army maximize integration, capability development, and training with MRF-D, the rotational Marine Corps presence in Australia. MRF-D, supported by the Ground Equipment Staging Program (GESP) participates in recurrent multilateral exercises like TALISMAN SABRE and bilateral engagement opportunities like PITCH BLACK. Additionally, Marine Corps support for the Australian Army's amphibious capability development which bolsters the second pillar of the enhanced trilateral security partnership "AUKUS." This continual support to Australia's defense development and modernization not only strengthens longstanding bilateral ties thus enhancing ongoing operational access.

d. *Marine Rotational Force-Southeast Asia (MRF-SEA):* Since 2022, MARFORPAC has forward-deployed forces to Southeast Asia to achieve maritime security objec-

tives with A&P in the region. MRF-SEA reassures A&P in region by consistently and reliably executing agreed-upon security cooperation activities. This contributes to regional stability by increasing MARFORPAC's responsiveness to crises and contingences. MRF-SEA conducts bilateral and multilateral security cooperation engagements with partners such as Singapore and Indonesia. This modular rotational force exercises distributed command, control, logistics, and transportation nodes supporting multiple, sometimes simultaneous, regional engagements. The exact composition of the force, locations, and schedules vary each year according to agreed-upon security cooperation engagements with host countries. This concept also operates within existing access, basing, and overflight agreements with Southeast Asian partners and allies to mutually support posture initiatives and reduce inter-theater transportation requirements for not only the Marine Corps but also partner and allied forces.

e. *Task Force Koa Moana (TF KM):* TF KM is the primary Marine Corps force to counter the People's Republic of China (PRC) influence and access in Oceania. Through TF KM's modest investments, the Marine Corps obtains excellent access to key sea lines of communication and achieves outsized effects that are mutually beneficial to A&P and the U.S. In fiscal year 2022 TF KM primarily engaged in Palau and the Commonwealth of Northern Marianas Islands due to pandemic-induced travel restrictions. In fiscal year 2023, TF KM has returned to contested terrain such as the Solomon Islands, Vanuatu, Kiribati, Fiji, and Tonga. These engagements supported maritime security and maritime domain awareness, as well as reinforce combined logistics hubs within contested environments. The development of multilateral maritime law enforcement, HA/DR response exercises, and climate change resilience continues to enhance multilateral security cooperation and accessibility throughout Oceania.

f. *Marine Rotational Force-Europe (MRF-E) in Norway:* The Marine Corps maintains a very close relationship with Norway that facilitates setting the theater—developing a profound understanding of the region and establishing conditions for Marine Corps success—through an exercise schedule that provides near-persistent presence of USMC forces in Norway and the High North. The United States—Norway Memorandum of Understanding (MOU) Governing Prestockage and Reinforcement of Norway provides USMC access to the Marine Corps Prepositioning Program in Norway (MCPP-N). MCPP-N facilitates prepositioned stocks, which are available for global operational requirements in support of any geographic combatant commander. In addition to the NATO Status of Forces Agreement, which allows USMC forces to move into, through, and transit out of Norway, the United States and Norway share a Defense Cooperation Agreement and Supplemental Defense Cooperation Agreement, which assure United States forces additional access to Norwegian and United States-built infrastructure in Norway.

III MARINE EXPEDITIONARY FORCE

160. Senator SULLIVAN. General Berger, Title X states that, "[t]he Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein." Can you explain the difference in III MEF's structure pre-Force Design 2030 and once Force Design is complete?

General BERGER. The Marine Corps still possesses three combat divisions, three air wings, three logistics groups, and has added three information groups.

Historically, the Marine Corps relies on supplying approximately one-fifth of III Marine Expeditionary Force's (III MEF) combat power via the Unit Deployment Program (UDP). Pre-Force Design, III MEF's structure consisted of just over 27,000 marines. At the conclusion of Force Design 2030, III MEF's structure will consist of just over 22,100 marines, however 89 percent of III MEF's combat power will be organic, reducing the requirement to source unit deployment-based marines to the MEF.

III MEF	Pre-FD (2019)	2023	2030 (4th/12th MLR)
MEF CE	3218	3174	3207
1st MAW	6418	7072	7281
3d MARDIV	6334	4358	4759
3D MLG	5288	4705	4517
Wing UDP	663	663	663
Div UDP	3732	3743	339
MEF CE UDP	120	120	120
31st MEU UDP	1235	1235	1235
Total UDP	5750	5761	2357
Total	27008	25070	22121
Share UDP	21%	23%	11%
Share non-UDP	79%	77%	89%

161. Senator SULLIVAN. General Berger, what was the structure of the 3d Marine Division pre-Force Design 2030 and what will it be in 2030?

General BERGER. Marine Corps Reference Publication (MCRP) 1–10.1 Organization of the United States Marine Corps defines the composition of a division. As the MCRP provides the high-level overview of the current structure of the Marine Corps at the time of publication, it is not a prescribed document. Thus, the three MEFs and the subordinate divisions, wings, and logistics elements will not be identical across the service. 3d Marine Division has always been organized differently than the other divisions (pages 5–2 through 5–4 of the 2015 publication). In this document, 3d Marine Division is composed of only two infantry regiments, one of which is filled by units throughout the Marine Corps under the unit deployment program (UDP).

This reference publication is currently in the final stages of republication in the first time since August 2015. Key updates to this republication will include the additions of the Marine Littoral Regiment (MLR), Marine Corps Information Command (MCIC), Marine Forces Cyber, and updated missions, capabilities, and organizational charts. This publication will also include the Amphibious Combat Vehicle (ACV) for the first time, along with references to Force Design 2030 formations like the Littoral Anti-Air Battalion (LAAB), Littoral Combat Team (LCT), and Littoral Logistics Battalion (LLB). Finally, the publication standardizes all doctrinal terms in accordance with the latest Marine Corps and DOD dictionaries.

At the completion of Force Design 2030 modernization efforts, 3d Marine Division will have three operational MLRs, the 3d, 4th, and 12th MLRs. Going forward, 3d Marine Division will retain a similar structure but with a different organization of the units within it.

162. Senator SULLIVAN. General Berger, by table of organization, how many infantry marines were in the 3d Marine Division pre-Force Design 2030?

General BERGER. 4,548

	Pre-FD (2019)	2030 (4th/12th MLR)
Total	4548	2203
% DIV Inf	44%	25%

The increased lethality of the core infantry battalion is improved through increased staffing. From 1995 until now, Battalion T/Os have gotten slightly smaller (from 904 to 897—with Navy personnel), but the staffing percentage has increased, and the unit-to-unit variances have decreased. The higher staffing level allows commanders to train as they will fight." For Infantry battalions, the staffing as a percent of T/O is 97 percent now; up from 89 percent in 1995 (all battalions aggregated). In 1995 only 5 of 24 battalions were staffed above 100 percent of T/O while 12 were below 90 percent of T/O, compared to that to 2023 where 10 battalions are above 100 percent and only 5 are below 90 percent.

163. Senator SULLIVAN. General Berger, how many infantry marines will be in 3d Marine Division when Force Design 2030 is fully implemented?

General BERGER. Two thousand, two hundred and three.

	Pre-FD (2019)	2030 (4th/12th MLR)
Total	4548	2203
% DIV Inf	44%	25%

For context the raw data depicted in the above two QFRs does not provide the necessary context to understand the increased lethality these infantry formations have gained by investments in capabilities such as precision fires, advanced sensor assets, and critical communications equipment to synthesize targeting. There are more killing assets per infantry marine in 2030 than in 2019. Infantry battalion lethality, as measured by share of crew-served weapons per marine assigned to infantry battalion, increased by 28 percent from 2019 to 2030.

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164. Senator SULLIVAN. General Berger, in 2030 will III MEF be able to conduct humanitarian/disaster relief operations on the scale that it did during Operation Unified Assistance, the response to the tsunami in Southeast Asia in 2004?

General BERGER. Yes, while our operations are dependent on amphibious fleet size, the Marine Corps will be able to conduct humanitarian/disaster relief operations on a scale heretofore achieved.

Title 10 United States Code, Section 8063 (United States Marine Corps: composition; functions) states that:

> The Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein. The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. In addition, the Marine Corps shall provide detachments and organizations for service on armed vessels of the Navy, shall provide security detachments for the protection of naval property at naval stations and bases, and shall perform such other duties as the President may direct. However, these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized.

The Marine Corps is and continues to be the Nation's force in readiness and prepared to respond to crisis across the globe. Our investment strategy for modernization required us to accept some risk in near-term readiness. However, we have continued to balance and mitigate that risk and still provide combatant commanders with relevant capabilities. These capabilities include credible deterrence and offer an option for the rapid aggregation of forward, tailored and ready forces to respond to crisis or conflict.

Mobility is a key characteristic to the dispersion and persistence of stand-in forces and crisis response. In the case of the Indo-Pacific, littoral mobility will be essential to our ability to maneuver through the complex geography of the region. A heel-to-toe ARG/MEU provides the Nation a mobile, multi-mission force that is forward deployed and able to quickly move to any number of crises around the world. A naval crisis response force is significantly more flexible than other land-based crisis response forces because it is less restricted by issues of access, basing, and overflight. The ability to maneuver by sea to the point of crisis makes the ARG/MEU critical

to our Nation's ability to demonstrate resolve in a HA/DR mission or to project power in a limited conflict.

In the next two to 5 years, many of our amphibious ships will reach the end of their service life and will cause delays in ARG/MEU deployments. When there are gaps in global ARG/MEU coverage, the Nation risks not having the right assets capable of getting to the crisis in time

165. Senator SULLIVAN. General Berger, beyond its role to operate in the contested littorals, is III MEF today currently capable of meeting its requirements for other regional war plans?

General BERGER. Yes. III MEF can meet all of its regional war plan requirements.

From the outset of our current modernization efforts, I have directed the Marine Corps to design and develop a force focused on our pacing threat. Our approach to modernization has been deliberately iterative as to remain flexible to changes in the operating environment. Where feasible, we are constantly looking for opportunities to sustain or expand existing strategic competitive advantages over our adversaries. The priority being the pacing threat. There are constraints and restraints associated with modernization. Specifically, our assumption is we must continue to modernize under the existing topline budget. Additionally, we are beholden industry's capacity to manufacture equipment as well as the maturation of certain technologies. In the case of the latter, regardless of how many resources you align to a new technology it won't necessarily speed up its development.

As we have seen from 2019 until now, the operating environment continues to evolve. I fully expect it to continue to evolve from now until 2030 and beyond. As such, 2030 is only a way point for our modernization and not the end.

However, with respect to our ability to respond in 2027, the Marine Corps is still the world's premier crisis response force. Additionally, I have prioritized III MEF and we have weighted them with the people and equipment necessary to be able to support INDOPACOM and their requirement to "fight tonight."

Our modernization envisions the activation of MLRs in III MEF only, which operates in the INDOPACOM area of responsibility (AOR). The MLRs were designed to support the National Defense Strategy in achieving integrated deterrence and preventing future war from occurring. However, the MLR's ability to support sea denial, sense, and conduct counter-reconnaissance in support of a maritime campaign has value to all geographic combatant commands. Wargames and experimentation continue to evaluate the effectiveness and efficacy of MLRs in key maritime terrain globally. The Marine Corps' modernization initiatives do not exclude the possibility providing similar capabilities to other geographic combatant commands. NMESIS Battalions, GLCM Batteries, LAAD Battalions, and MACCs units from I and II MEFs can dynamically task organize to provide MLR capabilities.

MARINE CORPS MINE CLEARANCE

166. Senator SULLIVAN. General Berger, in responses provided to my office by the Marine Corps following an April 14, 2023 brief on Section 1023 of the fiscal year 2023 NDAA, the Marine Corps reported that the Anti-Personnel Obstacle Breaching System (APOBS) and M58 Mine Clearing Line Charge (MICLIC) enabled the clearance for a 100m-long path through minefields for foot-mobile and vehicle movement. When either of these capabilities are employed, how will the minefields be "proofed" to ensure it supports foot-mobile or vehicular movement?

General BERGER. All "proofing" methods possesses risk. Enemy obstacles with deeply buried mines or more modern methods such as command detonated ancillary explosives not in the breach lane, or even loitering munitions targeting breaching and proofing vehicles all present risk. The action-reaction-counteraction cycle will continue. While there is no feasible way to eliminate risk in breaching operations, the Service has explored more technical means to identify remaining threats pre and post breach.

Currently, we are investing in the development of lighter route clearance capabilities; using unmanned air and ground platforms intended to detect and neutralize landmines and IEDs from a safe distance (i.e., outside the serious injury zone around the mine/IED). Between fiscal year 2023 and fiscal year 2028, $80 million will be invested into these emerging capabilities. One of these capabilities is the Littoral Explosive Ordnance Neutralization (LEON) program of record designed to provide an initial organic Marine Corps counter-mine capability from shallow water through the beach zone. Derived from a 2019 Rapid Statement of Need (RSON), the program fields a family of systems (FoS) that enables Explosive Ordnance Disposal (EOD) marines to detect and neutralize underwater explosive hazards from standoff distances with robotic and autonomous platforms. When fully operationally capable,

this FoS complements Navy Mine Countermeasure (MCM) capability and capacity, enhances multi-domain awareness, and ensures the maneuver, protection, and sustainment of the Naval expeditionary force.

"Proofing" as envisioned by veterans from a conflict 33 years ago against an adversary without long range precision fires is a different character of war than the peer competitor character of war for which the Marine Corps is modernizing. It is true proofing from a heavy mechanized vehicle will not be organically possible by the Marine Corps units. Enhanced tactics, techniques, and procedures more aligned with the lighter, highly mobile, and low signature maneuver capabilities are required to survive in a contested operating environment.

Marine engineer battalions remain equipped with the man-portable Anti-Personnel Obstacle Breaching Systems (APOBS) for clearing 45m lanes for foot-traffic, as well as with the trailer mounted M58 Mine Clearing Line Charge (MICLIC) for clearing up to 100m vehicle-capable lanes.

Through large land battles in CENTCOM over the past 20 years, route clearance capabilities have erroneously become synonymous with large Mine Resistant Ambush Protected (MRAP) vehicles. In 2007, Secretary of Defense Robert Gates initiated the MRAP Task Force to rapidly procure the Department of Defense's highest priority program to meet the need of the

Improvised Explosive Device (IED) threat in the Central Command (CENTCOM) theater. These vehicles were a critical asset during a prolonged land campaign against an inferior adversary that relied on improvised capabilities and saved many American lives.

Today's threat environment is characterized by great power competition with multiple peer adversaries that maintain advanced threat capabilities that put large, heavy, high-signature vehicles at risk. Furthermore, the size of these vehicles requires heavy sealift or airlift capabilities to get into the region, which limits the global responsiveness demanded of our Marine Forces as America's Force in Readiness. Even the employment of these 18-ton vehicles is limited on the unimproved roads across the landscape of archipelagos in the Indo-Pacific region. In 2021, the Marine Corps divested of mounted route clearance capabilities that used 18-ton Mine Resistant Ambush Protected (MRAP) vehicles as base platforms.

MARINE CORPS ARTILLERY

167. General Berger, senior Ukrainian military leaders have praised the addition of the HIMARS rocket system to their forces, but also add that the most important fire support system for their forces has been cannon artillery. How does the present, real world example comport with the significant reductions in marines' cannon artillery?

General BERGER. We have retained two cannon artillery battalions in the Active component, which provides capacity to support MEU deployments and to provide close support fires for a Marine Brigade-sized unit. Two additional cannon artillery battalions are available in the Reserve component to support surge requirements.

Ukraine is heavily dependent on 155 cannon artillery and mortar systems due to the nature of warfare being conducted across the forward line of troops. When Ukraine wants to prosecute long range, high value targets with precision, they rely on the HIMARS. Currently, the vast majority of Ukrainian and Russian forces fighting inside Ukraine are in close contact; oftentimes the distance between Russian and Ukrainian lines are a few hundred meters. Further, small pockets of territory are captured and recaptured by Ukrainian and Russian forces accentuating the war's relative closeness. From the Ukrainian perspective, the closeness of combat operations suggests that cannon artillery is the optimum fires required to support Ukrainian forces in contact with the Russians.

How the Ukrainian military is defending its homeland is a different problem set as to how the Marine Corps will integrate with the joint force in a future conflict and fulfill its Title 10 responsibilities of conducting "land operations as may be essential to the prosecution of a naval campaign" against a near peer adversary.

Cannons and rockets are complimentary fire support systems, but provide unique advantages and disadvantages depending on mission, enemy, targets, and terrain. The Ukrainians have effectively employed both cannons and rockets to defend and retake territory with a lack of aviation fires. As a part of our combined arms doctrine, the Marine Corps integrates artillery, aviation, naval, and non-kinetic fires to achieve effects that enable maneuver. We have carefully assessed the current and future capabilities of our peer adversaries, as well as the capabilities required to support naval maneuver. Through that analysis, we are retaining some cannon artillery for land-based contingency operations while transitioning to more long-range precision fires (i.e. rockets and missiles). In addition to providing greater range and

accuracy, these new systems provide an anti-ship capability that is critical to supporting naval campaigns. We will continue to assess the right mix of artillery systems to compliment the other fires components within the MAGTF.

FORCEMENT CAPABILITIES

168. Senator SULLIVAN. General Berger, the Marine Corps is divesting of three Law Enforcement battalions and consequently capabilities like policing, crime scene processing, mobility/route security, detention operations and Enemy Prisoner of War/detainee handling, biometrics and evidence handling, military working dogs, sensitive site exploitation, and police advising and training. Have Combatant Commanders been made aware that assigned or allocated Marine Corps forces will no longer possess these operational units and their associated capabilities?

General BERGER. Yes, the Marine Corps makes its capabilities and offerings known to the Joint Force and Combatant Commands through the annual Global Force Management Allocation Plan (GFMAP) development process.

169. Senator SULLIVAN. General Berger, does the Marine Corps intend to retain law enforcement capabilities in other units, and if so, which specific units and in what capacities?

General BERGER. With the divestment of the Active component Law Enforcement Battalions (LE Bn), the USMC continues to retain law enforcement capabilities within the installation and the Marine Corps Reserves within 4th LE Bn. Installation Law Enforcement capabilities reside within Marine Corps Installation Command (MCICOM), Training and Education Command (TECOM), and Marine Corps Reserve Headquarters, New Orleans LA. Installation Law Enforcement is comprised of Provost Marshal Offices and Marine Corps Police Departments (PMO / MCPD) and provide Law Enforcement capabilities to commanders that include, but are not limited to, Incident Response, Criminal Investigation, Special Reaction Teams (SRT), Military Working Dogs, Accident Investigation, Corrections, Physical Security, and Administrative Services. 4th LE Bn is organized to support operational requirements, while the PMO / MCPD at the installations train to garrison law enforcement standards.

Installation PMO/MCPD Locations

- MCICOM o MCLB Albany, GA
  - MCSF Blount Island, FL
  - MCB Camp Lejeune
  - MCAS Cherry Point
  - MCB Cam Pendleton
  - MCAS Miramar
  - MCAS Yuma
  - MCLB Barstow
  - MCB Quantico
  - MCAF (HMX–1
  - MCB Camp Butler
  - MCAS Futenma
  - Camp Fiji
  - Camp Mujuk
  - MCAS Iwakuni
  - MCB Hawaii
  - MCAS Hawaii
- TECOM
  - MCAGCC 29 Palms, CA
  - MCMWTC Bridgeport
  - MCRD San Diego
  - MCRD Parris Island
- Marine Forces Reserve
  - NOLA HQ

4th Law Enforcement Battalion Units/Location

- Military Police Company A
  o Lexington, KY
- Military Police Company B
  o North Versailles, PA
- Military Police Company C
  o Dayton, OH

- Military Police Company D
  - o Billings, MT
  - o Anchorage, AK
- Headquarters Support Company
- Albuquerque, NM

SCOUT SNIPERS

170. Senator SULLIVAN. General Berger, in late February 2023 the Marine Corps issued a memo announcing the immediate transition of Scout Sniper Platoons to Scout Platoons. The reason given was that scout sniper platoons didn't provide battalion commanders with sufficient "continuous all-weather information gathering." These new Scout Platoons of 26 marines, which is larger than the traditional Scout Sniper Platoon size of 18, will "provide the commander with relevant, reliable, accurate and prompt information." While Marine Forces Special Operations Command and Reconnaissance Battalions will continue to train their own snipers, infantry battalions will no longer have an organic sniper capability. Instead they will rely on some type of less capable and specialized designated marksman for precision shooting. I believe efforts to increase the information available to a battalion commander are worthwhile but I am concerned about the tradeoff. What exercises and experiments informed this decision?

General BERGER. In Spring 2020, the Commandant of the Marine Corps approved the Force Design 2030 plan, divesting the preponderance of weapon-specific military occupational specialties within the infantry battalions in favor of highly trained marines more capable of employing a variety of weapons and equipment. Included in this decision was divesting Scout Sniper Platoon structure, believing that rifle squads with advanced equipment and training could provide suitable ground-based sensing in support of the infantry battalion. (Today's basic infantry rifle with integrated scope is considerably more accurate than earlier versions, and infantry company "arms rooms" also include precision rifles for designated marines to employ as directed for specific missions.)

Infantry Battalion Experimentation (IBX) Phase I determined the redesigned infantry battalions lacked sufficient all-weather intelligence, surveillance, and reconnaissance (ISR) capabilities. Based on these findings, the Commandant approved establishing a Scout Platoon in each infantry battalion, providing timely, organic ISR capability in support of the battalion commander's Priority Intelligence and Commander's Critical Information Requirements.

Infantry companies retain their precision rifle capability, and the Marine Corps will maintain school-trained snipers within Reconnaissance and Marine Special Operations units. Reconnaissance marines will attend the Service-run Reconnaissance Sniper Course, training in precision marksmanship and weapons employment standards in multiple environments, focusing on distributed small unit operations. Marine Raiders attend the U.S. Marine Corps Forces Special Operations Command-run special operations sniper courses.

The Marine Corps no longer awards the 0317 (Scout Sniper) MOS. Beginning in fiscal year 2024, all infantry battalions will add a Scout Platoon, divest of the sniper platoon, and move the precision rifles to the infantry companies' arms rooms.

Experimentation is a core component of Force Design 2030, and the Service will continue testing concepts and equipment to ensure infantry battalions are properly structured, trained, and equipped to meet Joint, naval, and service requirements. In this spirit, experimentation is currently underway (IBX Phase II) to study how the new Scout Platoon best supports battalion-level organic all-weather ISR requirements and the Service's enduring requirements for precision marksmanship capabilities.

171. Senator SULLIVAN. General Berger, will Recon snipers be employed and assigned differently to provide the missing sniper capability if a battalion commander wants it?

General BERGER. No, Reconnaissance snipers will be employed to meet the missions assigned to their units. Within the restructured infantry battalions, the precision rifle capability now resides within an "arms room" in the infantry companies to be employed by infantry marines as deemed necessary for specific missions. Infantry marines designated by their commanders will attend the additional training necessary to become proficient in the employment of precision rifles. Through experimentation, the Marine Corps is in the process of analyzing the enduring requirements for precision marksmanship capabilities within the infantry battalions to determine the performance standards and training necessary to meet Fleet Marine Force requirements.

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The organizational structure of the scout platoon will be comprised of 26 marines that fall within the battalion's Headquarters and Service Company. It will consist of:

- 1x Platoon Commander
- 1x Platoon Sergeant
- 4x Scout Teams, each consisting of 6x marines (1x Scout Team Leader, 1x Scout Assistant Team Leader, and 4x Scouts).

LSM

172. Senator SULLIVAN. Secretary Del Toro and Admiral Gilday, the Landing Ship Mediums are essential to MLRs operating as Stand-in Forces and conducting EABO. The fiscal year 2024 Navy budget shows six LSMs being ordered over the next 5 years. That isn't enough to support one MLR, let alone the three MLRs the Marine Corps will field in the INDOPACOM AOR. How can the Navy accelerate delivery of LSMs?

Secretary DEL TORO and Admiral GILDAY. The ability to procure the Medium Landing Ship (LSM) is dependent on the approved requirements that are currently under development. The fiscal year 2024 funding request continues the development of acquisition documentation, equipment baseline, and efforts to support a lead ship contract award in fiscal year 2025. After lead ship contract award, opportunities may exist to accelerate deliveries of LSMs following sufficient reduction of design and production risks. The Navy supports the fiscal year 2024 President's budget request as the best balance of investments to deliver a combat-credible Navy within the directed topline. Any acceleration opportunities would be included in future President's budget requests, in that if future budget submissions include sufficient quantities, there may be an opportunity to establish a second source to accelerate LSM deliveries to the fleet.

The Navy-Marine Corps team is evaluating a broad range of options to provide a bridging strategy until the Medium Landing Ship (LSM) enters the fleet in sufficient numbers to meet Marine Littoral Regiment maneuver, mobility and sustainment requirements.

LIFT CAPABILITY IN INDOPACOM AOR

173. Senator SULLIVAN. General Berger, maintenance issues and amphibious ship retirements have prevented the Navy from deploying Amphibious Ready Groups when MEUs have been ready to deploy. The Navy's 30-year shipbuilding plan never achieves the legal requirement to have at least 31 amphibious ships in the fleet. The Landing Ship Medium, which is critical to realizing the full capability of the MLR, will not be fielded in sufficient numbers to satisfy the requirements for even one MLR in the next 5 years. With these significant challenges in amphibious lift, the Marine Corps is posed to reduce the organic aviation lift available to the MAGTF over the next several years, including putting MV–22s and CH–53Ks into storage. Please explain how the changes to Marine Corps aviation with Force Design 2030 do not decrease the Marine Corps' organic lift capability in the INDOPACOM AOR.

General BERGER. First, there is no substitute for a ready, deployable amphibious warfare fleet. These platforms are the most versatile surface ships in our fleet—prepared to respond when and where our Nation needs them. Second, the additive capability of LSMs provide significant shore-to-shore mobility for our stand in force. Marine aviation is a complement to these capabilities, not a substitute.

Force Design (FD) efforts have expanded Marine Aviation with modernized capabilities, increased readiness, and enhanced lethality across all platforms to meet the demands of global force management, rapidly changing technology, and the ever-

changing operating environment. Historically, the number of squadrons (organizational construct) and aircraft (composition) within aviation units has always evolved inside the Program of Records (POR) to ensure the Marine Corps remains the Nation's crisis response force while modernizing and optimizing the fleet to meet the challenges of the future operating environment. To provide an example of this evolution,

- Between 1990 and 2015, CH–53 Active component Marine Heavy Lift Helicopter Squadrons (HMH) fluctuated from nine to ten, to nine, to ten, to eight.
- Between 2011 to 2014, MV–22 Active component Marine Medium Tiltrotor Squadrons (VMM) fluctuated from 18 to 16 to 18.

FD modernization optimized Marine Aviation to operate from austere, distributed locations and across extended distances while providing cutting-edge advantages to the naval expeditionary force through the six functions of Marine Aviation which consists of Offensive Air Support, Anti-Air Warfare, Assault Support, Air Reconnaissance, Electronic Warfare, and Control of Aircraft and Missiles. Marine Aviation is manned, trained, and equipped to conduct the six functions and is integral to tomorrow's Marine Air-Ground Task Force (MAGTF), bringing lethal, agile, and sustainable capabilities to compete with, deter, and—if necessary—defeat our Nation's adversaries.

The Marine Corps is not divesting of any of its assault support aircraft. We are continuing to purchase the AAO for the MV–22 (359 of 360 funded). The current AAO will ensure enough MV–22 aircraft are available to support its program lifecycle with 16 squadrons of 10 aircraft each. Within INDOPACOM, a quarter of these medium lift assault support squadrons have been and will continue to be permanently stationed forward. These MV–22 aircraft numbers will be supplemented with those operating from amphibious warfare ships as Marine Expeditionary Units are assigned to the combatant commander.

Similarly, the Marine Corps AAO for the CH–53K is 200 aircraft. This platform is the only marinized heavy-lift helicopter in the DOD in development or production and provides a greater payload capability for Assault Support than any current or emerging rotorcraft at sea level and high-altitude conditions at great ranges. Achieving Initial Operational Capability in April 2022, the CH–53K was approved for Full Rate Production in December 2022 and plans to deploy for the first CH–53K MEU detachment in fiscal year 2025. The CH–53K provides critical expeditionary organic heavy-lift sustainment and mobility capability to the MAGTF, Joint Force, JFMCC, and COCOM. The USMC continues to analyze the heavy-lift requirement to support the stand-in force as part of force modernization.

To achieve our goals in the INDOPACOM AOR, the Marine Corps activated a second INDOPACOM Active Duty KC–130 squadron, VMGR–153, located at Marine Corps Air Station (MCAS) Kaneohe Bay. In conjunction with VMGR–152 and its 16 KC–130 at MCAS Iwakuni, this additional squadron expands fixed wing assault support capacity within INDOPACOM.

The Marine Corps continuously examines capacity and capability to support anticipated global force management requirements, maintain mandated response forces, and sustain service level training exercises, MAGTF training requirements and pilot development balanced with deployment-to-dwell. Current assault support squadrons are manned, trained, and equipped to execute their assigned tasking in support of the Marine Corps and Joint force.

NAVY STRATEGY DOCUMENTS

174. Senator SULLIVAN. Admiral Gilday, during the May 2022 Department of the Navy posture hearing, I asked you to ensure the Navy provided more explicit references to its role support EABO and SIF in its strategy documents and doctrine. I highlighted the need for Navy support to ensure Force Design 2030's success in an op-ed later that year. Can you provide a list of every Navy strategy document or doctrinal publication produced since May 2022 that lists EABO and SIF, including where those concepts are mentioned in the documents?

Admiral GILDAY. The Navy was a co-author of the Expeditionary Advanced Base Operations (EABO) concept and is keenly interested in its implementation. Leveraging land forces to support our Fleet Commanders' fight for sea control is a key focus of the concept, and it serves as an important enabler for Navy's Distributed Maritime Operations (DMO).

I released Navigation Plan 2022 to the Fleet on 26 July 2022. This document outlines how the U.S. Navy will build, maintain, train, and equip a dominant naval force to strengthen strategic partnerships, deter conflict, and if called upon, help win the Nation's wars. Navigation Plan 2022 aligns Navy's vision with the 2022 National Defense Strategy and discusses how the Navy is uniquely positioned to

strengthen integrated deterrence. On page 7, Navigation Plan 2022 describes how Navy will leverage the concepts for Stand-In Forces (SIF) and EABO (among others) to persist forward, prevail in conflict, and end hostilities on favorable U.S. terms.

Navy Tactical Techniques and Procedures (NTTP) 3–10.1 Maritime Expeditionary Security Force Operations, published January 2023, discusses support to SIF in section 1.5 (pages 1–2) and Navy Warfare Publication 3–26, Protection of Forces at the Operational Level of War, published February 2023, discusses support to EABO in section 8.14.1 (pages 8–18).

ARCTIC OPERATIONS

175. Senator SULLIVAN. Admiral Gilday, the January 2021 the Navy released Blue Arctic, which outlined its Arctic strategy. "Russia is investing heavily to enhance its Arctic defense and economic sectors, with a resultant multilayered militarization of its northern flank," the document states. "By modernizing its military capabilities and posture—particularly the Northern Fleet—Russia aims to improve command and control, infrastructure, and joint force employment to project power and defend its northern approaches." The blueprint also states the Department will take a tailored approach when considering permanently stationed forces, rotational forces, and temporary forces, pre-positioned equipment and stocks, and basing infrastructure across the region. The blueprint also states that the Department will enhance military education, training and exercises with allies and partners in and around the Arctic. It has been 2 years since this document was released and it is difficult to tell what investments the Navy has made to execute this strategy. Can you provide a detailed list, referencing provisions in the fiscal year 2022 and fiscal year 2023 National Defense Authorization Acts and the fiscal year 2022 and fiscal year 2023 Appropriations Acts, of investments the Navy has made to execute its Arctic strategy?

Admiral GILDAY. The Navy continues to make investments to execute the Blue Arctic strategy, per the following provisions of the fiscal year 2022 and 2023 National Defense Authorization Acts and Appropriations Acts:

R–1 Line Item 26, PE 0603801N, Innovative Naval Prototype Advanced Technology Development

Arctic Mobile Observing System (AMOS)

Fiscal year 2022 $3.457 million

- Deploy next-generation AMOS gliders and buoys to assess design changes and upgraded performance. Demonstrate Arctic-hardened Unmanned Underwater Vehicle (UUV) capabilities under Arctic sea ice. Perform 2 month persistence test of full AMOS system.

Fiscal year 2023 $4.480 million

- Construct, deploy and test Arctic-hardened ice gateway buoys with integrated meteorological sensor subsystems for final Arctic Node system test. Construct, deploy and test persistence of AMOS floats and gliders with two-way communication capabilities. Deploy and test performance of very low acoustic frequency source. Deploy complete AMOS node (buoys and UUVs) for final program demonstration.

R–1 Line Item 14, PE 0602792N, Innovative Naval Prototype Applied Research

Arctic Mobile Observing System (AMOS)

Fiscal year 2022 $6.446 million

- Model under ice communications to enable sustained and persistent communications in the Arctic using gliders and floats. Evaluate & assess network Command & Control (C2) & power strategies.

Fiscal year 2023 $8.320 million

- Evaluate performance of very low frequency acoustic sources for under-ice navigation system and glider communication and evaluate performance of C2, satellite and radio communication strategies for AMOS components in the Arctic environment.

R–1 Line Item 9, PE 0602435N, Ocean Warfighting Environment Applied Research

Marine Meteorology Applied Research

Fiscal year 2022 $0.500 million

- Support improvements in numerical models of the atmosphere that will enable more skillful forecasts of Arctic weather at longer lead times.

Fiscal year 2023 $0.500 million

- Implement new techniques to increase the predictability of Arctic cyclones at longer lead times based on results from prior basic research initiatives.

Physical Oceanography Applied Research

Fiscal year 2022 $0.800 million

- Support the collection of additional Arctic observations under the International Arctic Buoy Program to improve high-latitude forecasts capability and understand the role of observations in Arctic predictability.

Fiscal year 2023 $1.800 million

- Develop new autonomous systems to enable persistent observations of the maritime Arctic, including sea ice thickness, upper ocean heat content and stratification, and Arctic Ocean circulation through augmentation of ice-tethered profilers with new sensors.

R–1 Line Item 2, PE 0601153N, Defense Research Sciences

Marine Meteorology

Fiscal year 2022 $2.000 million

- Explore the role of Arctic clouds on cyclone development and the predictability of high-impact Arctic weather events. Perform phenomenological and predictability studies of the structure and evolution of Arctic cyclones, polar lows, and polar vortices.

Fiscal year 2023 $2.100 million

- Support research to better understand the role of the stratosphere in subseasonal to seasonal variability and predictability of Arctic weather systems. Study the potential for new observations to improve Arctic forecasting and prediction.

Physical Oceanography

Fiscal year 2022 $5.700 million

- Support basic research studies of critical environmental processes in the Arctic, including the mechanics and dynamics of sea ice, changes in the stratification and circulation of the Arctic ocean, and the processes that control the seasonal cycle of sea ice cover in the Arctic Ocean.

Fiscal year 2023 $4.500 million

- Enhance our understanding of changes in the Arctic physical environment through an expansion of observational sensors and systems deployed on and below the sea ice over the Arctic Ocean. Complete a multi-investigator study of sea ice rheology to inform future numerical models of sea ice for use in Arctic System Models.

Ocean Acoustics

Fiscal year 2022 $0.750 million

- Support studies of acoustic propagation across the Beaufort Gyre using observations collected during the Coordinated Arctic Acoustic Transmission Experiment.

Fiscal year 2023 $1.600 million

- Explore the use of acoustics for ocean thermometry through initiation of the High Arctic Acoustic Thermometry and Soundscapes (HiAATS) project.

SHIPBUILDING PLAN

176. Senator SULLIVAN. Secretary Del Toro, the 30-year plan makes it clear that the Navy has no intention of meeting the 31-amphibious ship statutory requirement. As the law states, "the naval combat forces of the Navy shall include not less than 11 operational aircraft carriers, and not less than 31 operational amphibious warfare ships of which not less than 10 shall be amphibious assault ships." Why are you violating the law?

Secretary DEL TORO. Admiral Gilday, General Berger and I agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come. The Chief of Naval Operations submitted the Battle Force Ship Assessment and Requirements (BFSAR) to Congress in June 2023. I recently wrote to you to State my commitment to executing the law. The DON is now engaged in formulation of the President's fiscal year 2025 budget, which will be submitted to Congress early next year, followed by the fiscal year 2025 30-year Shipbuilding Plan.

177. Senator SULLIVAN. Secretary Del Toro, why does your 30-year shipbuilding plan project to never meet the legal requirement for 31 amphibious ships?

Secretary DEL TORO. Admiral Gilday, General Berger and I agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come. The Chief of Naval Operations submitted the Battle Force Ship Assessment and Requirements (BFSAR) to Congress in June 2023. I recently wrote to you to State my commitment to executing the law. The DON is now engaged in formulation of the President's fiscal year 2025 budget, which will be submitted to Congress early next year, followed by the fiscal year 2025 30-year Shipbuilding Plan.

178. Senator SULLIVAN. Secretary Del Toro, when will you appear before the Senate Armed Services Committee with a plan to adhere to the legal requirement to maintain 31 amphibious ships in the United States Navy?

Secretary DEL TORO. Admiral Gilday, General Berger and I agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come. The Chief of Naval Operations submitted the Battle Force Ship Assessment and Requirements (BFSAR) to Congress in June 2023. I recently wrote to you to State my commitment to executing the law. The DON is now engaged in formulation of the President's fiscal year 2025 budget, which will be submitted to Congress early next year, followed by the fiscal year 2025 30-year Shipbuilding Plan.

179. Senator SULLIVAN. Secretary Del Toro, Congress has given you multi-ship procurement authorities. However over the past three NDAAs, amphibious ships are not being procured with this cost-saving authority. Why are you not using multi-ship procurement authorities to purchase the required amphibious ships?

Secretary DEL TORO. Admiral Gilday, General Berger and I agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come. The Chief of Naval Operations submitted the Battle Force Ship Assessment and Requirements (BFSAR) to Congress in June 2023. I recently wrote to you to State my commitment to executing the law. The DON is now engaged in formulation of the President's fiscal year 2025 budget, which will be submitted to Congress early next year, followed by the fiscal year 2025 30-year Shipbuilding Plan.

180. Senator SULLIVAN. Secretary Del Toro, the Marine Expeditionary Unit does not exist without Navy amphibious ships. In the fiscal year 2023 NDAA, Congress established in law a minimum number of amphibious ships the Navy must maintain—31. 10 must be "big deck" LHAs and 21 must be LPDs. Several Navy and DOD studies informed this number yet, surprisingly, the Navy's fiscal year 2024 budget treats this requirement like a suggestion under the auspices of conducting yet another study to determine what the requirement is. The Navy's new 30-year shipbuilding plan, which was not released with the budget, makes it even clearer that the Navy has no intention of following the law. Under all three alternatives, the Navy never once meets the legal requirement of 31 ships over the next 30 years. Marines cannot be the Nation's expeditionary force in readiness without the Navy amphibious ships required. In April 2022, the Department of the Navy could not sortie an Amphibious Ready Group/Marine Expeditionary Unit (ARG/MEU) early in response to a request from then United States European Command Commander General Todd Wolters because the Navy didn't have enough amphibious ships. In February 2023, an ARG/MEU could not deploy to assist with earthquake response in Turkey because there were not enough amphibious ships although marines were ready to deploy. Combatant commander demand for ARG/MEUs is high but the Navy's commitment to build and maintain the minimum number of amphibious ships required by law is low. Your 30-year shipbuilding plan doesn't meet the demand. What is your plan to comply with the law to ensure ARG/MEUs are available when the Nation needs them?

Secretary DEL TORO. Admiral Gilday, General Berger and I agree on the requirement for 31 amphibious ships, and we are committed to ensuring we meet this requirement and doing so in a timely manner, but with a capable, sustainable mix of ship classes that will support our marines and sailors for decades to come. The Chief of Naval Operations submitted the Battle Force Ship Assessment and Requirements (BFSAR) to Congress in June 2023. I recently wrote to you to State my commitment to executing the law. The DON is now engaged in formulation of the

President's fiscal year 2025 budget, which will be submitted to Congress early next year, followed by the fiscal year 2025 30-year Shipbuilding Plan.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, APRIL 20, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
WASHINGTON, DC.

UNITED STATES INDO-PACIFIC COMMAND AND UNITED STATES FORCES KOREA

The Committee met, pursuant to notice, at 9:30 a.m. in room SD-G50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, Kaine, King, Peters, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Senator REED. Good morning. The Committee meets to receive testimony from Admiral John Aquilino, Commander of the United States Indo-Pacific Command and General Paul LaCamera, the Commander of United States Forces Korea. Gentlemen, thank you for your service to the Nation and please convey our thanks to the men and women serving under your commands.

This is a critical time for our forces in the Indo-Pacific. China's ambition in the region continues to grow, as does its aggressive behavior. Chinese leadership seeks greater power influence around the world, and it is leveraging a wide range of military, economic, and political pressures against its neighbors to advance these goals.

As our defense leaders have made clear, the United States does not seek conflict with China, and strategic competition is not an inevitable march to conflict. America has long been a Pacific nation, and we have deep economic and security interests in the region.

During today's hearing I look forward to discussing how our forces can continue to improve our military posture and capabilities while also supporting whole-of-government efforts to compete effectively in the region.

To that end, the Defense Department recently raised its Joint Concept for Competing, which makes clear the objective of China and our adversaries is to, in their words, "win without fighting." The concept warns that if we do not adapt to the realities of long-

term competition, the United States risks ceding strategic influence, advantage, and leverage while preparing for a war that never occurs. I am interested to hear from our witnesses how they plan to utilize the joint capabilities in the Indo-Pacific and Korea to address these challenges.

Recognizing the challenges in the Indo-Pacific, President Biden has requested a considerable funding increase for INDOPACOM in the fiscal year 2024 budget. This includes $9.1 billion for the Pacific Deterrence Initiative, or PDI, to strengthen the posture, infrastructure, and capabilities of our forces. In addition, this PDI investment will help build the capabilities of our allies and partners through military-to-military training exercises, freedom of navigation operations, and infrastructure improvements. The PDI request is a subset of broader department-wide investments to modernize and equip the force, much of which is focused on China as the Department's pacing challenge.

Our comparative advantage over China remains our network of allies and partners in the region and globally. I am encouraged by the progress made through AUKUS, our military partnership with Australia and the United Kingdom, which is serving as an important test case for potential future partnership. The maturation of the Quadrilateral Security Dialogue, or Quad, involving the United States, Japan, India, and Australia, also presents a valuable framework.

Further, we have recently seen momentum in a number of other relationships throughout the region, including our new basing agreement with the Philippines, historic cooperation announcements between South Korea and Japan, and a remarkable transformation in Japan's new defense strategy. It is my hope that these developments will provide more opportunities to engage other regional powers.

However, the most dangerous flashpoint that could turn our competition with China into a conflict remains Taiwan. In the past several years we have seen a surge of aggressive Chinese military exercises around Taiwan's airspace and territorial waters, as well as an escalation in combative language from Beijing. The world has a right to be concerned.

To help Taiwan develop its own defense capabilities, consistent with the Taiwan Relations Act, the 2023 National Defense Authorization Act (NDAA) included a package of security assistance tools ranging from foreign military financing to Presidential drawdown authority. I understand INDOPACOM is continuing to help Taiwan develop its training and warfighting concepts, and I expect Congress will continue to support this effort. Admiral Aquilino, faced with these wide-ranging challenges, I would like to know your assessment of INDOPACOM's preparedness to carry out the United States' strategy in the region.

As we seek to more effectively compete with China, we must also manage the threat posed by North Korea. North Korea has conducted nearly 2 dozen missile tests this year, including ICBMs [intercontinental ballistic missiles] and cruise missiles, and has reportedly stopped its routine military-to-military communication with South Korea. We also know that Kim Jong-un continues to view nuclear weapons as the ultimate deterrence against foreign

intervention, and intends to gain international acceptance as a nuclear arms state.

The goal of United States policy remains the denuclearization of the Korean Peninsula, but we are not taking an all-or-nothing approach. Instead, the Biden administration has pursued what it describes as a calibrated, practical approach to diplomacy with the North, with the goal of eliminating the threat to the United States. This approach will require smart and firm engagement with the North Koreans, but more importantly, it requires coordination with our allies and partners in the region, particular South Korea and Japan. General LaCamera, I would ask for your views on the partnership between the United States, Japan, South Korea, and other regional partners in addressing North Korea's destabilizing activity. I would also like to know how your forces are maintaining readiness through training exercises with their South Korean counterparts.

I want to again thank the witnesses and look forward to your testimony. Let me now recognize the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman, and I want to thank both of our witnesses for being here today.

The Department of Defense's (DOD's) most pressing task remains ensuring deterrence of conflict in the Indo-Pacific. Failure to prevent aggression there would have enormous consequences. But we have already seen deterrence fail in Europe. We did not deter Putin from invading Ukraine, and not doing so has cost the global economy over $1 trillion thus far, brought untold suffering to the Ukrainian people, and heightened the threats under which our European allies live. Our intelligence community predicts that a deterrence failure in the Indo-Pacific would be much, much worse.

We are entering a particularly dangerous period. Xi Jinping is the most powerful and ruthless leader in China since Chairman Mao. We know Xi has aggressive intent, and he is rapidly increasing China's military capability.

His ally, Kim Jong-un, has also improved North Korea's capabilities to threaten the continental United States and our allies. The North Korean dictator has already provided significant weaponry to Russia's failing fight in Ukraine. We also know that Xi and Putin have signed up to a so-called "No Limits" partnership.

We have a lot of work to do. The fiscal year 2024 budget request before us is the last one in which significant programs and activities could be funded and fielded in time for 2027, the year by which Xi has told the Chinese military to be prepared to take Taiwan. That is less than 4 short years away.

Although a portion of the Pentagon is operating on a wartime tempo when it comes to supporting Ukraine, I cannot say the same for their focus on China.

Because this Committee felt that our defense strategy was not being implemented fast enough, the Pacific Deterrence Initiative was created and requires the Indo-Pacific Combatant Commander to provide an independent assessment of resources required to meet the challenge in that region.

This initiative has allowed us to start moving our policies and investments in the right direction, but this forward motion has come in fits and starts. For example, last year, Congress authorized and appropriated an additional $100 million for planning and design activities in the Western Pacific. These funds were meant to expand our basing and logistics footprint in places such as Yap in Micronesia, Tinian in the Marianas Islands, and the Philippines, and elsewhere.

Once again, these initiatives are not fully funded in this budget. At this pace, it would take 25 years to modernize our basing posture in the Western Pacific, compared to what we did in 5 years in Europe through the European Deterrence Initiative.

Similarly, low-cost and high-value investments for allies and partners remain unfunded. We still cannot effectively share communications and intelligence with allies and partners.

These are just a few of the important enabling capabilities we need in the Indo-Pacific. We need much more. For instance, the Pentagon still seems unserious about building the Guam Defense System in a timely fashion. There are key space, cyber, electronic warfare, and command and control technologies we must accelerate as well.

This Committee recognizes the seriousness of the competition. That is why this Congress led the bipartisan charge to increase the defense budget in last year's cycle, with a set of investments tailored to our most significant operational challenges in the Indo-Pacific. I am hopeful we can do so again this year. We really have to do so again this year.

Allow me to repeat: the window during which this Committee can authorize significant capability to deter China in the near term is closing. The year 2027 is a few short years away, if that is the accurate projection. I am not convinced we have treated that date with the adequate seriousness thus far. We will need to prioritize our defense investments more effectively here in Congress.

So, I thank our witnesses. You have quite a job ahead of you, and we appreciate what you do and want to work with you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Wicker. Admiral Aquilino, please.

STATEMENT OF ADMIRAL JOHN C. AQUILINO, USN, COMMANDER, UNITED STATES INDO-PACIFIC COMMAND

Admiral AQUILINO. Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, thank you for the opportunity to discuss the Indo-Pacific region with you here today.

I deeply appreciate your continuous support to all of our servicemembers, Government civilians, and their families within the Indo-Pacific Command. It is my distinct honor and privilege to serve alongside these brave men and women who selflessly execute our deterrence mission and defense missions every day. Your support is instrumental in our ability to accomplish these missions, but there is more to do, and we must act with a greater sense of urgency.

Every day, USINDOPACOM works tirelessly to prevent conflict, not provoke it. War in INDOPACOM is not inevitable, and it is not

imminent. However, this decade presents a period of increased risk, as illustrated by a variety of things. First, the illegal, illegitimate war by Russia in Ukraine. Second, the largest and fastest military buildup and malign behavior of the PRC [People's Republic of China], including their "No Limits" relationship and partnership with Russia. Third, the continuous missile provocations and nuclear rhetoric by the DPRK [Democratic People's Republic of Korea], and in this theater the threat of violent extremism is also present.

Our National Defense Strategy identifies the PRC as the most consequential strategic competitor to the United States, and the only competitor capable of combining its economic, diplomatic, military, and technological capabilities to mount a sustained challenge to the rules-based international order.

"Seize the Initiative" is INDOPACOM's approach to execute the National Defense Strategy and accomplish our defense priorities—defend the Homeland, deter strategic attacks, deter aggression, and build a resilient joint force. By design, this approach prevents conflict through integrated deterrence. It ensure we can fight and win should deterrence fail. And it provides the Secretary of Defense and the President with options for any contingency.

There are four pillars to our approach. First is a robust theater posture; second, a joint operations campaign comprised of lethal, persistent forces forward; third, technologically superior capabilities to maintain our warfighting advantages in the near, mid, and long term; and fourth, an enhanced network of allies and partners that which any of our challengers do not have. We respectfully request your continued support for these four focus areas, and recognize that any delay in one area directly affects all the others and puts the overall success of our deterrence efforts at risk.

Again, conflict in the Indo-Pacific region is not inevitable, but we cannot rest on our past accomplishments to secure a future peace. Security challenges threaten our very way of life as well as the peace, prosperity, and stability of the rules-based international order that has enabled that peace for over 80 years.

The investments we make today will allow future generations to enjoy the same legacy of liberty our ancestors entrusted to us, but we do not have the luxury of time. We must act now to preserve this free and open Indo-Pacific.

Chairman, Ranking Member Wicker, thanks again for the opportunity to appear today, and I look forward to your questions.

[The prepared statement of Admiral Aquilino follows:]

PREPARED STATEMENT BY ADMIRAL JOHN C. AQUILINO

INTRODUCTION / OPENING STATEMENT

Chairman, Ranking Member, and distinguished Members of the Committee, thank you for the opportunity to appear before you to discuss the Indo-Pacific region. I also want to extend my thanks for your continuous support to the men and women of United States Indo-Pacific Command (USINDOPACOM) and their families. It is my distinct honor and privilege to serve alongside the dedicated soldiers, sailors, airmen, marines, guardians, special operators, guardsmen, and civilian warriors that execute our deterrence and defense missions selflessly every day. Your support is instrumental in our ability to accomplish these missions. But there is much more to do, and we must act with a greater sense of urgency.

The men and women of USINDOPACOM work tirelessly every day to prevent conflict in this region, not to provoke it. War is not inevitable. However, this decade presents a period of increased risk as illustrated by Russia's illegitimate, unprovoked war in Ukraine; the People's Republic of China (PRC)'s nuclear and conventional buildup; the PRC's malign behavior, including its "No Limits" expanding partnership with Russia; the Democratic People's Republic of Korea (DPRK)'s continued missile provocations and nuclear rhetoric; and the risk of violent extremism. Our National Defense Strategy (NDS) identifies the PRC as the most consequential strategic competitor to the United States and the only competitor capable of combining its economic, diplomatic, military, and technological capabilities to mount a sustained challenge to the rules-based international order.

Seize the Initiative is USINDOPACOM'S approach to implement the NDS and accomplish our defense priorities—defend the homeland, deter strategic attacks, deter aggression, and build a resilient joint force. By design, this approach prevents conflict through integrated deterrence, ensures we can fight and win should deterrence fail, and provides the Secretary of Defense and President with options for any contingency. It aims to deliver a robust theater posture; campaign with lethal, persistent forces forward; technologically superior capabilities to maintain our warfighting advantages in the near, mid, and long-term; and stronger relationships with our allies, partners, and friends.

1) *A Distributed Force Posture* supports all elements of the joint force, enables our ability to seamlessly operate with our allies and partners, and demonstrates U.S. commitment to a stable and peaceful security environment. The access agreements and military construction (MILCON) requests outlined in our Independent Assessment (1254 Report) prioritize the locations and the required capacity at each. Given the time needed to complete the planning, design, and construction of each project, we must look for ways to accelerate our actions today to be prepared for future contingencies.
2) *A Joint and Combined Operations Campaign* synchronizes full spectrum military operations in all domains to build warfighting advantage and accelerate our ability to respond immediately. Persistent forces positioned west of the International Date Line (IDL), combined with our exercise and experimentation program, and synchronized with our allies and partners is an effective means to deter potential adversary aggression. Our globally coordinated efforts allow us to compete with our security challengers and positions the joint force to be able to rapidly transition from competition, to crisis, to conflict if required. This persistent, forward force operates throughout the region with our partners every day to demonstrate our commitment to the rules based international order and to provide options for our civilian leadership.
3) *Delivering Advanced Warfighting Capabilities* that outpace our challengers immediately improves our lethality and enhances our deterrence mission. The Guam Defense System (GDS) is our top homeland defense priority and our vision for the future includes offensive fires as well as robust theater logistics. Capabilities that enhance our command and control decision superiority in the near term are of equal importance. We must maintain the ability to safely operate in contested space, sustain our target quality, real-time battlespace awareness, and deliver advanced multi-domain joint fires munitions utilizing a Joint Fires Network (JFN) while integrating our allies and partners. The 1254 Report provides specificity on the capabilities and munitions to enhance combat credible deterrence in the near and mid-term.
4) *A Robust Network of Allies and Partners,* built on the strength of our shared interests, is our greatest advantage. USINDOPACOM is strengthening all layers of our security network: allies, multilateral arrangements, partners, friends, and the Five Eyes nations. We execute security cooperation activities, training, and exercises to strengthen those relationships, build partner capacity, and enhance interoperability. Security arrangements such as AUKUS (Australia, United Kingdom, and the United States) and other mini and multilateral opportunities allow us to pull together like-minded nations to improve our training. While not a military alliance, the Quad diplomatic partnership between Japan, Australia, India, and the United States enhances regional security and stability. We continue to develop our Mission Partner Environment (MPE) to facilitate information sharing, coordinate our operations, and enable high-end weapon system integration.

Advancing these four, critical areas are mutually reinforcing and each is foundational to USINDOPACOM's ability to deter and defend. Defense of the homeland and deterrence of threats in the Indo-Pacific requires significant, sustained investments, supported by a strong industrial base, reliable supply chains, and predictable budgets. We respectfully request your continued support to deliver the end

states of our four focus areas, recognizing that any delay in one area directly affects the others and puts at risk the overall success of our deterrence efforts.

USINDOPACOM thanks the Congress, the American people, and our partners for their continued support. We must act together and with urgency to maintain the rules-based international order that delivers the peace, stability, and prosperity of a free and open Indo-Pacific.

KEY ADVERSARIAL CHALLENGES

As stated in the 2022 U.S. National Security Strategy, the Indo-Pacific is the epicenter of 21st century geopolitics. The region features authoritarian regimes using military threats to subvert the existing rules-based international order while seeking to undermine confidence in U.S. commitment to the region. The PRC is taking increasingly coercive actions to reshape the Indo-Pacific region in its favor, supported by a rapidly modernizing People's Liberation Army (PLA) that is executing the largest military buildup since WWII. Russia's irresponsible behavior, exemplified by its illegal, illegitimate invasion of Ukraine, continues to pose an acute threat. The DPRK is increasing its bellicose behavior through development of ballistic missile and nuclear technology threatening the U.S. Homeland and placing regional partners at increased risk. Violent extremism also remains a threat in this theater.

People's Republic of China (PRC)

Strategic Intent

The PRC aspires to become the world's leading power in its drive toward "national rejuvenation," to replace the existing international order with a system that benefits authoritarian regimes at the expense of all other nations. Militarily, the Chinese Communist Party (CCP) has directed the PLA to develop the capability to seize Taiwan by force and surpass the United States as the dominant power in the Pacific. The PRC further seeks a network of overseas military installations and expeditionary capabilities to expand the PLA's ability to project power globally.

The CCP uses all elements of national power to create an international environment favorable to authoritarian regimes that furthers their totalitarian reach. The PRC is implementing a trifecta of global initiatives to reshape international norms for development, trade, and security under the Global Security Initiative (GSI), Global Civilization Initiative (GCI), and the Global Development Initiative (GDI). While each includes deceptively attractive language and concepts, they suffer from lack of specificity, vague implementation plans, and unclear goals allowing for PRC interpretation and enforcement. These initiatives seek to undermine the existing fair and respected international architecture and replace it with a system that encourages repressive, authoritarian governance and protectionist economics that distort markets by avoiding openness and transparency.

CCP representatives exploit, distort, and misrepresent international law for their own benefit and at the expense of all other nations. The CCP is attempting to portray troubling aspects of its own domestic legal framework as globally accepted international law to assert regional dominance. Domestic laws such as the Anti-Secession Law, China Coast Guard Law, Maritime Traffic Safety Law, Civil-Military fusion legislation including the National Defense Transportation Law, and so-called emergency fast-track laws provide the CCP with the domestic legal architecture to advance its ambitions and streamline political decisions under a veneer of international legal legitimacy. The CCP is also engaging in a large-scale campaign to influence media outlets around the world in an effort to advance their narratives while mischaracterizing or obfuscating facts.

Military Modernization

The PLA continues the largest, fastest, most comprehensive military buildup since World War II in both the conventional and strategic nuclear domains. In spite of economic and manufacturing challenges brought on by the COVID–19 pandemic, the accelerated pace at which the PLA has added advanced capabilities is concerning. In 2022 alone, the PLA added to its operational inventory 17 major warships, including four guided missile cruisers, three destroyers, five frigates, two attack submarines, and a large amphibious assault ship, plus scores of support and specialty ships. The air forces have doubled the production capability for its 5th Generation J–20 fighter with an estimated 150 of these aircraft now operational, many of them fielded last year. In 2022, the PRC completed 64 successful space launches that placed at least 160 satellites into orbit. And perhaps most stunning of all, the PLA Rocket Force continues to massively expand its arsenal of conventional and nuclear missiles, building hundreds of silos for nuclear missiles and fielding several hundred

ballistic and cruise missiles. This almost certainly includes a large number of hypersonic missiles, some of which may be nuclear-capable. The PRC may also be developing nuclear-armed hypersonic glide vehicles for use in a fractional orbital bombardment system (FOBS).

The CCP has now directed 2027 as the target for the PLA to deliver the capabilities needed to counter the United States military in the Indo-Pacific and project power across the globe. In October 2022, the 20th National Congress of the CCP set objectives focused on accelerating the PLA's modernization goals over the next 5 years, including strengthening its "system of strategic deterrence." With the 14th Five-Year Plan, the Chinese government has doubled-down on multiple national strategies already being implemented to ensure China achieves a globally dominant position in the emerging technologies that it believes are necessary for enabling complex modern military operations. The PRC continues to target technology and talent around the world to secure these technologies in pursuit of advanced military capabilities.

The PLA Navy (PLAN) consists of ~350 battle force ships and an additional ~85 patrol combatants and craft. The PLAN is on track to deliver 440 battle force ships by 2030 including significant increases in aircraft carriers and major surface combatants. The PLAN continues to expand their area of maritime operations emphasizing the development of expeditionary capabilities enabling their global aspirations. While much of the world expects the PLA to build-out a large dedicated amphibious fleet for a potential Taiwan invasion, in the near-term, we see use of modified civilian roll-on/roll-off (RORO) ferries as a means of troop transport and logistics support.

The PLA's aviation force is rapidly fielding technologically advanced, domestically built aircraft and a wide range of Unmanned Aerial Systems (UAS). More than half of its fighter force is 4th generation or better, a ratio quickly growing with the rapid fielding of its 5th generation J–20 stealth fighter. The PLA is also developing jet-powered and supersonic UAS systems, as well as stealth, Unmanned, Combat-Aerial Vehicles (UCAV).

PLA ground forces have received equipment upgrades and project a new 4th generation main battle tank in the near future. The PLA increasingly incorporates amphibious military and civilian vessels in its ground forces' training for potential amphibious operations and has significantly increased the number and roles of a variety of helicopters.

The PLA is developing a host of nuclear and conventionally armed long-range missiles and advanced weapons at a pace faster than expected. PLA Medium and Intermediate Range Ballistic Missiles (MRBM/IRBM), as well as Chinese cruise missiles can range United States bases, forces, and the homeland. The PRC continues developing longer range capabilities such as the DF–27 ballistic missile that will be able to reach targets well beyond the second-island chain. Additionally, China is developing hypersonic glide vehicles (HGVs) and a new generation of nuclear-armed mobile missiles that employ multiple independently targetable reentry vehicles (MIRVs) with the intent to evade United States, ally, and partner missile defenses.

The PLA is rapidly advancing its space and counter-space programs. In 2022, the PRC executed 64 space launches, probably meant to expand intelligence, surveillance, and reconnaissance (ISR), telecommunications, and navigation capabilities. For counter-space, the PRC is delivering capabilities that seek to deny use of our own space architecture despite their statements opposing the weaponization of space.

The PRC's cyber capabilities deliver both gray zone coercion and an enabling function to achieve decisive military advantage. PLA cyber efforts remain focused on developing capabilities to enable warfare activities targeting United States and partner critical civilian electric, energy, and water infrastructure to generate chaos and disrupt military operations. The PLA also actively pursues espionage operations and intellectual property theft through targeted cyber operations.

The PLA has embarked on a rapid and opaque expansion, modernization, and diversification of its nuclear forces. Construction of silo fields across northern China, coupled with modern ballistic-missile submarines and the H–6N nuclear-capable, air-to-air refuelable bomber, underscore China's focus on developing a survivable, nuclear triad. The PRC has not declared an end goal nor acknowledged the scale of this nuclear force expansion. The PRC likely will possess at least 1,000 deliverable nuclear warheads by 2030. This larger arsenal could provide the PRC with new options before and during a crisis or conflict to leverage nuclear weapons for coercive purposes, including military provocations against United States allies and partners in the region.

Destabilizing Actions

Taiwan

The PRC sees unification with Taiwan as "indispensable for the realization of China's great rejuvenation" and a top priority. To this end, the PRC uses all elements of national power, most notably a mix of military, economic, legal, information, and diplomatic tools, in pursuit of this goal. Beijing publicly claims a preference for peaceful unification over conflict; however, its consistent pressure tactics and coercive behavior demonstrates a significant disconnect between their words and their deeds.

During the CCP's 20th Party Congress, Xi Jinping unequivocally stated China will never renounce the right to use force as a means to achieve unification with Taiwan. Such rhetoric accompanies a concerted effort to develop military capabilities the PRC sees as necessary to seize Taiwan by force.

Beijing significantly increased its military pressure against Taiwan in 2022, in response to a perceived policy shift in United States-Taiwan political and military ties. Following the United States Speaker of the House's visit in August 2022, the PLA deployed its most capable assets around Taiwan and conducted ballistic missiles launches in a show of force. Since August, the PLA has normalized warship patrols around Taiwan and increased the number of military flights crossing into Taiwan's self-declared Air Defense Identification Zone. They have in effect erased the unofficial Taiwan Strait centerline, a mutually observed boundary designed to avoid unintended friction, to pressurize the people on the island.

Unsafe Intercepts of U.S. and Allied Aircraft

As Secretary Austin has noted, "we've seen an alarming increase in the number of unsafe aerial intercepts" of U.S. and allied aircraft throughout 2022. These included a February incident where a PLA Navy vessel directed a military-grade laser at an Australian P–8A patrol aircraft that could have permanently impaired the vision of the P–8A's crew. In May 2022, another Australian P–8A was intercepted by a PLA aircraft that maneuvered in front of the P–8A and ejected chaff into the Australian aircraft's engine. Days later, the Canadian armed forces issued a statement that PLA aircraft attempted to divert the flight path of one of their CP–140 long-range patrol craft, conducting a U.N. sanction enforcement mission, forcing the Canadian pilots to modify their flight path to avoid collision. Canada has noted such interactions are occurring with increased frequency. On December 21st, a US RC–135 surveillance aircraft, operating in international airspace was intercepted by a PLA fighter that unsafely maneuvered to within 20 feet of the cockpit of the RC–135, forcing our aircraft to take evasive action to avoid a collision.

All of these aircraft were operating in international airspace in accordance with international law when these dangerous intercepts occurred. In just over a year, the number of increasingly close intercepts against U.S. aircraft increased by 600 percent. Conducting destabilizing and coercive intercepts increases the potential for an accident, loss of life, or miscalculation.

Line of Actual Control (LAC)

Tensions between the PRC and India along the LAC, the de facto border between India and PRC, have remained high since a significant clash in June 2020, and an additional incident in December 2022. A 2021 PRC land borders law that allows for greater PLA involvement in border security represents a continuation of PRC's "lawfare" strategy to justify military action in territorial disputes. China's consistent attempts to expand its border has resulted in two physical confrontations between PLA and Indian soldiers. The PLA has also significantly expanded its military infrastructure along the LAC to maintain pressure on India and better posture forces for future contingencies. These actions are designed to expand their borders and consolidate their gains. The PRC's provocative behavior creates instability and increases the risk of unintended incidents.

Excessive Maritime Claims

The PRC's expansive maritime claims in the South China Sea are inconsistent with international law as reflected in the 1982 United Nations Convention on the Law of the Sea. Yet the PRC continues its coercive activities to reinforce these legally baseless claims and undermine the rules-based international order. The PRC has militarized its South China Sea outposts to expand its military reach, arming these features with anti-ship and anti-aircraft missile systems, laser and jamming equipment, and fighter jets that threaten all nations operating nearby. The PRC continues to explore and exploit the region's vast natural resources, including hydrocarbons, fish stocks, and minerals, including those inside other nations' Exclusive Economic Zones (EEZ).

The PRC uses domestic laws as justification to enforce its expansive maritime claims. In 2021, the PRC passed both a China Coast Guard (CCG) Law and a Maritime Traffic Safety Law (MTSL). The first authorizes its coast guard to fire upon or tow foreign ships it sees as violating China's domestic laws. The MTSL requires all specified vessels entering territorial sea areas "under the jurisdiction of China" to notify maritime authorities, carry required permits, and submit to Chinese command and supervision.

The enforcement of these domestic measures intimidates South China Sea nations from enjoying their rights to natural resources in the exclusive economic zones and continental shelf while infringing upon rights and freedoms guaranteed under international law as reflected by the United Nations (U.N.) Convention on the Law of the Sea (UNCLOS), a treaty to which the PRC is a party. These laws could provide the pretext for the use of force that could spark a wider conflict. More broadly, these laws and other unilateral actions, such as its annual, unilateral summer fishing ban, threaten China's neighbors and clearly illustrate an attempt to change the existing international order in its favor.

High Altitude Balloons

The February high altitude balloon incursion into United States territorial airspace, and similar incidents across the globe, demonstrated the CCP's intent to develop and deploy additional intelligence collection platforms. Such actions are in direct violation of the sovereignty of the nations overflown and further highlight the CCP's irresponsible behavior. This is a clear example of the disconnect between CCP words and actions.

PRC-Russia Cooperation

In February 2022, Chairman Xi and President Putin announced a "no limits" strategic partnership rooted in a common opposition for democratic systems and an international order both believe constrain their authoritarian governments. Just last month, Chairman Xi stood alongside President Putin in Moscow and jointly reiterated their mutual goal of a new world order. Xi once again failed to condemn Russia's unprovoked, illegal, and illegitimate invasion of Ukraine. CCP leaders and media continue to amplify Russian propaganda, and we diligently monitor the situation for any evidence of the PRC providing material aid. Additionally, Russia is transferring highly enriched uranium to the PRC, which will be used in fast-breeder reactors and could support the PRC's nuclear force expansion through the production of weapons-grade plutonium. Militarily, the relationship has incrementally grown over the past decade. In 2022, the PLA participated in VOSTOK 22, a multinational Russian exercise, and the two countries conducted multiple combined naval and strategic bomber patrols. Some of those highly symbolic events occurred in the air and sea spaces around Japan and near Alaska and Guam. These developments are especially troubling given the PRC's ongoing nuclear and conventional military buildup. By the 2030's, for the first time in its history, the United States will face two major nuclear powers as strategic competitors and potential adversaries, creating new stresses on stability and new challenges for deterrence, assurance, and risk reduction.

Russia

Strategic Intent

Russia represents an acute threat that desires to maintain its status as a global power and influence by using all elements of national power. Russia seeks to upend the international order's status quo in favor of a multipolar system that advantages its authoritarian regime. Russia's illegal, illegitimate war against Ukraine is the most blatant example of its contravention of international law and norms. Moscow's ongoing support of Burma's military regime and its continued assistance to the DPRK, are less publicized but nonetheless concerning. Russia's actions are an attempt to demonstrate a global position of strength even in the midst of diplomatic, economic, and military struggles.

Military Modernization

Despite Russia's brutal war in Ukraine, Russia's updated 2022 Naval Doctrine prioritizes the Pacific region, establishes a primary goal of "strategic stability," and describes the Sea of Okhotsk as an "area of existential importance," alongside Russian territorial seas and its EEZ. As such, Russia is upgrading strategic assets in the Eastern Military District. Such improvements are designed to bolster Russia's ability to threaten the United States and our allies, including Japan.

In 2022, Russia transferred multiple naval assets to the Pacific including a Dolgorukiy II-class nuclear-armed, nuclear-powered ballistic missile submarine, a

Severodvinsk-class nuclear-powered cruise missile submarine, and upgraded Kilo—class cruise missile-capable diesel submarines. Another eight advanced cruise missile capable vessels will likely arrive before 2026. Armed with dual nuclear and conventional capable Kalibr cruise missiles and the Tsirkon hypersonic cruise missile (still in testing), the Russian Pacific Fleet is increasing its ability to threaten United States and allied land and maritime targets.

Russia executed its quadrennial VOSTOK capstone exercise in early September 2022 with the naval component conducting simulated cruise missile and bomber strikes to message they are still capable of defending their far-eastern region.

President Putin vowed to modernize Russia's nuclear forces, which he described as "the main guarantee of our sovereignty and territorial integrity, strategic parity and the global balance of forces," and indicated the Sarmat Intercontinental Ballistic Missile (ICBM) will enter service shortly.

Destabilizing Actions

Power Projection

In the Pacific, Russia increasingly relies on its Pacific Fleet, particularly its submarine force, to shoulder the burden of defense for Russia's eastern regions. The Pacific Fleet, long-range aviation forces, and strategic capabilities remain mostly unaffected by Russia's illegal war in Ukraine. We expect Moscow to use these forces to demonstrate Russian power and presence through expeditionary air and maritime operations that threaten the homelands of the United States and several of our allies.

Bomber Patrols

Russia continues to send strategic bomber patrols near United States airspace, having executed patrols near Alaska, Hawaii, and Guam in recent years. These patrols are meant to message Russia's ability to threaten the United States Homeland. Russian forces, which also routinely patrol airspace off the coast of Japan, are increasingly collaborating with the PLA to execute combined air patrols that regularly cross into Japan and the Republic of Korea's Air Defense Identification Zones (ADIZ), further threatening our allies.

Naval Exercises

Russia also employs its Navy to demonstrate reach and showcase some of its newest capabilities. In 2021, a large naval deployment operated in the vicinity of Hawaii for this very purpose, an event that could be repeated this year with some of the new capabilities recently fielded in the Pacific Fleet.

Combined Exercises with the PRC

The PRC participated in VOSTOK 2022 sending more than 2,000 troops, 300 vehicles, 21 fixed-wing aircraft and helicopters, and 3 ships. Additionally, the two countries also conducted multiple combined air patrols, and naval exercises. While the increase of combined military maneuvers does not translate to an integrated force, deepening cooperation poses an increased risk to the United States and our partners in the region.

Arms Transfers from DPRK

Russia is procuring ammunition and other military equipment from the DPRK, which has significant experience obfuscating shipments in the face of international sanctions. Russia, through its private military company the Wagner Group, has reportedly purchased infantry rockets and missiles from North Korea to restock its diminished reserves.

Territorial Dispute with Japan

The territorial dispute over the southern Kuril Islands / Northern Territories dominates Russia-Japan relations. In December 2021, Russia positioned Bastion coastal defense missile systems on Matua Island to underline Moscow's firm stance on disputed territory with Japan. These missiles are part of a newly formed permanent missile brigade, which demonstrated live-fire events as part of VOSTOK 22.

Democratic People's Republic of Korea (DPRK)

Strategic Intent

The DPRK prioritizes regime security above all else and views its strategic weapons programs and vast conventional military force as keys to deterring external aggression and invasion. Pyongyang's forces pose a threat to United States and Republic of Korea (ROK) forces on the peninsula, to Japan, and across the Indo-Pacific. Its investment in ballistic missiles, nuclear technologies, and other weapons of mass destruction (WMD), are in direct violation of U.N. Security Council resolutions, and

consistent with the regime's goal of achieving strategic deterrence. Underscoring this point is DPRK leader Kim Jong Un's December 2022 call for an exponential increase in the country's nuclear arsenal and mass production of tactical nuclear weapons. In September 2022, the DPRK passed a law reaffirming its self-proclaimed status as a nuclear power and establishing conditions for nuclear use and rejecting de-nuclearization.

Military Modernization

The DPRK is prioritizing upgrades to its nuclear and other WMD programs as well as its conventional military capabilities. The majority of Pyongyang's modernization efforts focuses on its WMD forces, underscored by an unprecedented number of missile tests in 2022. The DPRK is increasing its missile inventory and is testing new, more advanced ballistic and cruise missile systems capable of launching from diverse platforms, including sea-based and rail-launched systems. In 2022, the regime conducted a test flight of the Hwasong–17 ICBM, which it claimed demonstrated the capability to strike the entire continental United States with nuclear weapons. The DPRK is also testing a series of increasingly capable short range missiles that Pyongyang claims are capable of delivering tactical nuclear warheads. Kim Jong Un appears ready to conduct the first nuclear test since 2017.

The DPRK's modernization of its conventional forces is muted in comparison to its WMD force developments. The naval modernization program is pursuing submarine-launched ballistic missile technology. The DPRK is upgrading some air defense systems and is pursuing unmanned aerial vehicles for military missions. Modest upgrades to DPRK ground forces include tanks and artillery pieces that made appearances in parades since 2020.

The DPRK continues to advance aggressive cyber programs as a low risk, cost effective tool to influence and intimidate adversaries. Pyongyang also uses cyber programs to steal intellectual property and generate revenue, which includes the theft of crypto assets that helps finance weapons research and development.

Destabilizing Actions

Missile Launches

The DPRK conducted over 70 ballistic and cruise missile launches in 2022, more than tripling the amount in any previous year, including an IRBM that overflew Japan. 2022 marked the DPRK's first ICBM launch since 2017. The DPRK launched a Hwasong–17 ICBM at a deliberately steep angle making it difficult to analyze its true capability. Finally, the DPRK tested a solid-fuel-powered rocket engine that, if effective, would allow the DPRK to transport and launch missiles faster than current liquid fuel-powered variants.

Nuclear Program

Over the last year, the DPRK increased its threatening rhetoric and took steps to expand and improve its nuclear capabilities. In September, Pyongyang codified its nuclear use policy stating its nuclear forces have a deterrence and a wartime-use mission. Pyongyang also carried out what it termed "tactical nuclear warhead" training and "ballistic missile launching drills" in support of the regime's goals to operationalize its nuclear weapons program.

In 2022, the regime reconstituted its nuclear test site at Punggye for potential future use. Additionally, an International Atomic Energy Agency (IAEA) report highlighted indications of ongoing operations at the DPRK's plutonium enrichment facility, which produces fissile material that could be used in nuclear weapons.

Support to Russia

North Korea is using Russia's war against Ukraine war to strengthen its relations with Russia. In addition to its vote against the U.N. General Assembly's resolution demanding Russia's withdrawal and its recognition of Russian's illegal referendum of Ukrainian provinces in the Donbas region, the DPRK has supplied Russia with a significant amount of ammunition.

Sanctions Evasion

The DPRK continues to evade U.N. imposed sanctions intended to curtail funding for its nuclear and other WMD and ballistic missile programs. A U.N. Panel of Experts found continued sanctions evasion by entities, networks, and vessels that persistently fund these programs in defiance of U.N. Security Council Resolutions.

Violent Extremist Organizations (VEOs)

Transnational and ethno-nationalist violent extremist organizations continue to pose a threat to safety and stability across the Indo-Pacific region. We continue to defend the United States and our many regional allies and partners from this desta-

bilizing threat. Additionally, we monitor the potential return of foreign fighters from distant conflicts, and seek ways to prevent violent extremists from planning and executing violent attacks.

IMPLEMENTING SEIZE THE INITIATIVE

Seize the Initiative is USINDOPACOM's approach to defend the Nation and deter conflict. If deterrence fails, this approach ensures our forces are prepared to fight and win. *Seize the Initiative* consists of a distributed force posture that facilitates a campaign of joint and combined operations utilizing advanced warfighting capabilities with an enhanced network of allies and partners.

DISTRIBUTED FORCE POSTURE

Forward-based and rotational joint forces armed with lethal capabilities demonstrate resolve, support the security of our allies and partners, and provide the Secretary and President with multiple options if required. Definitive access, basing, and overflight (ABO) arrangements enable the joint force, improve interoperability with host-nations, and position capabilities forward in the event of a crisis. A widespread and distributed force posture west of the IDL gives us the ability to more easily exercise and operate with our partners, increases survivability, reduces risk, and sustains the force with a network of stores, munitions, and fuel to support operations in a contested environment.

USINDOPACOM is pursuing operating locations, both permanent and rotational, across "clusters" throughout the Indo-Pacific. Funding provided by the Congress in 2023 and the requests in the President's Budget Request (PBR) for 2024 will allow USINDOPACOM to continue the necessary planning and implementation efforts to disperse the joint force, enhance interoperability, and build capacity with allies and partners. The classified 1254 Report describes and prioritizes the specific locations and capabilities at each location.

The Guam Cluster

As the most-forward United States territories in the Pacific, Guam and the Commonwealth of Northern Mariana Islands (CNMI) are critical to United States regional security in the theater. The Department, along with the Government of Japan, has committed more than $7Bn for military construction and family housing projects on Guam in fiscal years 2022 to fiscal year 2028 to meet our commitment with Japan under the Defense Policy Review Initiative (DPRI). This investment in Guam, which is home to 170,000 American citizens, highlights the importance of the island for sustaining the joint force as a main operating base.

Several upcoming key posture projects in Guam and the CNMI will require historic levels of military construction. While Guam has the third highest construction workforce per capita nationally, current military construction demands require a workforce more than three times as large as what currently exists in Guam. Anticipated levels of future military construction will further exacerbate consistent labor shortages that have already left private construction projects unable to meet their baseline needs. The Department requires relief from the H–2B visa restrictions through at least 2029 to be able to provide the workforce required for our construction needs. A longer-term extension, beyond the current date of December 31, 2024, helps meet the Department's requirements and deliver critical military construction projects on time.

To execute our command and control responsibilities, USINDOPACOM has requested support for Joint Task Force (JTF) Micronesia forward stationed in Guam. The JTF's area of responsibility will be the Guam cluster, which includes United States Territories (Guam, CNMI, Wake Island, and Midway Island) and the Freely Associated States (FAS), which consist of the Federated States of Micronesia (FSM), Republic of Palau, and the Republic of the Marshall Islands (RMI).

The Japan Cluster

The United States is working to strengthen our alliance and optimize our force posture with Japan through the forward-deployment of more versatile, resilient, and mobile capabilities. An optimized United States posture in Japan, alongside enhanced Japan Self-Defense Forces (JSDF) in areas including Japan's Southwest Islands, will substantially strengthen deterrence and response capabilities. The United States deployed MQ–9 remotely piloted aircraft to the Kanoya Japan Maritime Self-Defense Force (JMSDF) Base, and we will establish the Composite Watercraft Company at Yokohama North Dock this year. We are also working closely with Japan to expand joint/shared use of United States and Japanese facilities and are increasing bilateral exercises and training.

The Philippines Cluster

We have made significant progress to improve interoperability of United States and Philippines forces through utilization and expansion of the Enhanced Defense Cooperation Agreement (EDCA). EDCA permits the United States to build infrastructure and preposition equipment at agreed upon locations. Under EDCA, United States infrastructure investments help meet our alliance requirements, fill short-term Armed Forces Philippines (AFP) capability gaps, support long-term AFP modernization, and better position the Department of Defense to respond to Humanitarian Assistance / Disaster Relief (HA/DR) events. In February 2023, our governments announced the addition of four future AFP sites as EDCA agreed locations, bringing the total to nine sites and ~$82 million in U.S. investments to date.

The Australia Cluster

The United States and Australia have agreed to continue the United States rotational presence across air, land, and maritime domains, including U.S. Bomber Task Force rotations. Leaders identified priority locations in Australia to support enhanced United States force posture to enable our combined exercises and presence. Assessments are underway for the potential use of various Australian locations for logistics, increasing the prepositioning of munitions and fuel. The 1254 Independent Assessment identifies several significant posture initiatives in Papua New Guinea (PNG), where negotiations on a bilateral Defense Cooperation Agreement are underway.

CAMPAIGN OF JOINT AND COMBINED OPERATIONS

Campaigning involves persistent and synchronized joint operations in tandem with our allies and partners, linked over time and space, to build warfighting advantage and deter our security challengers. Persistent day to day joint operations aligned with our combined exercises are critical to our ability to deter conflict. Campaigning normalizes our operations throughout the AOR, delivers interoperable and confident warfighting partners and gives us the ability to rehearse warfighting concepts together. In 2022, key highlights included ground forces operating in Northern Luzon and Japan's Southwest Island, the Rim of the Pacific Exercise (RIMPAC), and a new 14 nation combined exercise initiated by Indonesia titled Super Garuda Shield.

Exercise, Experimentation, and Training

Joint, all-domain exercises demonstrate combat credibility by bolstering the joint force's interoperability with our allies and partners and deliver warfighting proficiency. USINDOPACOM's robust exercise program demonstrates our commitment to defending the rules-based international order, facilitates capability development, and builds relationships across the region with our partners. USINDOPACOM seeks to further expand multilateral participation in our exercise program, and train in contested, all-domain environments. These desired effects require continued investment in the Joint Training Exercise and Evaluation Program (JTEEP).

USINDOPACOM is facilitating experimentation with advanced concepts and technologies to deliver warfighting outcomes at speed. This requires the ability to conduct high-end, multi-domain experimentation events in a continuous campaign. A real world environment enables proper evaluation of promising technologies for potential implementation in the near term.

High-end training is an advantage for U.S. forces and our allies and partners. To maximize our training effectiveness, we are linking our ranges across all domains via a federation of interconnected live, virtual, and constructive effects, simulation centers, and mobile training support systems with the Pacific Multi-Domain Test and Experimentation Capability (PMTEC). PMTEC provides the combatant commander the capability to train joint and combined forces forward in theater at the highest levels. This initiative creates the largest coalition range complex in the world with the most advanced capabilities to support operational rehearsals and deliver integrated deterrence.

ADVANCED WARFIGHTING CAPABILITIES

The joint force currently enjoys the ability to deliver effects throughout the AOR, but we must continue to maintain and expand this advantage with new technologies across all domains. Maintaining our joint warfighting advantages will deter conflict and fulfill a decisive role should we need to fight and win. Advanced capabilities delivered by our maritime, air, expeditionary, land, cyber, space, and special operation components enabled by advanced concepts with our allies and partners deliver peace and stability throughout the AOR. To effectively counter competitor's anti-ac-

cess/area denial (A2/AD) strategy, USINDOPACOM requires joint capabilities that provide overmatch in the near, mid, and long-term.

Guam Defense System (GDS)

USINDOPACOM's priority mission is to defend the homeland. Establishing the GDS, a 360-degree, integrated air and missile defense on Guam, remains the highest priority. Funding for a single integrated weapon capability must be uninterrupted to provide an advanced, integrated, persistent, and enduring, layered defense against ballistic, cruise, and hypersonic missiles. This system must also be prepared to incorporate offensive capabilities as needed, and synchronize our logistics requirements from the island.

Decision Superiority

Decision superiority means the joint force can see, think, and fight faster than its adversaries. This requires an ability to operate in contested spaces, maintain persistent, all-domain battlespace awareness, and close kill chains with advanced munitions enabled by a Joint Fires Network.

To achieve decision superiority, the joint force must possess an ability to operate in contested spaces and deliver effects across multiple domains to deny, degrade, or defeat any threat. Our adversaries are developing and fielding A2/AD capabilities to constrain the U.S. military's ability to dominate all domains. To effectively deter our adversaries and counter any A2/AD strategy, USINDOPACOM requires joint warfighting capabilities in the near, mid, and long-term to ensure we can continue to operate our force anywhere we desire at the time and place of our choosing.

The joint force requires persistent, all-domain battlespace awareness through a suite of all domain sensors, distributed via a Persistent Targeting-Quality Common Operating Picture (PT-COP) to multiple nodes. An effective PT-COP requires exquisite intelligence to achieve its full potential. FISA Section 702 is a vital authority to keep our Nation safe and will lapse on 31 December 2023 if not reauthorized. Section 702 allows targeted collection on the communications of our most critical foreign intelligence targets outside of the United States who use U.S. infrastructure and services to communicate. A lapse of Section 702 authority will have a significant detrimental effect on foreign intelligence collection specific to USINDOPACOM's mission and result in a decrease of battlespace awareness.

A final, critical component of decision superiority is an upgraded network of all-domain sensors linked to an integrated fires network with advanced weapons capable of engaging all threats in the battlespace. JFN provides decision superiority by fusing land, maritime, air, and space-based sensors with nationally derived information to provide target guidance over a resilient and adaptable information technology-based architecture. JFN allows geographically dispersed commanders to simultaneously share a common understanding of the battlespace, fed by sensors from any platform which can provide targeting guidance to any weapons system. JFN, coupled with the lethality of current and future munitions, underpins conventional deterrence and provides the joint force with the necessary lethality to maintain combat credibility.

Mission Partner Environment (MPE)

Combined warfighting interoperability requires rapid, widespread sharing of information with like-minded nations to operate with our joint force. The MPE modernizes 13 separate coalition command, control, communication, computer, and information technology (C4IT) network systems into a single cyber safe system to deliver combined command and control (C2) capability throughout the theater. USINDOPACOM's MPE provides a resilient, secure, interoperable digital architecture that supports all-domain operations, provides real-time intelligence, and allows all participants to share a common operational picture.

Integration of Space and Cyber Domains

Our competitors seek to challenge U.S. dominance in all domains, including space and cyber. To maintain our warfighting advantages, USINDOPACOM requires resilient and flexible space and cyber capabilities, and we continue to integrate these capabilities into activities and exercises with our allies and partners.

ENHANCED NETWORK OF ALLIES AND PARTNERS

The U.S. network of allies and partners is our greatest asymmetric advantage, built upon shared values, mutual trust, and respect. Our alliances, multilateral arrangements, partnerships, friendships, and Five Eyes relationships are all essential components of this network and play an important role in regional security. USINDOPACOM continues to strengthen all layers through increased security co-

operation, advanced training, and more complex, multilateral campaigning. These activities in turn increase interoperability, build capacity, and enhance our shared security while reinforcing the rules-based international order. We are deliberately building theater-wide capabilities through information sharing that strengthen our alliances and partnerships.

Five Treaty Alliances

Australia

The United States-Australia alliance has never been stronger or more vital to regional security. Australia is a critical ally and an important leader in international efforts to promote a free and open Indo-Pacific. Similar to the United States, Australia communicates the importance of transparency and the maintenance of rules-based behavior and international law in its interactions with the PLA. Australia helps maintain regional and global security through U.N. sanctions enforcement against DPRK, and the hosting of United States forces.

Australia is increasing its collaboration across the region, building stronger relationships with India, Japan, and Indonesia. Australia's recently signed Joint Declaration on Security Cooperation with Japan, as well as its leadership in supporting the security and stability of Blue Pacific nations, exemplifies the country's priorities on collaboration.

Australia and the United States enjoy a robust relationship, and actively seek to deepen our partnership through military engagements, defense acquisitions, and force posture initiatives. The United States and Australia are working to enhance all-domain cooperation, integrate ranges, improve posture, and expand multilateral exercises across the theater. Australia and the United States have increased our cooperation throughout the Indo-Pacific, greatly improving our interoperability. Australia hosts the Marine Rotational Force-Darwin (MRF-D), and recently commenced deployment for its eleventh rotation through Northern Australia, demonstrating combined operational capability, to include two Bomber Task Forces.

Japan

The United States-Japan alliance remains the cornerstone of peace and prosperity in the Indo-Pacific Region. Japan's decision to significantly increase its defense budget will enhance the alliance's ability to deter conflict and set the example for other like-minded nations to defend the rules-based international order. Our nations are well aligned in our views of security challenges in the region, and in our efforts to deter conflict. To preserve our strategic alignment with Japan, we are working to complete the realignment of United States forces outlined in the DPRI.

At the January 2023 United States-Japan Security Consultative Committee meeting, our nations bilaterally announced the revision of the 2012 Roadmap for Realignment Implementation, which will transition the 12th Marine Regiment to the 12th Marine Littoral Regiment in Okinawa by 2025, optimizing alliance force posture.

The JSDF is highly capable and employs a large percentage of U.S. defense equipment, which is completely interoperable with U.S. forces. Additionally, Japan formally announced its decision to acquire defensive counterstrike capabilities and is currently looking at delivery platforms and munition options.

Japan is also a key security contributor in bilateral and multilateral efforts with partners across the region that support a free and open Indo-Pacific. In 2022, Japan signed a Joint Declaration on Security Cooperation with Australia, and a Reciprocal Access Agreement (RAA) with the U.K. to help facilitate military-to-military activities.

Republic of Korea (ROK)

The United States-ROK alliance has been the linchpin for maintaining a stable, security environment since 1953 and we remain ready to deter and respond to the DPRK regime's threats. A multinational, whole-of-government approach is required to effectively deter DPRK provocation and enforce U.N. Security Council Resolution (UNSCR) sanctions.

The military-to-military relationship between the United States and the ROK remains steadfast, and the alliance continues to focus on maintaining military readiness and a combined defense posture suited to address the dynamic challenges on the Peninsula. The return of the Extended Deterrence Strategy and Consultation Group (EDSCG), return of major exercises on the Korean Peninsula, the first United States deployment of 5th generation fighter aircraft to the Korean Peninsula, and first United States aircraft carrier port visit to Korea in 4 years were positive demonstrations of United States commitment. USINDOPACOM is resolute in executing

routine deployments of strategic assets to demonstrate the United States' unwavering extended deterrence commitment to the ROK.

At nearly $46.3 billion USD, the ROK's 2022 Ministry of National Defense budget is the ROK's largest defense budget ever, and reflects plans to restructure and modernize the ROK military and acquire the capabilities needed for wartime operational control (OPCON) transition. Progress continues to be made in meeting the bilaterally agreed upon conditions for OPCON transition and, once achieved, will yield a historic restructuring of the alliance and our combined defenses.

Republic of the Philippines

The Philippines is a strategic treaty ally, and our strong bilateral defense relationship is critical to our network of allies and partners in the Indo-Pacific. The United States is committed to continuing our persistent counter-terrorism efforts with the Philippines and is also increasing support for maritime security, a national security priority for the Philippines.

A United States firm, Cerberus, signed an asset purchase agreement in 2022 for the Hanjin Shipyard, now called Agila Subic, and finalized several lease agreements for the shipyard facilities. One of the agreements enables the Philippine Navy to use the shipyard and host United States ships for maintenance and voyage repair in this key strategic location.

We have made significant progress to improve interoperability of United States and Philippines forces through utilization and expansion of the EDCA. In April 2023, our governments announced four new EDCA sites. The EDCA expansion makes our alliance more resilient, and accelerates the modernization of our combined military capabilities.

This month, Balikatan 23 begins a 3-week, annual, joint command and control exercise (C2X) and field training exercise (FTX) with humanitarian civic assistance events conducted in the Philippines. It features Armed Forces of the Philippines (AFP) and United States forces exercising a mutual defense scenario with a focus on tactical interoperability. Its purpose is to demonstrate United States commitment to the 1951 United States—Philippine Mutual Defense Treaty.

Kingdom of Thailand

The United States-Thailand alliance, built upon a mutual interest in maintaining stability in Southeast Asia and throughout the region, continues to progress. The United States is working to build partner capacity in Thailand and support modernization of the Royal Thai Army, Navy, Air Force, and Special Operations Forces. USINDOPACOM supports Thailand's military modernization efforts to enhance Thai capacity and United States-Thai interoperability. Most notably, the United States is currently reviewing Thailand's request to purchase our most advanced fighter, the F–35.

Thailand is a critical partner for regional security and provides logistical nodes essential to United States military operations throughout the Indo-Pacific region. Efforts are underway to expand access to Utapao Air Base and additional new sites to support airfield dispersal, including Hat Yai and Nam Phong airfields.

Exercise COBRA GOLD (CG) has returned to full scale participation after reductions in previous years due to COVID–19. CG23 allowed us to improve the training and readiness of our forces by participating in a large multilateral exercise in Thailand. We expect CG to continue to expand in complexity and scale, as over 20 nations joined the exercise in an observer status this year. CG is the largest exercise in Southeast Asia, and highlights the multinational security architecture standing ready to meet future challenges.

Multilateral Cooperation

AUKUS

The 2021 establishment of AUKUS (Australia, UK, and the United States) intends to buildupon longstanding bilateral ties through the establishment of a trilateral, security partnership based on defense capabilities that support our mutual national defense objectives. The first initiative under AUKUS Pillar I was to determine the Optimal Pathway to deliver a conventionally armed, nuclear-powered submarine capability to the Royal Australian Navy, which concluded and findings were formally announced on March 13, 2023. AUKUS Pillar II efforts focus on building trilateral capabilities in areas of shared interest including undersea warfare, cyber, artificial intelligence, and quantum computing to provide pivotal, future high-end warfighting and enhance our combined force posture.

United States-Japan-ROK

The United States has strengthened our trilateral exercises and operations with Japan and the ROK to enhance interoperability, advance our intelligence sharing, and bolster efficient communication as we work to deter and respond to increasing DPRK provocations. Our ballistic missile defense exercises included detecting, tracking, and intercepting simulated targets. The United States, Japan, and the ROK also participated in an integrated air and missile defense exercise with Canada and Australia off the coast of Hawaii, which included a live fire intercept of a short-range ballistic missile. Additionally, we increased our anti-submarine warfare exercises to improve interoperability against undersea threats.

The United States remains dedicated to the complete and verifiable denuclearization of the Korean Peninsula, and USINDOPACOM will continue to focus on strong trilateral cooperation to this end.

The Quad

The Quad, comprised of Japan, Australia, India, and the United States, is an important diplomatic partnership in the Indo-Pacific region. While not a military alliance, the Quad nations cooperate on advanced technologies, developing better infrastructure, and improving cybersecurity as a demonstration of how four mature democracies can favorably shape the security environment for the region. All four nations participate in exercise MALABAR to advance the collective planning, integration, and employment of advanced warfare tactics between nations.

Strategic Partnerships

India

The United States and India continue to strengthen our strategic and unique Major Defense Partner relationship based upon our shared vision for maintaining a free and open Indo-Pacific and sustaining the rules-based international order. We are building an increasingly robust level of defense cooperation through exercises, information sharing, and efforts to establish greater co-development and co-production of military technology. With respect to the Line of Actual Control, we continue to support direct dialog and the peaceful resolution of border disputes amid provocative Chinese behavior.

USINDOPACOM is cooperating with the Indian Navy on increasing maritime domain awareness, specifically in the underwater domain, in order to address the growing threats in the Indian Ocean. Furthermore, we are supporting the India Navy's Information Fusion Center-Indian Ocean Region (IFC-IOR) with a Liaison officer to increase our information sharing. Our air domain cooperation is developing as B–1B Bombers participated in this year's AERO India and we look forward to participating in exercise COPE India as the bomber's presence sends a strong signal regarding the growth of our bilateral relationship.

Exercises like TIGER TRIUMPH, COPE India, YUDH ABHYAS and MALABAR facilitate progress toward interoperability and enhance our information sharing as we increase the complexity and scope of our training.

USINDOPACOM also seeks to deepen cooperation under the Logistics Exchange Memorandum of Agreement to enable more regular and flexible reciprocal access in the Indian Ocean Region, to include U.S. ship repair in Indian yards. In August 2022, the USNS *Charles Drew* became the first U.S. Navy ship to conduct a mid-voyage repair in an Indian shipyard.

India is currently considering purchases of the F–21 (formerly F–16), F/A–18 Super Hornet, F–15EX Eagle, MQ–9B guardian, and P–8I aircraft. In support of India's efforts to grow its defense industrial base, the Department has offered to explore proposals for co-production and co-development projects. These potential projects would support India's defense modernization and improve its capacity as a net security provider in the Indo-Pacific.

Singapore

Singapore is a highly capable partner, providing critical support for our air and naval forces in the vicinity of the Strait of Malacca and South China Sea, anchoring our presence in Southeast Asia. Demonstrating incredible flexibility, Singapore supported a short-notice United States aircraft carrier port visit in July enabling required ship maintenance and crew rest. The Singapore Armed Forces use four continental United States locations for training and in 2019, we signed a non-binding MOU for Singapore to establish a permanent fighter detachment on Guam.

Singapore also supports regional and global security initiatives, including hosting a multinational maritime Information Fusion Center, as well as a regional Counter-terrorism Information Facility (CTIF). The CTIF represents USINDOPACOM's first

collaborative, operational partnership with regional states to use network analysis and multilayer analytics to identify terrorist threats.

USINDOPACOM looks forward to identifying opportunities to collaborate with Singapore's fourth uniformed service, the Digital and Intelligence Service, inaugurated in October 2022.

Developing Regional Partnerships

NORTHEAST ASIA

Mongolia

Mongolia engages with the United States and other like-minded nations as part of its "Third Neighbor Policy," to balance Russian and PRC influence by developing relationships with democratic nations. Mongolia is a dedicated partner in global Peacekeeping Operations (PKO). Through their extensive U.N. PKO contributions and deployments, the Mongolian Armed Forces (MAF) have gained significant operational experience and increased interoperability with the United States.

Our active defense relationship with Mongolia is a key component of the Strategic Partnership, and contributes to shaping the regional security environment. USINDOPACOM continues to assist MAF with their defense reform: enhancing U.N. PKO capabilities, improving HA/DR response, developing a professional military education program for officers and Noncommissioned Officers, and expanding their Special Operations Forces capability growth. USINDOPACOM also co-sponsors Mongolia's KHAAN QUEST, an annual, multinational exercise designed to promote regional peace and security.

Taiwan

United States policy on Taiwan remains unchanged. We will continue to uphold our support for Taiwan's self-defense capabilities, consistent with the Taiwan Relations Act. Our support for Taiwan remains strong, principled, and in line with our one China policy, which is guided by commitments enumerated in the Taiwan Relations Act, the three United States-PRC Joint Communiques, and the Six Assurances. The United States will continue to support a peaceful resolution of cross-Strait issues, consistent with the interests and best wishes of the people on Taiwan. Our defense engagement with Taiwan helps ensure that Taiwan remains secure, confident, free from coercion, and able to engage in a peaceful and productive dialog.

Southeast Asia

The United States' engagement with Southeast Asia and with Association of Southeast Asian Nations (ASEAN) strengthens relationships and conveys the United States' commitment to the region and building multilateral partnerships. ASEAN currently consists of ten member states and in November 2022, they agreed in-principle to admit Timor-Leste as the 11th member.

ASEAN is the most influential multilateral institution in the Indo-Pacific. We support the principle of ASEAN centrality and understand its importance to building trust, avoiding conflict, and reinforcing the rules-based international order.

We continue to express our concern over the PRC's pressure on ASEAN members to conclude negotiations on the Code of Conduct in the South China Sea in a way that would impede lawful activities and undermine ASEAN parties' ability to engage in governmental or economic activities with foreign partners of their choosing. At the 2022 United States-ASEAN Summit, President Biden announced the launch of the United States-ASEAN Comprehensive Strategic Partnership. USINDOPACOM is integral to ASEAN's multilateral capacity building efforts and will continue to invest time and resources to enhance the United States-ASEAN Comprehensive Strategic Partnership.

Brunei

The United States-Brunei defense relationship is very strong with an expanding level of military cooperation. Brunei seeks increased cooperation with USINDOPACOM, and 2022 saw the establishment of the first United States-Brunei Land Forces Talks.

In September 2022, Brunei approved the first multilateral training event to occur on Brunei soil. The U.K. Special Boat Service joined United States Navy SEALs and the Brunei Special Forces Regiment during Exercise NEPTUNE WARRIOR.

USINDOPACOM is collaborating with Brunei and deepening cooperation in mutually beneficial areas, to include enhancing maritime domain awareness. Brunei's Integrator UAS, a Direct Commercial Sales purchase, is now operationally capable. The system will bolster maritime domain awareness and border security. Brunei has received six Integrator UAS platforms, and will receive a final three early in 2023.

Bilaterally, we incorporated UAS into our exercises for the first time in 2022 via PALAWAN WARRIOR and the Southeast Asia Cooperation and Training (SEACAT) Exercise.

Burma (Myanmar)

The Department of Defense condemns the Burmese military's 2021 coup deposing the democratically elected government in Burma, and the detention of government officials, journalists, human rights activists, and members of civil society. The military uses brutal and excessive violence while continuing to restrict basic freedoms. USINDOPACOM does not engage with the Burmese military.

Russia has taken advantage of the coup to increase its long-standing engagement with the Burmese military, through high-level visits, military-to-military exchanges, and sustained weapons and equipment sales.

The fallout from the coup has stalled efforts by ASEAN to resolve the resulting political and humanitarian crises and has led ASEAN to downgrade Burma's attendance at high-level ASEAN events.

Cambodia

In early 2017, Cambodia suspended all military-to-military exercises with the United States. USINDOPACOM continues to cooperate with Cambodia on humanitarian mine clearance and Missing-in-Action (MIA) personnel accounting.

USINDOPACOM holds serious concerns about the PRC's military presence and construction of facilities at Ream Naval Base in the Gulf of Thailand. While USINDOPACOM desires to engage military-to-military with Cambodia when and where policy allows, Cambodia's actions to limit democracy and its lack of transparency with regard to Ream Naval Base provide a weak foundation for rebuilding trust.

Indonesia

Indonesia occupies a key strategic position as regional leader and the third largest democracy in the world. Defense ties with Indonesia are strong. Indonesia is advancing its status as a regional maritime leader, increasing enforcement against illegal fishing and investing in defense articles to update and replace equipment.

Our exercise program continues to grow as demonstrated during GARUDA SHIELD 2023, the largest multilateral event to date designed to deliver joint and combined training. Future iterations will support Indonesia's newly developed Joint Transformation Initiative and is likely to include more like-minded allies and partners. We have expanded the Joint Exercise Program to include GARUDA SHIELD and will continue to build partner capacity with the Indonesian military.

Laos

Laos is one of the least developed countries in the region, with the PRC owning about 50 percent of its external debt. Laos seeks balance between its traditional relationships with Vietnam, the PRC, and Russia, and is seeking stronger ties with other ASEAN members and regional partners.

Reconciling legacy of war issues remains a focal point in our relationship with Laos as we aim to resolve Unexploded Ordnance and Prisoner of War/Missing in Action (POW/MIA) recovery issues by 2030. Laos repatriated two sets of remains in 2022.

Malaysia

The United States-Malaysia military-to-military relationship has steadily grown over the last decade. In recent years, Malaysia has transitioned the focus of its military toward external security, developing a viable coast guard, and improving maritime domain awareness through intelligence, surveillance, and reconnaissance (JSR) capabilities. We support Malaysia's maritime domain awareness by providing capabilities that can be dual-purposed for use in Counter-Terrorism (CT) and Maritime Security (MARSEC) contexts. Since 2017, the United States has invested approximately $220 million in Maritime Security Initiative/Building Partner Capacity (MSI/BPC) programs in support of MARSEC objectives. During the 2022 CARAT exercise, Malaysia hosted 7th Fleet sailors and marines, and the Malaysian Armed Forces operated their newly acquired Link–16 ground stations with United States forces.

Timor-Leste

Timor-Leste is a geographically strategic country within the Second Island Chain and an emerging partner that welcomes expanded United States security cooperation. The 5-year, $23 million Baucau airfield joint rehabilitation effort will provide expanded access to the airfield in support of military exercises. Additionally, the MARSEC program opens doors for expanded access and presence.

Timor-Leste was granted ASEAN special observer status in November 2022 and ASEAN has agreed in-principle to admit Timor-Leste as the 11th member of ASEAN.

Vietnam

Vietnam is a vocal supporter of adherence to international laws, freedom of navigation for all, and adherence to the rules-based international order in the South China Sea. The United States and Vietnam signed a Three Year Defense Cooperation Plan of Action for 2022–2024 as well as an updated Defense Memorandum of Understanding (MOU) Annex codifying new cooperation areas including defense trade, pilot training, cyber, and personnel accounting (POW/MIA).

SOUTH ASIA

Bangladesh

Bangladesh is an important security partner to enhance regional stability. We are seeking to conclude a General Security of Military Information Agreement (GSOMIA) that will facilitate cooperation between the United States and Bangladesh on defense matters. Conclusion of the GSOMIA will advance opportunities for Bangladesh to access high-end United States military equipment and we are investigating other ways to strengthen security cooperation. This creates an opportunity to increase bilateral engagement in areas such as information sharing, military hardware, maritime security training, doctrine development, communications training, and joint planning and operations. Bangladesh has prioritized the development of maritime domain awareness capabilities and is seeking to modernize and diversify its military equipment.

Maldives

Maldives is a valuable partner for the United States and an integral part of a free and open Indo-Pacific. In 2022, the Maldives National Defense Force (MNDF) sought increased engagement with the U.S. military and like-minded partners. Maldives co-hosted the 2022 USINDOPACOM Intel-Chiefs Conference, the USINDOPACOM Environmental Security Forum, and the Special Operations Command Tempest Wind exercise. Countering terrorism is an enduring area of mutual cooperation. In 2022, the MNDF affirmed they would participate in a trilateral CT exercise with the United States and the United Kingdom. Maldives also signed an arrangement with the Montana National Guard to join the State Partnership Program. The addition of a Deputy Security Cooperation Chief at United States Embassy Colombo dedicated for United States Mission Maldives will enhance this partnership even more.

Nepal

The United States has a strong partnership with the Nepali Army and conducts a range of security cooperation activities focused on HA/DR, PKO, military professionalization, and border security. Nepal is a regional and global leader in U.N. PKO. USINDOPACOM supports the development of Nepal's PKO cadre through Global Peace Operations Initiative (GPOI) funds provided by the Department of State.

Sri Lanka

USINDOPACOM seeks to ensure Sri Lanka is a capable regional partner with a professional military force supportive of the rules based international order. The Department of Defense continues to seek opportunities to expand exercises with Sri Lanka and encourages them to work with other like-minded nations to build partner capacity. Sri Lanka will host the fiscal year 2023 USINDOPACOM Environmental Security Forum to identify areas of cooperation and security impacts of climate change. Sri Lanka's recent announcement to reduce and restructure their Armed Forces suggests excellent opportunities for future security cooperation activities that focus on defense professionalization and building capacity in maritime security, HA/DR, and U.N. PKO.

BLUE PACIFIC

In 2022, Australia, Japan, New Zealand, the United Kingdom, and the United States established the Partners in the Blue Pacific, an inclusive, informal coordination initiative that effectively supports the Pacific region. Our efforts are informed by the 2050 Strategy for the Blue Pacific Continent, the Pacific Islands Forum's long-term strategy to achieve a free, safe, and prosperous region.

Blue Pacific cooperation is critical to a free and open Indo-Pacific, enabling coordination with allies and partners in the AOR through strategic sea lines of commu-

nication. Blue Pacific nations highlight the security impacts of climate change as the single greatest threat to their livelihoods, security, and well-being. Other security priorities for the Blue Pacific nations are countering illegal, unreported, and unregulated (IUU) fishing, transnational crime, cybersecurity, maritime domain awareness, and drug trafficking.

The Freely Associated States (FAS)

The Freely Associated States of RMI, FSM, and Palau, are the cornerstone of the United States security architecture in Oceania, linking the United States with the Blue Pacific and Southeast Asia. RMI, FSM, and Palau have the highest military service per capita in the U.S. military, and make significant contributions to our operations. Our Compacts of Free Association (COFAs) agreements with the FAS, establish U.S. economic assistance for the FAS, and provide defense posture opportunities in the Indo-Pacific. Under the COFAs, the United States has full authority and responsibility for security and defense matters related to each of these three countries, including special and extensive access to operate in these territories and the ability to deny access to these three countries by any third country militaries. MOUs supporting the COFAs were signed with RMI, FSM, and Palau in early 2023. USINDOPACOM engages in military construction projects throughout the FAS to improve air and maritime infrastructure, enhance domain awareness, and support FAS efforts to protect their economic interests.

Fiji

As a regional economic and defense leader, Fiji is integral to the security of the Southwest Pacific. We work with the Fijian forces through exercises, security cooperation, and activities with the Nevada National Guard State Partnership Program (SPP). Fiji's new training center, Blackrock, supports their U.N. PKO deployments across the globe. The Republic of Fiji Military Forces (RFMF) sent security forces in support of the Solomon Islands after riots in early 2022 and to the Sinai as members of the Multinational Force as well as other U.N. missions. Additionally the RFMF hosts USARPAC's multilateral exercise CARTWHEEL and will co-host the 2023 Chiefs of Defense Conference in Fiji.

New Zealand

New Zealand remains a steadfast partner and important leader in the Blue Pacific. The United States-New Zealand bilateral defense relationship is strong and continues to grow. In 2022, in coordination with our campaign plan, the RNZN HMNZS AOTEAROA participated in the RIMPAC exercise, conducted regional maritime patrols and Pacific Island engagements, and provided logistical support to United States, U.K., Australian, and JMSDF vessels sailing throughout the region. New Zealand also augments the DPRK U.N. Security Council Resolution enforcement efforts by providing maritime patrol aircraft and personnel to staff the Enforcement Coordination Cell.

Papua New Guinea (PNG)

PNG is an important emerging partner for the United States, with a shared history dating back to World War II. USINDOPACOM is in discussions with PNG leadership regarding several significant posture initiatives that are contingent on the signing of a bilateral Defense Cooperation Agreement (DCA). Negotiations with PNG on a DCA and a ship rider agreement are currently underway.

Security cooperation initiatives in PNG, though limited in scope, are important to grow the capability of the PNG Defense Forces (PNGDF), strengthen security ties with its institutions, and assist in military development. USINDOPACOM is supporting State Department implementation of the strategy under the Global Fragility Act by providing disaster response and gender equity training to PNGDF. We also support the burgeoning relationship between the Wisconsin National Guard and PNGDF.

Tonga

Tonga is a partner with a history of coalition participation and ties to the Nevada National Guard through the SPP. Defense engagement has returned to pre-COVID levels to build partner capacity. A leader in the region, Tonga hosted the 2022 Southwest Pacific Defense Minister's Meeting in November with senior defense delegations from Fiji, Papua New Guinea, Australia, New Zealand, Chile, and France including observers from the United States and Japan.

Other Indo-Pacific Nations

Canada

Canada is a key Indo-Pacific ally and staunch supporter of the rules-based international order who deploys highly capable forces to the Pacific to support UNSCR enforcement efforts. To support the principle of sovereignty and uphold freedom of navigation rights, Canada executed combined Taiwan Strait Transits with the United States. Canada recently released its new Indo-Pacific Strategy aligned to the principles of like-minded nations to ensure a free and open Indo-Pacific.

France

The United States maintains defense cooperation activities in the Indo-Pacific with France, America's oldest ally. France has the largest EEZ in the region, including commands located in French Polynesia (FAPF), New Caledonia (FANC), and South Indian Ocean Zone (FAZOI). France is a pivotal contributor to regional security efforts such as protecting fisheries, building community resilience, countering transnational crimes including trans-Pacific narcotic trafficking, and HADR. With key leader engagements and multiple deployments to the theater, France is increasing interoperability with the United States and other key allies throughout the theater. Additionally, the French-led multilateral exercise MARARA included participation by Australia, France, Japan and the United States in Bora Bora in 2022. Last month, France held the third LA PEROUSE exercise in the Indian Ocean Region to enhance naval planning and operations, with participation from Australia, India, Japan, the United Kingdom, and the United States. France also supports UNSCR sanction enforcement activities against North Korea. In 2022, France updated their Indo-Pacific Strategy to focus on increased cooperation with like-minded regional partners throughout the region.

United Kingdom (U.K.)

The U.K. remains committed to the region as a champion of the free and open Indo-Pacific. They continue to sustain a healthy defense posture in the region, having renewed the Brunei Garrison Agreement to maintain around 700 troops in the Sultanate since September 2019. In 2022, the U.K. continued its deployment of two Royal Navy offshore patrol vessels to the region through exercises in support of the Five Power Defense Arrangement (FPDA) with Australia, New Zealand, Malaysia, and Singapore, as well as a multitude of other bilateral and multilateral Operations, Activities, and Investments (OAIs). The U.K. also signed a Reciprocal Access Agreement with Japan in 2022. USINDOPACOM continues to benefit from basing and access to the British Indian Ocean Territory at Diego Garcia.

Other Areas of Cooperation

Women, Peace and Security (WPS) Program

WPS is codified in law as a national security imperative, and USINDOPACOM is focused on WPS implementation. USINDOPACOM appreciates Congress' continued support of our WPS efforts. The command's WPS program is a unique and unmatched competitive advantage that promotes a free and open Indo-Pacific by upholding international human rights and the rules-based international order.

In 2022, we continued to expand our work to meet the growing appetite for WPS training, engagements, and integration of WPS concepts into existing activities. To support an upcoming PKO deployment, USINDOPACOM conducted two WPS seminars with the Mongolian Armed Forces as part of exercise KHAAN QUEST. USINDOPACOM supported several ASEAN events, engaging with diverse stakeholders focused on a human security approach. We have also increasingly focused on supporting WPS work with Blue Pacific partners including the development of a WPS National Action Plan in Fiji and are similarly looking to assist the Solomon Islands this year.

In August 2023, USINDOPACOM will deliver a 10-day regional Gender Advisor training in coordination with Australia, New Zealand, and Japan and will continue tailored WPS initiatives with the Pacific Islands countries, including a multi-year program for Papua New Guinea, as well as Thailand, Malaysia, the Philippines, and others.

Red Hill

In the last year, Secretary Austin tasked USINDOPACOM to establish Joint Task Force Red Hill in recognition of the imperative to safely and efficiently defuel the Red Hill Bulk Fuel Storage Facility on Oahu. Through cooperation, openness, and transparency with the Environmental Protection Agency and the Hawaii Department of Health, we have made steady progress throughout the year. Our actions will continue to be guided by uncompromising commitments to the health and safety

of the people of Hawaii, including our military families, protecting the natural environment, and accomplishing our assigned missions.

Security Impacts of Climate Change and Disaster Preparedness

The security impacts of climate change present a significant challenge to allies and partners in the USINDOPACOM AOR. Pacific nations frequently cite climate change as their top concern. Nations in Oceania, South, and Southeast Asia are particularly vulnerable to food security, water security, and agricultural productivity challenges exacerbated by extreme weather impacts.

Addressing these issues can strengthen relationships as we recognize their greatest concerns. The military's role in disaster preparedness and response builds trust and resilience throughout the region. The annual Pacific Partnership mission delivers medical, engineering, and HA/DR projects to address these critical challenges. During the Pacific Partnership 2022 mission, the USNS MERCY brought the Pacific Partnership team to see over 15,000 patients and complete 10 major construction projects in Vietnam, Palau, the Philippines, and Solomon Islands.

Understanding security impacts from sea level rise, temperature changes, and extreme storms is essential to long-term planning for U.S. operating locations in the Indo-Pacific region. USINDOPACOM is committed to reinforcing infrastructure, increasing resilience of its facilities, and assisting allies and partners to do the same.

CONCLUSION

In the last year, the global security environment dramatically changed. The PRC accelerated their whole-of-government assault against the rules-based international order and partnered with Russia to advance their goals. Strategic competition with the United States now encompasses all forms of national power across all domains. We see increasing efforts to drive wedges between the U.S. and like-minded nations in an attempt to dominate the region.

Implementing the NDS in the near, mid, and long-term requires the United States to present a persistent, lethal, and integrated joint force west of the IDL that can deny adversary objectives while simultaneously demonstrating U.S. commitment and resolve to our allies and partners. Seize the Initiative is our approach, in support of the NDS, to deliver combat credible integrated deterrence by building a distributed force posture, improving our joint and combined operational campaign, advancing our warfighting capabilities and enhancing our network of allies and partners. To be successful, we all must execute with a sense of urgency.

I will continue to advocate for the most pressing and pertinent requirements in the near and mid-term, but I cannot emphasize enough the importance of passing timely appropriations. The Department cannot move faster in the current year or adequately plan or execute programming in the FYDP without the resources to initiate new starts or properly sustain required programs. Continuing resolutions (CRs) result in cumulative and detrimental effects on our buying power, which are exacerbated by inflation, and add to the increased levels of operational risk.

Conflict in the INDOPACOM AOR is neither imminent, nor inevitable. Nevertheless, we do not have the luxury of time, we must act now to maintain a free and open Indo-Pacific.

Chairman REED. Thank you very much, Admiral Aquilino.

General LaCamera, please.

STATEMENT OF GENERAL PAUL J. LACAMERA, USA, COMMANDER, UNITED NATIONS COMMAND / COMBINED FORCES COMMAND / UNITED STATES FORCES KOREA

General LACAMERA. Chairman Reed, Ranking Member Wicker, and the distinguished Members of the Committee, thank you for the opportunity to appear before you as the Commander of the United Nations Command, Combined Forces Command, and United States Forces Korea to discuss the current situation on the Korean Peninsula.

Korea is as important today as it was in 1950, when the international rules-based order was first challenged and successfully defended on the Korean Peninsula. Located on the Asian continent, the Republic of Korea is crucial to regional and global stability. When North Korean communist forces invaded South Korea, with

the blessing and assistance of the Soviet Union and China, the United States, along with the 22 members of the United Nations, stood together with the South Korean people to expel the aggressors. The Korean War taught us that we must always be ready and forward-postured with our allies.

To ensure continued peace and stability on the Peninsula, I have five priorities that are nested within the Indo-Pacific Commander's "Seize the Initiative" approach to ensure free and open Indo-Pacific.

My first priority is to defend the homelands, the United States and our allies. The Korean War has not ended—we are in an armistice—and the Kim regime has developed capabilities that can reach beyond Seoul, Tokyo, Washington, DC, and the capitals of the United Nations Command Sending States. By defending forward in this strategic location we better protect our people and the Korean people. Defending forward reinforces our iron-clad commitment to the Republic of Korea.

My second priority is to strengthen the United States and the Republic of Korea alliance. We must never take the alliance for granted. This is our center of gravity for deterring the Kim regime. The alliance has effectively deterred the Kim regime's resumption of large-scale aggression for almost 70 years, allowing security and stability to flourish and the Republic of Korea to develop into an economically prosperous, vibrant democracy.

In contrast, the Kim regime ignores the needs and rights of the great majority of its population and continues to invest its resources into developing weapons that it uses at a leverage. External leverage coerces concessions from the international community. Internal leverage maintains control of the people and ensures Kim regime survival.

My third priority is to prepare for combat. This is decisive. Our alliance alone cannot deter aggression. Our power of resistance deters. Maintaining the highest State of combat readiness is our main effort. Because readiness is perishable we must continue realistic training in order to respond to aggression and defend our Homelands.

My fourth priority is to build coalitions to dissuade aggression in the region. Our network of allies and partners with common interests on the Korean Peninsula represents our greatest asymmetric advantage.

My fifth priority is to ensure our personnel are taken care of and prepared to execute our mission on the Korean Peninsula. Mission first, people always. Our people serving on the Asian continent have the extraordinary responsibility of providing security and stability throughout the Republic of Korea and Northeast Asia. Our focus remains taking care of the mental, physical, and spiritual needs of our servicemembers, civilians, and families.

Since 1953, the United States and the Republic of Korea remain ready to deter and respond to North Korean aggression. Our mutual defense treaty expresses our common desire to live in peace with all people and governments. It also expresses our common determination to defend ourselves against external armed attacks so that no potential aggressor could be under the impression that the United States or the Republic of Korea stands alone in the Pacific area.

While the United States and the Republic of Korea alliance began out of military necessity, it has evolved to become the linchpin of stability and prosperity in Northeast Asia. The soldiers, sailors, airmen, marines, guardians, civilians, and contractors are proof of our iron-clad commitment to the alliance and ensure that the authoritarian regimes of North Korea, China, and Russia cannot unmake the international rules-based order.

Should the Kim regime resume hostilities, with your continued support we are ready. I am proud to serve with them and honored to represent them before you. Thank you, and I look forward to your questions.

[The prepared statement of General LaCamera follows:]

PREPARED STATEMENT BY GENERAL PAUL J. LACAMERA

INTRODUCTION

Chairman Reed, Ranking Member Wicker, and distinguished Members of the Committee, thank you for the opportunity to provide a written statement on the security environment in Northeast Asia, an update on the ironclad commitment of the United States to the Republic of Korea (ROK); an overview of the combined and joint readiness of the United States-ROK Alliance deterring the Democratic People's Republic of Korea (DPRK); an update on United Nations Command (UNC), Combined Forces Command (CFC), and United States Forces Korea (USFK); and resourcing needs of the Joint Force and our families living on the Korean Peninsula.

The soldiers, sailors, airmen, marines, guardians, civilian employees, and contractors of UNC, CFC, and USFK have the extraordinary responsibility of providing peace and security throughout the Republic of Korea and stability throughout Northeast Asia. My foremost responsibility is to ensure our personnel are taken care of and prepared to execute our mission on the Korean Peninsula. My specific priorities for the United States Joint Force forward stationed in Korea are: Defend our Homeland(s), Strengthen the Alliance, Prepare for Combat, Grow Coalitions, and Take Care of our People.

Almost 70 years ago, Congress ratified the mutual defense treaty between the United States and the ROK. The American people's commitment to the United States-ROK Alliance has never wavered in the years since. As stewards of this treaty, I appreciate your leadership and dedication as we work alongside our Korean allies, as well as our allies and partners represented by the United Nations (UN) Sending States. The support we have received from this Committee is instrumental in maintaining our ironclad commitment to the United States-ROK Alliance.

The United States-ROK Alliance was forged in the crucible of combat—the first test of the post-World War II international system. When North Korean communist forces invaded South Korea, the United States along with 22 members of the United Nations, stood together with the South Korean people to expel the aggressors. While the United States-ROK Alliance began out of military necessity, our Alliance has evolved beyond security issues to become the linchpin of stability and prosperity in Northeast Asia.

Our competitors and enemies seek to unmake this prosperity. It is imperative to remember that the Korean War has not ended—the Korean Peninsula is only in armistice—and that DPRK has capabilities which threaten not only the region but nations around the world. In confronting DPRK's aggression, the United States and the ROK will continue to stand shoulder-to-shoulder to maintain peace and security on the Korean Peninsula and stability throughout Northeast Asia.

THE SECURITY ENVIRONMENT IN NORTHEAST ASIA

The United States' commitment to the ROK reflects the importance of Northeast Asia and the Korean Peninsula to global peace and stability. Northeast Asia was, is, and will remain decisive terrain for allied primacy within the wider Indo-Pacific. History demonstrates the region is a nexus of strategic competition, with the Korean Peninsula repeatedly used as an invasion route from the Asian continent into the first island chain. As a result, four out of the top five major military powers have fought multiple wars in Northeast Asia over the last 125 years. This history has carried forward into the present, with four of the world's most powerful economies—the United States, ROK, Japan, and China—competing in the same region.

The ROK is an advanced, vibrant democracy critical to the resiliency of the regional and global economic engine. The ROK is, by GDP, the 10th largest economy in the world and a leading producer of semiconductors, cars, digital displays, smart phones, and other high-end electronics. It is also the 6th largest defense exporter in the world, and the President of the Republic of Korea, President Yoon Suk-Yeol, has set a goal for the ROK to become the 4th largest during his tenure. Furthermore, while the ROK was once a recipient of foreign aid, it has become a net contributor of foreign assistance.

The ROK's success is due to the hard work of the Korean people and our shared values, democratic ideals, and market-based economies within the rules-based international order. President Yoon articulated his vision for the ROK to become a "global pivotal state" and the ROK government has released an Indo-Pacific strategy of its own. The strategy is a comprehensive vision for the entire region—one not limited to just Northeast Asia or only to economics. It is reflective of a rules-based international order founded in cooperation rather than coercion. As the ROK aims to be the "hub for cooperation networks in the Indo-Pacific," protected under the security umbrella of United States military deterrence capabilities—including nuclear, conventional, and missile defense—as well as the capabilities of the United States-ROK Alliance, I expect Northeast Asia will remain vital to global stability and security.

These factors increase the potential for third party actor intervention and influence on the Korean Peninsula, specifically from China and Russia. While we remain in armistice with DPRK, we are also in competition with these two traditional Asian land powers. Both are mindful that there is a premier Joint Force of nearly 30,000 American servicemembers forward deployed to the Asian continent, 700 miles from Beijing. These geographic realities, combined with powerful economic interests, make the ROK the linchpin of security in Northeast Asia. In the current strategic environment, relative to the U.S. the "Far East" has become the "Near West."

THE DPRK THREAT

In the years since the Armistice was signed in 1953, DPRK has repeatedly and deliberately violated this agreement as the Kim Regime seeks concessions from the international community. Under Kim Jong-un (KJU), DPRK prioritizes regime survival over necessary reforms that could repair its economy and feed the North Korean people. Kim Jong Un uses perceived external and internal threats to eliminate competing sources of power and influence. Kim Jong-un's response to COVID–19 included measures unrelated to the pandemic, such as a rededication of communist education efforts which only serve to further consolidate his control over the population. Despite the suffering of the North Korean people, he pursues new military capabilities he believes will solidify his rule. Over the last 10 years, DPRK has increased its capabilities and capacities, and is no longer a regional nuisance or problem for only United States and ROK forces on the Korean Peninsula. In January 2021, DPRK codified a new "menu of weapons development," which it unveiled at the Eighth Congress of the Worker's Party of Korea and began to steadily work through to achieve KJU's stated goals.

As much as KJU and DPRK State their weapons development programs are in line with the right of any nation to develop self-defense capabilities, they have shown that they are unwilling to abide by international norms and abandoned any pretext for diplomacy. For example, when DPRK launches its missiles over Japan and into the surrounding waters, they do not issue notices to air missions (NOTAMs) or notices to mariners (NOTMARs), placing civilian populations at risk. Recently, their missile overflights of Japan caused Japanese civilians to seek cover. Furthermore, the December 2022 DPRK drone incursions into South Korean Airspace did constitute an Armistice Agreement violation. Since January 2022, DPRK has launched an unprecedented number of missiles with increasing capabilities, even testing long range systems that have no purpose other than to increase the credibility of its threat to the United States Homeland, the ROK, and other nations around the world.

Most concerning is DPRK's renewed threats of nuclear destruction against the United States and the ROK. Recently announced DPRK policies indicate a renewed intent to pursue nuclear delivery capabilities. In September 2022, DPRK announced a new Nuclear Forces Policy Law which states that the DPRK will use nuclear weapons against non-nuclear states if it deems the non-nuclear State is "colluding with nuclear states." This has been reinforced by statements made by Kim Jong-un's sister, Kim Yo Jong, and other authoritative sources affirming DPRK's first-use nuclear policy. Additionally, in remarks delivered at the beginning of 2023, KJU said North Korea needed to mass-produce tactical nuclear weapons and develop new

Intercontinental Ballistic Missiles (ICBMs) that would enable a "quick nuclear counterstrike." KJU believes a nuclear deterrent is the best means to preserve his regime and coerce the international community to lift sanctions. He is determined to operationalize his nuclear arsenal and is developing a credible second-strike capability. Right now, KJU is poised to conduct a 7th nuclear test; without outside influence, it is not a matter of "if" DPRK will detonate another nuclear device but "when."

I am concerned about DPRK leadership miscalculating or mistakenly believing they can control escalation. Contrary to DPRK's rhetoric blaming the United States and the United States-ROK Alliance for tensions on the Korean Peninsula, DPRK's actions demonstrate that if conflict were to resume it would be due to DPRK aggression. Such a conflict could immediately become a regional conflict and have a global impact, just as Russia's war against Ukraine has. We must remember that DPRK and China have a mutual defense treaty, which is the only defense treaty DPRK and China have with any nation. Finally, DPRK has shipment and transport lines of communication into Russia and China, allowing KJU to export his illegal weapons directly into Europe, as well as receive goods and services bypassing sanctions.

The best way to deter DPRK is to maintain our ironclad commitment to the United States-ROK Alliance which has endured for almost 70 years—and to never take it for granted. This requires us to shape the strategic environment during armistice through continuous validation of our extended deterrence capabilities and combat readiness, which remain our current focus. Our policy remains the denuclearization of the Korean Peninsula and deterring the use of nuclear weapons by the Kim Regime. Achieving this requires the proactive, coordinated, and concerted efforts of all three Commands in Korea: UNC, CFC, and USFK, along with our interagency colleagues, and international allies and partners.

THREE COMMANDS, ONE GOAL: PEACE AND SECURITY IN NORTHEAST ASIA

Since the Armistice was signed, the ROK and the United States have stood together to maintain peace and security on the Korean Peninsula and Northeast Asia. While we remain focused on a diplomatic resolution, the missions of UNC, CFC, and USFK are to be prepared to defend the ROK so our diplomats can negotiate from a position of strength. As President Biden has said, leading with diplomacy means standing shoulder-to-shoulder with our allies and partners. Our network of allies and partners with common interests that exists on the Korean Peninsula represents our greatest asymmetric advantage in maintaining regional stability. Additionally, effective collective action discourages the need for unilateral action by other states impacted by DPRK aggression.

Our collective action ensures we are strategically predictable to our allies and partners, while being tactically and operationally unpredictable to adversaries and competitors. Managing and responding to crisis is the most consequential thing we do as an Alliance. Each of the three commands has separate sets of authorities, separate chains of command, and each continues to adapt to meet emerging security challenges. Our goal is to prevent a resumption of hostilities and we remain prepared to respond to any form of aggression across all domains, using our extended deterrence and kill web capabilities.

ENFORCING THE ARMISTICE: UNITED NATIONS COMMAND (UNC)

The evolving security environment reinforces the inherent utility and importance of UNC. Since 1950, U.N. Sending States have collectively supported the ROK's security and sovereignty alongside United States forward deterrence. While UNC transferred its warfighting mission to CFC in 1978, it continues to represent the mechanism for collective security on the Peninsula through its three enduring functions. First, UNC enforces the Armistice Agreement. After the signing of the Armistice in 1953, UNC has executed the functions necessary to maintain and enforce the terms of the Armistice through close coordination between the United States, the ROK, and relevant U.N. member states. This also requires coordination with the Korean People's Army (KPA). Since 1953, UNC has had over 1,200 formal meetings with the KPA, adapting the terms of implementation of the Armistice Agreement to match the requirements of the security paradigm on the Korean Peninsula. Furthermore, UNC informs DPRK prior to the start of United States-ROK Alliance large-scale training exercises, such as the defensive FREEDOM SHIELD, WARRIOR SHIELD, and ULCHI FREEDOM SHIELD exercises, to ensure training events are not misinterpreted as aggressive actions.

Second, UNC coordinates the multinational contributions for securing the Korean Peninsula. The multilateral cooperation represented by UNC is essential to security on the Korean Peninsula, as the threats posed by DPRK will not be resolved by the

ROK alone. Today, 18 countries contribute to UNC's mission. These U.N. Sending States come from every corner of the globe, offering a visible reminder of the international community's resolve to defend the Republic of Korea and the global nature of the DPRK threat. I am thankful for their countries' contributions, and it is an honor to serve with their countrymen and women.

Finally, UNC executes functions as assigned by U.S. National Authorities through the Joint Chiefs of Staff. United Nations Command is not a U.N. peacekeeping organization, but a multinational military command under U.S. leadership. While resolving all the sources of conflict on the Korean Peninsula remains elusive, progress has been made due to the efforts of UNC in implementing the terms of the Armistice Agreement while maintaining a combat credible deterrent in CFC.

THE HEART OF THE UNITED STATES-ROK ALLIANCE: COMBINED FORCES COMMAND

Combined Forces Command has been the heart of the United States-ROK Alliance for over 44 years and is a unique, bilateral warfighting command charged with the dual missions of deterrence and defense. Previously located in the capital of Seoul, CFC recently completed its relocation to United States Army Garrison Humphreys. The bilaterally agreed upon Land Partnership Plan and associated Yongsan Relocation Plan provided the foundation for streamlining USFK's footprint while returning valuable land to the ROK for future development. These strategically analyzed and negotiated returns allow for continued economic growth on the Korean Peninsula, while the new headquarters on Camp Humphreys improves operational effectiveness and our combined defense posture. Co-locating USFK and CFC ensures we remain integrated and synchronized across all staff levels and domains.

Combined Forces Command receives its direction and guidance from United States and ROK national leaders, through ministerial and general officer level forums. During Armistice, I, as the Commander of CFC, have Combined Delegated Authority of designated ROK forces to maintain deterrence and to prepare forces to execute combined missions and plans. This starts and ends with tough, realistic training—executed in combined and joint environments alongside our interagency partners across all domains using live, virtual, and constructive environments.

Combined readiness is a no-fail mission. In just the last year, the United States-ROK Alliance completed numerous combined training events that demonstrated our ability to operate in multiple domains simultaneously. Off the shores of the Korean Peninsula, the ROK Navy and *Ronald Reagan* Carrier Strike Group executed multilateral exercises throughout the summer of 2022. These exercises included the participation of Japan, another important ally in Northeast Asia. Exercises such as PACIFIC DRAGON 2022 and PACIFIC VANGUARD 2022 saw the United States, ROK, and Japan train together on combined antisubmarine warfare and mine warfare exercises. I am greatly encouraged by these trilateral exercises and look forward to additional high-end complex maritime and air exercises in the future.

In the air domain, the deployment of United States Air Force fifth generation fighters and combined bomber escorts throughout Korean airspace demonstrated our ability to provide air superiority anywhere we choose. Again, I highlight our ability to coordinate with the Japan Self Defense Force, which provided fighter escort to our bombers before they transitioned into ROK airspace.

On land, our combined ground forces were enhanced with the arrival of a Stryker Brigade Combat Team and establishment of a permanent AH–64 Apache helicopter gunship squadron. The Stryker platform brings enhanced maneuverability and mobility to our land forces and increases our interoperability with ROK mechanized formations. Working alongside the ROK's Apache units, our Alliance demonstrated its lethality through multiple combined live fire exercises on the Korean Peninsula.

United States and ROK forces have increased our capabilities and capacities to operate in the space domain. Our United States Space Force guardians operating on the Korean Peninsula became a service component command in 2022. We now have the ability to synchronize with our other components to maximize space effects and to coordinate with the ROK's Space Program. Within CFC, our Space Integration Team works to ensure our interoperability with the ROK in this critical domain. The ROK Space Program, led by the ROK Air Force, plans to become a major space power by the end of the decade. We are encouraged by the ROK's requests to participate in United States Space Force and United States Space Command exercises and war games to bolster interoperability.

Finally, in the cyber domain, United States Cyber Command and ROK Cyber Command signed a memorandum of understanding this year, increasing our ability to conduct operations and counter third party intervention and influence on the Korean Peninsula.

Our demonstrated lethality in every domain of strategic competition supports our combined progress toward Operational Control (OPCON) Transition. When complete, OPCON Transition will ensure any response to DPRK aggression that leads to military operations is led by a ROK general officer, with a United States general officer acting as the Deputy Commander of CFC. This process has always been governed by, and subject to, bi-national decisionmaking. We appreciate the ROK government's support in progressing through the mutually agreed upon conditions required to complete this transition. The previous major defensive exercise on the Korean Peninsula, ULCHI FREEDOM SHIELD, demonstrated the progress being made toward Future CFC. ULCHI FREEDOM SHIELD included a Full Operational Capability evaluation of OPCON Transition, with ROK General Ahn Byung Seok acting as the Future CFC Commander.

Exercises such as ULCHI FREEDOM SHIELD and FREEDOM SHIELD are routine, defensive training events critical to our ability to provide extended deterrence in Northeast Asia. Combined Forces Command was precluded from conducting large scale exercises in recent years due to COVID–19 and the political environment. Going forward we are making a concerted effort to reintroduce live training into our combined exercise program with our ROK Allies. As we increase our combined training, however, a large portion of the training remains unfunded. Despite an increased demand, there have been no additions to fiscal year 2023 theater exercise programs. Training is perishable and must be continuously conducted to maintain an appropriate level of combat readiness.

RESOURCING THE UNITED STATES COMMITMENT: UNITED STATES FORCES KOREA

United States Forces Korea remains the premier Joint Force, capable of operating in all domains with our allies and partners, committed to defending the security of the ROK. It is a critical part of the United States' approach to providing extended deterrence in Northeast Asia. As United States Indo-Pacific Command's (USINDOPACOM) sub-unified joint force on the Korean Peninsula, USFK is primarily responsible for the Reception, Staging, Onward Movement, and Integration of reinforcing United States forces to the CFC, as well as the sustainment of those forces. As the USFK Commander, I support UNC and CFC by coordinating and planning among United States component commands in the ROK, exercising operational control of United States forces as directed by USINDOPACOM, and coordinating United States military assistance to the ROK.

Our ability to provide forward deterrence is dependent upon conducting regular, robust, and challenging training. Due to space constraints, collective live-fire training opportunities are limited. Any reduction in funding levels will degrade 7th Air Force and Eighth Army's ability to execute these types of training events on-and off-peninsula. Current funding levels, therefore, should be viewed as a "floor" rather than a "ceiling."

United States Forces Korea continues to demonstrate new and innovative capabilities that provide our forces advantages across all domains. Everything the Department of Defense (DOD) is doing to modernize is occurring on the Korean Peninsula—in a combined, joint, interagency environment in multiple domains. We are pursuing opportunities in artificial intelligence and machine learning. The DOD's Chief Data and Artificial Intelligence office prioritized USFK near the top of commands to invest in to enhance Sensor-to-Shooter and Combined Kill Web analytics. Our Digital Operational Plan (Digital OPLAN) will incorporate machine learning and artificial intelligence to move USFK forward in data analytics. Additionally, we are working with all United States military services on improving our aging network and cybersecurity posture for our Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting (C5ISRT). Improving C5ISRT will enhance our situational awareness, decisionmaking, and communication readiness from our national command authorities to our forces in the field. To avert network isolation of our C5ISRT capability, we are pursuing replication of our coalition network off peninsula. Furthermore, USFK is collaborating with the DOD Joint Program Office for counter Unmanned Aircraft Systems (UAS) and established a counter small-UAS experimentation lab last summer. Our first experiments began in August 2022.

United States Forces Korea continues to enhance our existing capabilities, such as the Terminal High Altitude Area Defense (THAAD) ballistic missile defense system. This defensive capability provides protection for United States forces and the ROK against DPRK's ballistic missile program. President Yoon's administration has supported improved access to the THAAD site over the last year. The normalization of THAAD operations and unfettered access to this site are critical to maintaining

the overall readiness of the system, as well as the health and safety of the servicemembers at this location.

While we can operate across all domains, I am concerned about our ability to compete in the information environment in Northeast Asia. China, Russia, and DPRK's aggressive investments in information warfare technology and operational practices outpace DOD investments and challenge United States influence in Northeast Asia. As the largest United States force on the Asian continent, USFK is uniquely positioned to counter many of the disinformation, misinformation, and mal-information efforts of our competitors and adversaries, and defeat enemies during conflict. The price of operations during armistice to deter, degrade, and disrupt adversaries is orders of magnitude less than the cost of combat operations designed to challenge revisionist states and authoritarian regimes.

SERVING TOGETHER: TAKING CARE OF OUR PEOPLE

Servicemembers, civilians, families, and contractors who support the Joint Force are our most precious resource and taking care of our people is a no-fail task. Those who bring their families to the Korean Peninsula will spend at least 2 years here, defending the ROK and deterring DPRK. The families who live alongside their servicemembers in the ROK do so without many of the conveniences of living in the continental United States. Ensuring those personnel and their families are afforded the best quality of life while they are away from the United States Homeland is of paramount importance and is something I stress with leaders at every echelon. We continue to look for ways to build our community to ensure the ROK remains an assignment of choice for our personnel and their families.

Our people live and work across the entire ROK, from Panmunjom near the Demilitarized Zone to the port of Busan. Being a responsible ally means being good stewards of the Korean land and environment. United States Forces Korea continues to conduct bilateral engagements with the ROK to appropriately posture our presence while also returning valuable land for use by the Korean people. We could not do this without military construction support from Congress.

Thanks to congressional support, we have transferred the center of gravity for the United States-ROK Alliance out of Seoul and are actively improving our facilities across the Korean Peninsula. To help combat climate change, USFK is using the most current unified facility mechanisms to reduce downstream maintenance, improve quality of life, and maintain force protection. We are nearing the completion of Camp Humphreys' $10.6 billion transformation to the new center of gravity for the United States-ROK Alliance and the headquarters of UNC, CFC, and USFK. As we begin the third year (CY23) of a 5-year Special Measures Agreement with the ROK, we appreciate the Committee's continued support to ensure we can synchronize ROK funding and United States-appropriated funding to improve our facilities as quickly as possible. This support will ensure new facilities such as the United States Space Force Complex on Osan Air Force Base remain projected to break ground earlier than traditional military construction projects with the help of cost-sharing with our ROK Allies. It is also critical in improving our existing facilities, such as the ongoing repairs to the piers at the port of Busan.

Providing support and medical care to our servicemembers, civilians, and families at our installations across the ROK remains a challenge. For example, the Brian D. Allgood Community Hospital on Camp Humphreys is not sufficiently staffed to provide care for the installation's population. Very few of the staff are assigned solely to the hospital; most of the staff are borrowed from operational units which have frequent field training requirements. These shortfalls are exacerbated at smaller outposts and locations. To provide the highest quality and most reliable care for our servicemembers, civilians, and their families, additional permanent staff should be recruited, retained, and assigned to all our deployed locations in the ROK. Particular attention should be given to the fields of behavioral health, nursing, and primary care.

Finally, my focus remains on the well-being of our servicemembers. Our families include the dependents of U.N. Sending States who live on our installations. We are working with the DOD Education Agency to draft language into the future National Defense Authorization Act to allow these U.N. Sending State dependents status commensurate with United States servicemember dependents. The well-being of our servicemembers is also dependent on addressing systemic issues such as sexual assault and harassment in our ranks. I have a zero-tolerance policy for any action that harms unit cohesion. Our senior leaders continue to impress the importance of these initiatives upon their subordinates. This is not just about combat readiness—it is simply doing right by our people.

MOVING FORWARD

While DPRK prepares for a 7th nuclear test, our resolve remains unmoved: we will deter and, if necessary, defeat our adversary; and we are committed to the denuclearization of the Korean Peninsula. Our collective actions will advance a free and open Indo-Pacific that is more connected, prosperous, and secure. The men and women working toward that goal are motivated, capable, and postured to do so while forward deployed to the Asian mainland alongside our ROK Allies. Cooperatively, we are focused on maintaining a robust combined readiness cycle, strengthening deterrence through strategic asset deployments, and conducting multi-domain operations while DPRK continues its provocative weapons development activities.

I am grateful for this Committee's continued support. I am honored to serve this dedicated multinational, combined, and Joint Force deployed to the Asian mainland.

Chairman REED. Thank you very much, gentleman.

General LaCamera, your prepared testimony states that Kim Jong-un is determined to operationalize his nuclear arsenal and is developing a credible second-strike capability. Your testimony also states that without outside influence it is not matter of if North Korea will detonate another nuclear device but when.

In this situation, do you see China in any way affecting their decisionmaking about the inevitability of another nuclear detonation? What is the effect of the North Korean's having a credible second strike?

General LACAMERA. Thanks, Chairman. I think China can play a spoiler in this. They can be supportive or they can be non-supportive in what he is doing. What we are seeing right now, in any kind of U.N. sanctions votes in the United Nations, both China and Russia continue to veto that, and they continue to work against the things that we are trying to do to maintain peace and stability.

Chairman REED. With a second-strike capability, I presume that would immensely complicate your——

General LACAMERA. Yes, sir. I mean, it is clear that he has, in the last year plus, he has demonstrated a whole bunch of different capabilities, all of which could lead to a second-strike capability. I mean, he is clearly focusing on the theater ballistic missile capability, not just on the Peninsula regionally but globally.

Chairman REED. Thank you.

Admiral Aquilino, you have difficult steps to prioritize in terms of investments, and one area which seems critical is the electronic spectrum. I mean, to successfully conduct operations in the Pacific ideally you could disrupt the communication of our enemies and also their ISR [intelligence surveillance and reconnaissance], and at the same time, in a complementary fashion, disguise our assets and also have constant secure communication. Is that, in your view, like the number one priority?

Admiral AQUILINO. Thanks, Chairman. If you are talking about a prioritized list, the Guam Missile Defense System remains the Indo-Pacific's number one priority. That is based on the Homeland defense mission that is most critical. But immediately behind it, Senator, you talked about the capability to influence the electromagnetic spectrum, absolutely. We view it through this lens of decision superiority, which means we need to be able to operate in contested space, we need persistent battle space awareness of all things going on, and we need to be able to close our kill chains with the weapons and the network that allows that to happen, and the electromagnetic spectrum is critical to that.

Chairman REED. Are we putting enough resources in this budget to accelerate that process and accomplish that task?

Admiral AQUILINO. I am very thankful for the Department's budget. It certainly is strategy based. It is certainly focused on the Indo-Pacific. That said, as you know, Chairman, I have provided an unfunded list as it applies. The Secretary has got global responsibilities. As you have tasked in the authorization language, I am responsible to provide you with a list of what INDOPACOM assesses as the critical capabilities needed to both deter and defend, and we have provided both of those reports, as directed by law, to help inform.

But it has certainly been identified, and my requirements have been fed into the Department.

Chairman REED. Thank you very much. Final point, Admiral Aquilino, you point out in your testimony, this is the first time in history the United States is facing two major nuclear powers, so a lot of the theory, a lot of the institutional arrangements that we have made reflect the cold war, which was a Soviet Union and United States confrontation.

Just very quickly, how has this changed, to your thinking and the thinking of your colleagues in the Department of Defense?

Admiral AQUILINO. Thanks again, Chairman. So certainly the No Limits relationship by President Putin and President Xi is something we ought to be watching very closely, and what does that mean. My partner, General Cotton, at STRATCOM, is the lead for all the strategic nuclear portions. As it applies to INDOPACOM, he is a great supporting partner, and that means we have to understand what does that look like as we manage escalation and deliver deterrence, both conventionally and strategic in the strategic nuclear lens.

I think what makes sense to me, and I know he would advocate for, and that is the modernization of our strategic nuclear triad as a priority threat, to be able to compete in that new world.

Chairman REED. Thank you very much.

Senator Wicker, please.

Senator WICKER. Thank you, Mr. Chairman.

Admiral, let me just make sure I understand. With regard to the electromagnetic spectrum, that is highly important, right up there bumping up against the Guam Initiative. Is that right?

Admiral AQUILINO. Yes, Senator. I would say it is in my number two kind of pile of decision superiority, behind the Guam Defense Initiative.

Senator WICKER. Okay, so in order for us to take care of that we are going to have to fund some unfunded requirements. Is that correct?

Admiral AQUILINO. Senator, for consideration again I have provided the assets and the capabilities I think I need. There are certainly some capabilities I have asked for that provide benefit in the electromagnetic spectrum in order to execute our mission.

Senator WICKER. Is it highly important that we fund this, vitally important?

Admiral AQUILINO. Yes, sir. I believe it is.

Senator WICKER. Okay. Let me just ask both of you, there are some people who feel our support for Ukraine is taking away from

our capability and credibility in the Indo-Pacific, particularly with regard to Taiwan. Admiral, you first and then General. What do you say to that?

Admiral AQUILINO. Senator, I do not. The United States is the only global force capable of managing multiple threats. My partner in EUCOM is executing his mission sets. I have not been impacted at this point as it applies to my deterrence mission. So I do believe we can do both. I believe we have to do both to maintain the peace.

Senator WICKER. We have to do both. Okay. General, what would Ukrainian success in this war say to the world about the situation in the Indo-Pacific?

General LACAMERA. For us, we are taking what is going on in Ukraine as lessons learned, boiling it down. It does not necessarily translate to what a fight on the Peninsula would look like. I think the support that is being provided, the lessons learned coming off of that, I think it reinforces how we feel about sovereignty and a country's right to choose their future.

Senator WICKER. Okay. Well, let me then ask you to enlarge on that. What is it to us, what happens in Taiwan and South Korea? You spoke about an international rules-based order, and sometimes I am troubled that that terminology does not get through to the American people. What is it to us, living in Virginia and Maryland and Mississippi and Nebraska and Arkansas that the forces of Xi Jinping and Kim Jong-un not succeed in that area?

General LACAMERA. I think it is a history lesson for the American people. I mean, the blood and treasure that we put forth in World War II and international rules-based order that we established right after that was challenged in 1950. It has been bookended by what is being challenged in Ukraine right now, and I think what it is demonstrating is that we believe in the sovereignty of a nation, choosing their future. We believe in democracy, et cetera.

Senator WICKER. Okay. Admiral, do you see what I am saying? International rules-based order—what is it to us in Tupelo?

Admiral AQUILINO. Thanks, Senator. What it means is freedom of navigation. Think of goods and services flowing unencumbered through wherever they need to go to get to the people of the world.

Senator WICKER. Our ability to purchase the products we need for everyday life.

Admiral AQUILINO. I do not know if it is on the purchase side, but when we talk international rules-based order it is certainly on the delivery side. So two-thirds of the entire global economy flow through the South China Sea and the Straits of Malacca, and if you were to not have a rules set of orders and there was a country that believed they could meter, monitor, task, tax, or impact that set of prosperity, that is what it would mean to the people of America, when you talk about the international rules-based order.

The ability to fly anywhere that rules allow. The U.S. standing in the region as it applies to being an assured partner in the vicinity. Those are kind of the stakes and what it means when we talk about the international rules-based order.

Senator WICKER. The value of the word of U.S. leaders, you are saying.

Admiral AQUILINO. Absolutely.

Senator WICKER. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker.

Senator Shaheen, please.

Senator SHAHEEN. Thank you, and thank you both for your service and for being here this morning.

India is a key partner. It is a member of the Quad. It is the only member of the Quad that maintains such a close and ongoing relationship with Russia, including continuing to acquire additional weapons from Russia.

Are there more steps we should be taking to discourage India from maintaining that relationship with Russia and encourage them to adopt more of the positions of other members of the Quad, Australia, Japan, with us?

Admiral AQUILINO. Thanks, Senator. India has been a tremendous partner. The partnership is only growing. It is strengthening. We have similar security concerns. We have people-to-people ties. We have certainly deep relationships with the Indians. They buy our equipment. We are interoperable in the military-to-military space. Their Chief of Defence, General Chauhan, and I have a terrific relationship.

I think what we need to do is keep fostering this. The world's largest democracy with similar security concerns, we have to continue to work together in order to ensure that the United States and India's relationship grows. We certainly support the increased multilateral aspect of it. So the Quad is not a military agreement. It is an economic and diplomatic relationship. But the Quad nations come together often to practice and rehearse, and will continue to do that.

Senator SHAHEEN. Well thank you. I agree. I think it is very important, and as we look at the growing relationship between China and Russia, it has an ever-increasing role to play. So thank you.

Can you speak to how the expanded security agreement between the United States and the Philippines enhances our posture and how it can serve as a model for other nations?

Admiral AQUILINO. Thanks, Senator. It is critically important. One of five mutual defense treaty allies in the region, the Philippines, our history goes back a very long way, as everyone knows. The increased EDCA [Enhanced Defense Cooperation Agreement], that have been concurred to—and I thank the Secretary for his work there as we have proposed those sites, that expands the areas that we can rehearse and exercise with the Philippines. But the critical nature of the Philippines, its strategic location, and the partnership that we have, those sites are critical. More than likely in next year's budget you will see and ask to do planning and design work in those sites. They have just been announced. There is no money in the 2024 budget to start work in those additional four sites, but you do see other requests to buildup the current sites in the Philippines. Our operations there, our partnership with the Philippines is critical.

Senator SHAHEEN. Is that helpful as we are looking at other partner nations in the region, to be able to show what is happening in the Philippines? Are they looking at that as something that they are willing to consider because they see that agreement?

Admiral AQUILINO. Thanks, Senator. I think all the nations in the region are looking at the threat and realizing they need to take additional actions, the Philippines, as a model for how we operate together, but it is certainly not alone. We are doing the same thing with the Japanese. General LaCamera is working with the South Koreans. We are working with our Australian counterparts. We are doing the same with our Thailand alliance.

It is a model, and it is expanding, and we are looking at all nations to deliver those same capabilities, together with the United States.

Senator SHAHEEN. Thank you. I really appreciate the leadership that INDOPACOM has taken on the Women, Peace, and Security Act, and I think it serves us well all around the world. But can you speak to the advantage that that gives us over China, when we are looking at how we can engage women more fully and the contrast that presents to what China is doing?

Admiral AQUILINO. Certainly, Senator. The contrast is clear when you think about Xinjiang and the treatment of the Uyghurs, and understand that that goes on, that is a problem set that China has to face, and one of our asymmetric advantages. Our ability to care for all people, no matter what, and the Women, Peace, and Security Initiative that was begun in INDOPACOM before me and that we continue has been helpful.

As a matter of fact, I was just in Papua, New Guinea, a couple of months ago with my counterpart, General Goina, and that is where our next seminar is coming up, followed by one in Japan.

It is about people, it is about respect, it is about treating people fairly. It is what we stand for in the United States and we will continue to do those things.

Senator SHAHEEN. Thank you very much. Thank you both.

Chairman REED. Thank you, Senator Shaheen.

Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. Thank you both for being here today and thank you for your service to this country.

Admiral, on your unfunded requirements list you included a requirement for funding to accelerate the development of several munitions, including the FM–6, the Army's PrSM weapon system, and the Maritime Strike Tomahawks. What would those capabilities provide and why do you assess that it is necessary to make those investments in 2024?

Admiral AQUILINO. Thank you, Senator. As we always look at lessons learned, certainly one that came out of the Ukraine conflict was the ability to ensure that our stockpiles were correct, with the right number and the right types of weapons and capabilities. In the Indo-Pacific Command, we have those requirements identified. We can talk specific classified if we need to, but bottom line is the entire Joint Force is required to help deliver effects to both deter and fight and win.

So from the land component, Maritime Strike Tomahawk, PrSM Increment 2, those capabilities, to enable the MDTF [Multi-Domain Task Force] from the Army, their new formation, the Multi-Domain Task Force, and from the Marine Corps and the Littoral Marine Regiment, those are the capabilities that those forces need to bring

with them in the region to do the missions assigned. So that is why I have advocated for those, right types and right numbers.

Senator FISCHER. Right. Thank you, because it was a lesson learned from Ukraine. The much, much faster rate than planned for, especially in expending all those munitions there. So thank you for including those on the requirement list.

You also have on the unfunded priority list a requirement for an additional $511 million for INDOPACOM campaigning. Why is campaigning in the Indo-Pacific particularly valuable, and what types of exercises or activities would this additional funding be used for if Congress would authorize it?

Admiral AQUILINO. Thanks, Senator. The deliver of deterrence through the lens of INDOPACOM "Seize the Initiative" approach, campaigning is one aspect of it, and that means persistent forward forces operating with our allies and partners in the region forward every day.

When we talk about our operations and exercises, we do 120 exercises a year with our allies and partners, but that is not 365 days. So for the days we are not exercising I am also looking to ensure that our forces are forward, prepared, and operating with our allies and partners every day. That is what those campaigning dollars are requested for. That is to pick up the force and move it forward into the theater, in places where they can operate with our allies and partners. That money is not to do maintenance. It is not to do depot-level sustainment. It is for transportation costs to be able to move the force and sustain the force forward.

Senator FISCHER. Which is extremely important not just for the exercises but also for future planning. Correct?

Admiral AQUILINO. Yes, ma'am.

Senator FISCHER. Thank you. With AUKUS [Australia, United Kingdom, United States], the security partnership that allows us to share significant capabilities with our closest allies. We hear a great deal about Pillar 1 and the sharing of nuclear propulsion technology with Australia, and that is an important part of the agreement.

However, through Pillar 2, the AUKUS partnership allows for greater cooperation across multiple lines of effort. What do you assess to be the prime areas of opportunity to increase that coordination and extend partner capabilities and capacities?

Admiral AQUILINO. Senator, first, our partnership with the Australians is so critically important, again, a mutual defense treaty ally. The Australians have shared blood and treasure with us in every fight we have been in for over 100 years. So I commend my partner, Angus Campbell, and all of the Australian leadership.

They also are concerned about the security environment, which is why AUKUS is so critical for both peace and prosperity, as we share submarine technology and deliver U.S. *Virginia*-class submarines, and follow-on types of submarines.

But in Pillar 2 there is also a ton of capabilities that you highlighted. The most critical, and I think we can get at fast, there are some cyber capabilities, there are space-based capabilities, there are some undersea capabilities, and then there is some work in the form of artificial intelligence and machine learning. There are oth-

ers. Those, I think, have the most promise for near-term delivery of capability.

Senator FISCHER. The United States is stronger when our allies are strong as well. Correct?

Admiral AQUILINO. Always.

Senator FISCHER. Thank you.

Chairman REED. Thank you very much, Senator Fischer.

Senator Gillibrand, please.

Senator GILLIBRAND. Thank you. Admiral Aquilino, INDOPACOM is the first combat command to have a Space Force Regional Command Center. How is U.S. Space Force's Indo-Pacific integrating into INDOPACOM, and can you discuss how you build the guardian skill set into your regional exercises like Cobra Gold and Balikatan?

Admiral AQUILINO. Yes, Senator. Thank you. I really appreciate General Saltzman's team, along with General Dickinson to set up the first component at INDOPACOM. So General Mastalir is my component commander, and the criticality of his efforts to synchronize our effects, undersea, on the sea, above the sea, in space and cyberspace, is something that the U.S. can do better than anybody on Earth. The space component is critical. Their enabling capabilities are extremely valuable, and working with our allies and partners in this domain is also important.

In Cobra Gold, which is our most recent exercise, in Thailand, we actually put in place a space component as a part of that exercise. We are doing it in Balikatan. It will be included in all of our upcoming exercises, wherever and whenever we can. Talisman Sabre, as well, with the Australians. Northern Edge as a part of our event. So it is now just normal ops.

Senator GILLIBRAND. Great. The House Armed Services Committee earlier this week, you noted that the strategy and approach with regards to the PRC [People's Republic of China] is competition and not containment. Can you expand upon why that difference is important?

Admiral AQUILINO. I think for me, Senator, the ability to compete is really a non-adversarial type of relationship, which is, I think, what the United States seeks. The PRC believes we are trying to contain them. There is no doubt, despite the President's comments, the Secretary of Defense's comments, General Milley's comments, and my comments. We seek peace, not to provoke conflict.

So competition is important. There are things we are going to agree on. There are things we are not going to agree on. That is what competition looks like.

Senator GILLIBRAND. Well, relatedly, last month Secretary Austin testified before this Committee that he thought it was important that great powers have the ability to talk to each other and manage crisis. But reports indicate that his outreach was not answered by the PRC during the tensions in February over the high-altitude balloon.

Are you engaged with your counterparts in China's eastern and southern military districts, and from your perspective, why would such engagement be important?

Admiral AQUILINO. Senator, I certainly think it is valuable to have relationships and be able to have conversations, whether it is

for positive reasons or in times of concern. So it has been important for me. I have not had contact with my counterparts, either in the Eastern Theater Command or the Southern Theater Command, although I have had a standing request to have a conversation now since I have been in this position.

We have invited our counterparts to the Chiefs of Defense Conferences that we do two to three times a year virtually, and once a year in person, and we will continue to seek their attendance to those important events where we can come together with all of the regional military leaders to have conversations.

Senator GILLIBRAND. I would be grateful if you do establish that contact that you update the Committee, because this is a priority that we can deconflict.

Admiral AQUILINO. Yes, Senator.

Senator GILLIBRAND. Similarly, the Department has focused on One Health surveillance, meaning an integrated public health approach considering human and veterinary diseases, food, and environmental monitoring, for years, since well before the pandemic. COVID–19 focused us all on the intersection well-framed in the One Health concept.

Can you address any programs or initiatives within INDOPACOM based on the One Health concept and how those are serving to protect the health and security of the American people?

Admiral AQUILINO. Thanks, Senator. We certainly support CDC [Centers for Disease Control and Prevention] in this important initiative. We do not have any programs, but what we do have is exercises. So in 2021, we did an exercise directly focused on this issue. We will do it again in 2023, and we will remain linked with the interagency. Especially in the wake of COVID, the importance, I think, came to light.

Senator GILLIBRAND. Right, and the fact that we do not have any working relationship with China made the work with regard to COVID's beginnings, middles, and end really difficult. So that is why your role is so important in these long-term national security goals.

General LaCamera, Kim Jong-un has launched 12 rounds of missile tests since January. Some of these tests happened close in time to our Freedom Shield exercise with South Korea, but several of the tests predated that exercise. Can you fill us in on what your assessment is driving the recent surge in dangerous activity?

General LACAMERA. His Eighth Party Congress in 2021, Senator, he laid out a trajectory. He is doing that. Right now I think he is reacting to our training. Since President Un has come in we have increased our ability to not just do command post exercises but field training exercises.

The challenge is when we telegraph the timing of it, it gives him an opportunity to plan to use that as a reaction to us. But he is on a course that he set in 2021, and he is moving out on it.

Senator GILLIBRAND. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Gillibrand.

Senator Cotton, please.

Senator COTTON. Admiral, I want to continue along the line of questioning about Taiwan's capabilities. I know that there is a backlog of weapons transfers to Taiwan that has to be addressed.

But not every kind of weapon in the world is backlogged. So while we work on that backlog I want your professional assessment of whether an appropriation of FMF [foreign military financing] funds to provide Taiwan with weapons that are not backlogged, weapons such as mines, might be helpful for them and also helpful to increase deterrence in the Western Pacific.

Admiral AQUILINO. Yes, Senator. The delivery capability to enable our responsibilities under the Taiwan Relations Act is important, and to get it to the people on Taiwan is critical. The capabilities we have laid out, that we have coordinated and identified inside the Department, there are many that could be done very quickly.

Senator COTTON. Could you just give us kind of a handful of the top priorities of what additional FMF funds could get to Taiwan of weapons that are not backlogged?

Admiral AQUILINO. I think what I would give you is the capability set. I cannot tell you which specific ones are backlogged.

Senator COTTON. That is fine.

Admiral AQUILINO. But if you think about anti-aircraft capability, if you think about anti-ship capability in a variety of forms, whether they be missiles, mines, but those capabilities would be critical.

Senator COTTON. There is also the possibility of a Taiwan-focused Presidential drawdown. Would your answer be the same for that, that that also could help surge some of the capabilities to Taiwan that they need to improve deterrence in the Western Pacific, just like FMF funds would?

Admiral AQUILINO. Yes, sir, absolutely, and I thank Congress for taking a look at that, and ultimately for the Presidential drawdown authority, not only for the authority to do it but ultimately to backfill it, if possible, is critical.

Senator COTTON. Okay. You have also expressed concern about the loss of any combat power in the theater. As the Ranking Member on the Air, Land, Power Subcommittee I have been particularly concerned about the fact that our Air Force is characterized by shrinking inventories and an aging fleet, going back 30 years now.

I want to be clear I am not talking about changing our global force posture. I know there has been a lot of angst, if you will, about moving aircraft around from the Western Pacific and from Germany and Alaska. So I am not talking about that. I am talking about adding more capability to the Air Force as a whole.

Given the importance of air power in any kind of conflict scenario in the Western Pacific, would additional F–15EXs and F–35s in the Air Force inventory enhance your efforts to deter conflict?

Admiral AQUILINO. It certainly would, Senator, especially when you talk about the increased capability and capacity that might come with that. Fifth-generation advanced and the fourth-generation capability that exists in the EX, those capabilities would absolutely help deliver deterrent effects.

Senator COTTON. Thank you.

General, North Korea continues to develop new capabilities and make new threats to the Republic of Korea and to the United States and other friends. They recently tested a solid-fueled intercontinental ballistic missile. How does that change your assess-

ment of their capability, and why would that be an important advance for North Korea over their traditional liquid-fueled missiles?

General LACAMERA. Thanks, Senator. It poses some challenges on the indications and warnings. Again, he laid out his plan. He is moving toward it. It is continuing to demonstrate a couple of things. One, he meant what he said, and two, he is continuing to be able to develop this capability. Even with sanctions and even with COVID and lockdowns and things like that, he has been able to continue this development.

Senator COTTON. Why, exactly, does the introduction of a solid-fueled missile reduce your indications and warnings?

General LACAMERA. I would rather move that to a classified setting, Senator.

Senator COTTON. Okay. I think sometimes we get kind of accustomed to these provocations from North Korea and we overlook the fact that they are, in fact, improving their nuclear forces capability, and it is not just the same-old, same-old.

General LACAMERA. I can assure you I am not distracted.

Senator COTTON. No, I know you are not, but I think some people here, and when they see the news in the United States are, and I think it is important that we be mindful that they are making technological progress that is alarming in both the nature of their nuclear forces and also the ranges of their missiles.

Thank you both, gentlemen.

Chairman REED. Thank you, Senator Cotton.

Senator Kelly, please.

Senator KELLY. Thank you, Mr. Chairman.

Admiral Aquilino, as we spoke about this morning, I just want to get a little bit more detail on the Compass Call electronic warfare mission. You know, there is no doubt that the next conflict that we are involved in will be heavily fought, and potentially won in the electromagnetic spectrum. As our adversaries evolve in their EW [electronic warfare] capabilities it is critical that we maintain our competitive edge here by being ready to protect our own assets and also attack our adversaries' capabilities in the electronic warfare spectrum.

So the EC–37B, the new Compass Call capability that I worked on on this Committee to increase the procurement will enhance blue force lethality and survivability. I am really proud that this capability is going to be hosted in Arizona, at Davis-Monthan Air Force Base.

Admiral, what impact would the Compass Call have in INDOPACOM if a crisis or conflict emerged?

Admiral AQUILINO. Thanks, Senator. It is absolutely a part of our set of capabilities that we believe we would need to employ. The new capability out of Compass Call is critical, along with all of the other electromagnetic support capabilities that come from all the services. Again, this is going to be a joint service fight. The Compass Call supports not only the Air Force but the rest of the Joint Force, so it is critical.

Senator KELLY. I know you are not an EW guy, you know, being a former F–14 pilot, who served, by the way, with my brother, I think aboard the Ike. But can you speak specifically about the EC–

37B and what critical capabilities that it can deliver that might not be available on any other platform?

Admiral AQUILINO. To keep it in the unclassified space, the ability for our force to operate in contested space is important. Our ability to have persistent battle space awareness is important, and then any capabilities to do any disruption actions that we would like to take are important.

Senator KELLY. Has it recently been used in any exercises?

Admiral AQUILINO. I will have to get back to you on that, sir.

Senator KELLY. Okay, and then, finally, in your professional military opinion how many Compass Calls do you think that your theater, INDOPACOM, needs to ensure blue force survivability if we were to be in a conflict, specifically with China?

Admiral AQUILINO. Sir, if it is okay I would get back to you in a classified setting on that.

Senator KELLY. General, can you also comment on the necessity for a strong electronic warfare attack capability on the Korean Peninsula?

General LACAMERA. Yes, Senator. Thank you. I need that but I also need the ability to train at that level on the Korean Peninsula, which we currently do not have, either on the ROK [Republic of Korea] Air Force or United States Air Force side. So we have got to go off-peninsula to get some of that training for our pilots to be able to operate in the EW threat area.

Senator KELLY. Admiral, back to you. On the Navy's EW capability, how do you currently assess where the United States Navy is specifically with aircraft carrier battle groups?

Admiral AQUILINO. Senator, as we talked about there is a critical importance for that electronic attack and electronic support capability. It is inherent and interwoven into the carrier strike group formation. It is also used to support the rest of the Joint Force, so those F–18G Growlers are critically important.

Senator KELLY. It is one area where Ukraine is currently struggling when the Russian electronic warfare capability is outmatching them at this point. I think it is indicative of how important electronic warfare is in any modern combat, so thank you, Admiral, and thank you, General.

Chairman REED. Thank you, Senator Kelly.

Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman. Gentlemen, first of all let me begin by thanking both of you for your service to our country, and your families' as well. It is appreciated and sometimes we do not say it enough.

Gentlemen, to both of you, I would like to begin along the same lines with regard to spectrum issues. There has been a discussion about the separation or the sharing of certain parts of the electromagnetic spectrum, in order for our country to continue moving forward in 5G development. But the area in particular that I want to focus on is the area which is the 3.1 to 3.45 gigahertz band. It is especially sensitive because we have already had testimony by naval officials, including Secretary Del Toro, specifically regarding the use of that part of the electromagnetic spectrum with regard to radar.

I would like to continue that line of questioning and provide each of you an opportunity to discuss the importance of the 3.1 to 3.45 portion of the spectrum with regard to protecting our forces, and perhaps a little bit of additional color with regard to how critical that part is with regard to the physics of that area of the spectrum.

Admiral Aquilino?

Admiral AQUILINO. Senator, we certainly operate in that spectrum, so as we look at the potential sharing and how we are going to do that, we certainly do not want to have any place where either our capabilities are impacted by other use, and as always, as good stewards, we do not want to be impactful to any other use. So I think we would have to look at it very closely and figure out how we could make it work.

Senator ROUNDS. Fair to say that the current radar systems that our most advanced destroyers use is using radar systems that operate in that area. Correct?

Admiral AQUILINO. Yes, Senator. There are a variety of Joint Force capabilities that operate in that spectrum, to include missile defense, firm at sea, so there are certainly some critical capabilities there.

Senator ROUNDS. Does that include the island of Hawaii?

Admiral AQUILINO. The Aegis system on Kauai, in Kauai, certainly operates in that spectrum, along with other missile defense capabilities.

Senator ROUNDS. Thank you. General?

General LACAMERA. Senator, I am going to have to take that for the record. That is above my expertise.

Senator ROUNDS. That is fine. Thank you, gentlemen. I simply think that it is very important that we understand—we have a committee which is working right now on sharing that information. There are some people that would like to move forward with including a sale of that part of the spectrum, and I think it is just simply not responsible for us to allow that to happen until after the complete report is completed in September. That is the reason for asking the question.

Admiral Aquilino, cyber and space remain critically important domains to U.S. national security. Could you briefly explain how you integrate your operations with CYBERCOM and SPACECOM? Do you believe the fiscal year 2024 budget adequately supports our ability to effectively address the growing cyber and space threats in the Indo-Pacific?

Admiral AQUILINO. Thanks, Senator. I have a space component, as we just talked about, and I also have a cyber component. As a part of our operations development and planning and campaigning those teams are plugged directly into the physical domains, the ships, the submarines, the airplanes, the ground forces, and we synchronize all those operations.

General Nakasone, General Dickinson, and General Saltzman are great partners. They understand the missions that I have asked, they understand my priorities, and they are taking all actions to support our efforts.

Senator ROUNDS. Thank you. We have talked some about the use of land mines and other capabilities in which to shape a battlefield. General LaCamera, can you talk a little bit about the need to be

able to appropriately shape a battle positioning on land in the Korean Peninsula and the need to have those battle-shaping capabilities.

General LACAMERA. Thanks, Senator. I mean, the Demilitarized Zone is probably one of the most heavily mined areas in the world, and to be able to integrate, to prevent, shape, move, disrupt the enemy's ability to move over land is extremely important to the ground force commander.

Senator ROUNDS. Do you continue to have discussions about the deployment or the ability to deploy appropriate, treaty-appropriate capabilities? We are talking about land mines, basically, but those of a modern era that we can control in terms of when they are available and when they are neutralized?

General LACAMERA. Yes. As we go through on our exercises, mine clearing and mobility exercises is all part of the field training exercises that we do, not just in the digital world but on the ground.

Senator ROUNDS. Can you do your mission appropriately without access to those types of tools?

General LACAMERA. I do not believe so.

Senator ROUNDS. Thank you, sir. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rounds.

Senator Ernst, please.

Senator ERNST. Thank you, Mr. Chair. Gentlemen, thank you very much.

Admiral Aquilino, let's talk a little bit about the Indo-Pacific. It absolutely is the priority theater and site of our pacing threat. Thank you for your defense. If, God forbid, the United States would ever cross swords with China, the defense of our Nation really does depend on you, so thank you.

I want to talk specifically, Admiral, about the land-based systems. DOD reports that China fields more than 1,250 ground-launched ballistic missiles and ground-launched cruise missiles, with ranges between 500 and 5,500 kilometers. How many ground-launched missiles of that range does the United States field?

Admiral AQUILINO. None that I am aware of at this time.

Senator ERNST. You are right. Zero, and of the programs under development, how many exceed 3,000 kilometers, which would be the outer ranges of your area of responsibility?

Admiral AQUILINO. Same.

Senator ERNST. Zero. You are right, Admiral. Thank you. And Admiral, what military advantages would this gap provide China with in any future conflict?

Admiral AQUILINO. Well, Senator, it certainly is in their strategy and their design is to keep us out of the theater. So, our ability to operate in that space is critical, as I discussed.

Senator ERNST. Admiral, would you agree that ground-launched theater-range strike systems could buy down some of that risk in your AOR [area of responsibility]?

Admiral AQUILINO. Senator, as we said, the entire Joint Force would be required both to deter and to fight and win if need be. The ability for the land component to deliver those weapons—and again, those are articulated in my 1254 Report, as requirements that I have identified that we need—it certainly expands our abil-

ity to provide multiple dilemmas, and they are directly involved in our approach.

Senator ERNST. Multiple dilemmas is a good thing. Admiral, would you further agree that DOD should study options for deploying those ground-launched, theater-range strike missiles in your AOR?

Admiral AQUILINO. I do not know about the study. I can tell you we are doing it right now, Senator. Our exercises, our operations as a part of the Multi-Domain Task Force and the Marine Littoral Regiment, the forces are preparing when that capability is delivered.

Senator ERNST. Very good. Thanks, and I am glad to be leading an effort to build the Rings of Fire in INDOPACOM along with Senator Manchin and Congressman Gallagher in the House. We feel that that is important for your capabilities.

Admiral, you spoke a little bit with Senator Wicker about some of the Ukraine tradeoffs, and I want to drill down a little bit on that and be a little more specific. So let's talk about Ukraine as it applies to Taiwan. Has our support to Ukraine depleted any munitions that are needed for Taiwan?

Admiral AQUILINO. Not at this time, Senator.

Senator ERNST. So a little different fight, a little different capabilities that are needed. Just to be very, very clear, the fight that is ongoing between the Ukrainians and the Russians, the munitions that we are providing to Ukraine at this time are not degrading capabilities that are necessary for the fight that might occur in Taiwan.

Admiral AQUILINO. That is correct, Senator.

Senator ERNST. Okay. Thank you. We do have a lot of discussion about this, ongoing, in the Senate and in the House. There are those that say we cannot complete both missions, we should not be helping in Ukraine. I agree with you, Admiral Aquilino, I agree with you, General LaCamera, that we must maintain our assistance to Ukraine. It will not, at this point, degrade what we are doing as we look toward the East.

I want to thank you both for making that very clear today, and I do hope that other Members of Congress understand this need, and plainly put, it is for the defense of our Nation and our global standing that we ensure success with the Ukrainians, but we also cannot take our eye off the ball when it comes to any fight that might occur, whether it is North Korea or whether it is China.

Thank you, gentlemen, very much for being here. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Ernst.

Senator Rosen, please.

Senator ROSEN. Well, thank you, Chairman Reed. I really appreciate you holding this hearing. Thank you both for your service to our Nation, for being here today, and I want to associate myself with my colleague, Senator Ernst, on how we have to do all of it. All of our standing, our safety around the world matters, and I appreciate your service there.

We are going to go right into it, Admiral Aquilino, and talk about maintaining our technological edge, because we are all talking about China. They are leveraging State funding to accelerate their

own military modernization efforts across key domains. They are rapidly advancing in areas like AI [artificial intelligence], robotics, cyber, and, of course, hypersonics.

Domestically, global competition for a skilled workforce, declining investment in R&D [research and development], DOD's contracting challenges, and the STEM [science, technology, engineering and mathematics] workforce gap, they are unfortunately all eroding and they are hurting our technological edge over China.

So it is why I am working to establish a public-private partnership program to accelerate the scaling, production, and acquisition of innovative defense technologies by creating incentives for investment right here in American small businesses working in this space. We have to be nimble.

Admiral Aquilino, how might a public-private partnership that spurs private sector investment and advanced defense capabilities, how do you think that could help us maintain our technological edge with China?

Admiral AQUILINO. Thanks, Senator. As I articulated in my testimony, the ability for the United States to go faster to deliver deterrent effects is critical. The innovation that exists in the United States is second to none anywhere on the globe, so any actions that would deliver outcomes in support of our deterrence effect would always be welcome.

Senator ROSEN. Thank you. I think using the imagination and innovation partner is always a good thing. And another place that we really have to do that is our cybersecurity, and our cybersecurity cooperation, in particular, with Taiwan, because we are acutely aware of the threat that China poses in the cyber domain. China has used Taiwan as a testing ground for its cyber capabilities, and its recent cyberattacks have forced Taiwan to harden their defenses.

It is why today I am introducing, with Senator Rounds—he is not here right now—Senator Rounds and Congressman Gallagher, bipartisan legislation to expand military cybersecurity cooperation with Taiwan. Again, Admiral Aquilino, how do you assess Chinese cyber threats to Taiwan and how is INDOPACOM working to expand military-to-military cybersecurity cooperation with Taiwan to strengthen the deterrence and raise the cost of escalation for Beijing?

Admiral AQUILINO. Thanks, Senator, again, in combination with my partner, General Nakasone from CYBERCOM, we always look to strengthen allies', partners', and friends' networks so that they are secure and that they can have a confidence that the things that they are putting out in their own networks are not being read or impacted by other nations, and we do that across the theater. We certainly have actions undergoing to ensure that.

As a part of our approach in INDOPACOM, and it is a part of my unfunded list, is something called the Mission Partner Environment. To talk to those allies and partners right now, I have 13 separate networks. That is costly. They are at risk, and what we are attempting to deliver is a single pane of glass that allows us to communicate securely, in a cyber safe way, with all of our partners across the region, no matter who, at the level at which we can share.

We have demonstrated already with one of our partners, and we will expand that our ability to scope and scale it. But it is the only way we will be able to operate with those allies and partners in a way that gives us confidence.

Senator ROSEN. I agree with you on the single point of entry because 13 separate networks leaves a lot of points of vulnerability, too much to manage.

In the few seconds I have left, I want to talk about your State partnership program. In Nevada, we have the Nevada National Guard, we have our partnerships with Fiji, Tonga, and most recently Samoa, to support INDOPACOM's mission. I am going to go pretty fast here. In the South Pacific we help you with maritime security and humanitarian assistance goals.

Given their strategic locations, the small island nations, particular again vulnerable to threats from China. How can our State partnership program, how can it be leveraged to bolster the cybersecurity programs in the Indo-Pacific, and the National Guard is?

Admiral AQUILINO. We view those relationships through the National Guard, and General Hokanson is also a great partner in support of that. As a matter of fact, we just signed a recent one—I was at the signing—in one of the Pacific islands not long ago.

So expanding that, building those relationships help build trust, and all of that leads toward increased interoperability and capability, in cyber and all the other domains.

Senator ROSEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rosen.

Senator Budd, please.

Senator BUDD. Thank you, Chairman, and General, Admiral, thank you both for being here.

Admiral, in very real terms what is the strategic significance of the Taiwan Strait? More broadly, why is maintaining a free and open Indo-Pacific matter to Americans?

Admiral AQUILINO. Thanks, Senator. Certainly Taiwan itself is in a strategic location as it applies to the transfer of two-thirds of the global commerce around the world. It matters as it applies to the international rules-based order. In other words, if a single nation is allowed to describe what will be allowed to sail, fly anywhere that they choose. That is not what the like-minded nations of the world have signed onto. There is a coercive potential. There is increased cost potential. There is insurance hike potential. I mean, the second-, third-, and fourth-order effects are enormous. All of those things are what matter to the global nations.

Senator BUDD. Thank you for that. You know, when I think about this, I think about how important it is to work with and empower our allies and our partners to ensure that no one nation can dominate such an important region, militarily.

Sticking with you, Admiral, I have got a few questions I would like to ask about our foreign military sales process. I have asked questions of other geographic combatant commanders as well. I would appreciate, on the first part, just a simple yes or no, and then at the end I will give you a chance to expand, if you will.

Is the current FMS [Foreign Military Sales] process, is it fast and flexible enough to meet our foreign partner security needs, in

your AOR? That is a yes or no. Is it fast and flexible enough to meet——

Admiral AQUILINO. I would like it to go faster.

Senator BUDD. So that is a no, I take it?

Does the transfer of U.S. defense articles build our partners' capacity to provide for their own defense?

Admiral AQUILINO. It does.

Senator BUDD. Is the United States still the security partner of choice in your AOR?

Admiral AQUILINO. For almost all of the nations, yes, sir.

Senator BUDD. Thank you. Is the United States at risk of losing that security partner of choice status to China?

Admiral AQUILINO. I think it is an area of competition that we have to ensure that we execute our roles and make sure that we, in alignment with all those like-minded nations, are moving toward a region that supports the benefit of all those nations.

Senator BUDD. Is China increasing arms exports to any countries in your area of responsibility?

Admiral AQUILINO. They are.

Senator BUDD. Could you explain how foreign military sales challenges are impacting strategic competition with China in the Pacific?

Admiral AQUILINO. The FMS program for the United States, Senator, helps us ensure that we are interoperable with like-minded nations. We are certainly not going to plug in any of the PRC capabilities into our systems. It builds confidence. We have the best capabilities on the globe, also a lesson learned from Ukraine. Continuing to share, operate, coordinate, and exercise with those partners increases their ability to defend themselves and it increases our partnerships.

Senator BUDD. Thank you. Admiral, how comfortable are you with the defense industrial base ability to produce the munitions necessary to meet your requirements?

Admiral AQUILINO. I am extremely impressed with all the defense industrial base. I would like them to go faster.

Senator BUDD. Thank you very much. Chairman, I yield back.

Chairman REED. Thank you, Senator Budd.

Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. Admiral Aquilino and General LaCamera, thank you very much for your service and for being here, and Admiral, always good to see you.

When we met recently, Admiral Aquilino, you made it very clear that you are the responsible person for missile defense of Hawaii. In this year's budget request there is money for a dual-use radar, and this is a good step forward, but certainly will not be the last.

As the supported commander for the mission, do you believe the services and your fellow combatant commanders are providing you the capabilities you need for the defense of Hawaii now and into the future?

Admiral AQUILINO. Aloha, Senator. Thank you. I am absolutely responsible for the defense of Hawaii. I am supported by a variety of great partners. They understand their roles. They understand the stakes. I certainly have an added concern since I live there. But bottom line is Hawaii is defended, and we will continue to defend

it. The additional capabilities we have asked for will enhance that defense.

Senator HIRONO. Thank you. The Compacts of Free Association (COFA) between the U.S. and the Republic of the Marshall Islands, the Federated States of Micronesia and Palau are currently up for renewal. You and I discussed the importance of the Compacts when we met, and they are vital to our ability to maintain a free and open Indo-Pacific.

The COFA agreements include support for COFA citizens who can come to our country without visas, a very special category of lawfully present people in our country. Until the policy changes in the late 1990's, these COFA citizens had access to Federal benefits. While the access to COFA benefits is not directly within your jurisdiction, effective Compacts are critical to our ability to operate in your AOR.

Admiral, do you agree that strong Compact agreements, including honoring our commitments to the people of the Compact states and nations, and particularly those who choose to live in the U.S., is critical to our ongoing operations in the Indo-Pacific?

Admiral AQUILINO. Thanks, Senator. So the Compact Agreements are absolutely critical to the defense of the United States. Those are partner nations that we have deep history ties with. As a matter of fact, the Compact states, per capita, send more servicemembers to the United States military than anywhere else. They have proven to be patriots, and they are tremendous friends. We defend them like they are our hometown, and we will continue to do that. That is critically important.

Now, as you articulated, not in my lane, but the United States takes care of people. Our ability to ensure the broad spectrum of human rights and taking care of people is a part of our DNA, so I certainly support that.

Senator HIRONO. Thank you very much, because as a totality of the commitments that we have to our Compact nations, the DOD, which very much, of course, in our country, very much benefits from these Compacts, that again, while it may not be in your lane as to their ability to access Federal benefits, that is a very important component of our partnership and our close relations with our Compact nations.

Admiral Aquilino, across your theater facilities in Hawaii, Guam, Japan, and Korea are in a State of disrepair, impacting our readiness and ability to mobilize forces quickly. Failing pipes, moldy barracks, intermittent blackouts, and frankly, lackluster repair facilities run counter to our military and community needs.

How does the deferred maintenance of our infrastructure, really resulting in massive facility failures such as at Red Hill, how does that impact your ability to conduct deterrence in your AOR?

Admiral AQUILINO. Thanks, Senator. As you know, the infrastructure and support and funding for the service infrastructure comes through service budgets, but when we took a look at the most recent, specifically the water main break on Hawaii, I took a look through the lens of readiness, on we ought to be able to identify where we are concerned, and not just in Hawaii. We did in Korea. We did it in Japan and the other places throughout the theater, for me to be able to understand our readiness.

So we undertook a study. My team is reviewing what that looks like, and Senator, when we complete that study I would be glad to come back and brief you. I have advocated for those investments into the infrastructure to deliver the readiness we need for the force. But again, I owe you an answer on that.

Senator HIRONO. I think it is really important because as we establish priorities for the DOD and for all of the services that the deferred maintenance is becoming ever, ever larger, and it results in the kind of catastrophes that cost billions of dollars. So I appreciate your leadership on this, and as far as I am concerned we need to have a much better plan on how we are going to keep up with maintenance of all of our facilities across our country, as well as, indeed, the world.

Thank you very much.

Chairman REED. Thank you, Senator Hirono.

Senator Scott, please.

Senator SCOTT. Thanks, Chairman.

General LaCamera, thanks for hosting me last Independence Day. I got to meet a lot of your troops, and a lot of them were from Florida, so thanks for doing that.

If North Korea invades and was able to take over South Korea, would it have any impact on the American family?

General LACAMERA. Yes, I believe it would.

Senator SCOTT. If you were going to say, hey, this is why we should have troops in South Korea, why we should make sure that South Korea remains as an independent country, what would you tell the American public?

General LACAMERA. I would tell it is an important piece of ground. It puts us on the Asian continent. It is a demonstration of our iron-clad commitment to the region and peace and stability in the region. I think South Korea's economy is important to our economy, and that regional stability. I believe that a challenge to that would have impacts on the United States.

Senator SCOTT. Are there any products or services that would be important that the American citizen would be without? Would it matter to the average person that wants to go buy something?

General LACAMERA. No. I believe in capitalism and competition, and I am sure they can find another product elsewhere. I think it is more of an intangible than it is a tangible.

Senator SCOTT. Admiral, what would you say about—would you say the same thing about Taiwan? If China invaded and they were able to win and took over Taiwan, would it have any impact on American families?

Admiral AQUILINO. Senator, first of all, the integration of the global economic network is critical, and there would be multiple touches on the Taiwan piece, specifically the high-end semiconductors is critical to many things we use. So there would be a drastic impact if we were not able to replace it in some other way. There is no doubt about that.

Senator SCOTT. Do you have any idea of what percentage of high-end chip are made in Taiwan and how much of an impact that would have on cars, any electronics we do?

Admiral AQUILINO. Almost all of them, and I do not know what that percentage of impact would be, but it would be broad.

Senator SCOTT. For both of you, for Korea and for Taiwan, are the governments of South Korea and Taiwan, are they doing everything they can to defend themselves? Because it is not the easiest thing in the world to, one, get to Taiwan, or two, to have the resources to be able to defend South Korea. So for each of you, could you just tell me how important it is, and do we have the right resources, are they doing the right things? I mean, as far as I can tell, Taiwan—I mean, what, do they have 8-month conscription? I mean, they have not armed their citizens. I mean, it seems to me that would be some of the simplest things to do, have a stronger military, arm their citizens. The same with South Korea.

Admiral AQUILINO. Yes, Senator. In the wake of the Ukraine invasion by Russia I think if you look at that and if you look at a variety of other actions that have gone on in the region, there is a real concern, to include on the island of Taiwan. If you look at Hong Kong, all right, who is next? If you look at Ukraine and the linkage between Russia and China, there is a real concern.

I have certainly been encouraged by recent actions for conscription and other things that have been taken. I think there is a real seriousness now.

Senator SCOTT. Is that true for South Korea?

General LACAMERA. It is a little bit complicated because right now we have a bilaterally agreed upon OPCON transition program to get them to where they would take over one of my commands, Combined Forces Command. They are on the right trajectory to do that. The agreement is that it will be standards based and not time based, so we are moving in that direction, to make sure that happens.

Senator SCOTT. Senator Budd brought up, and I think some others have brought up our military industrial complex ability to provide weapons. We are way behind, we know, in Taiwan. What do you think the Federal Government ought to be doing to make sure that our defense contractors move faster? Because it will make your lives easier, especially in Taiwan, if they had, what is it, $19 billion worth of arms that they have ordered that we have not provided to them.

Admiral AQUILINO. Yes, Senator. Certainly the President's Budget, as it was submitted, has got a component of a multi-year on the munitions piece, would be very helpful. I think sending that consistent demand signal is what industry needs. That said, as the most innovative Nation in the world, I would hope that the industrial base could take that, combined with other actions, and move faster.

Senator SCOTT. All right. Thank you. Thank you, Chairman.

Chairman REED. Thank you, Senator Scott.

Senator Duckworth, please.

Senator DUCKWORTH. Thank you, Mr. Chairman. Good morning, gentlemen.

I have been emphasizing the importance of our partners in Southeast Asia, in particular, with every chief and combatant commander that has come before this Committee today. I think we can do much more to bolster these key relationships to support the entire Indo-Pacific region, and there are some nations that we have

not managed those relationships in the last few decades in a way that we have in the past.

In August, I plan on taking several of my colleagues to the Philippines, Indonesia, and Thailand, in particular, where we will focus especially on this issue, the many important opportunities that our nations have to partner together.

Admiral Aquilino, in your testimony you highlighted INDOPACOM's enhanced exercises with 14 partner nations like Indonesia's Super Garuda Shield. But beyond these, Coral Gold, Garuda Shield, once-a-year, once-every-other-year exercises, in what other ways does your command plan to deepen cooperation with our allies and partners, in Southeast Asia in particular, including those nations that maybe we have not dealt with on a regular basis, like Vietnam or Cambodia, and some of the other nations?

Admiral AQUILINO. Yes, thanks, Senator. So the exercises certainly are a critical component, as you know. My partner, General Centino, in the Philippines—as a matter of fact, I am flying to the Philippines on Wednesday to go to an event with him and our Japanese counterpart. We have agreed to, across the region, the Chiefs of Defense and myself, to work toward more mini-and multi-lateral sets of engagements, whether they be meetings, tabletop exercise, or operations, for more consistent and more direct ability to operate the interoperable and to execute our mission sets. All for the defense of the region and to keep it safe.

We are doing a ton. There are almost no events we do unilateral anymore. Everything is done with allies and partners.

In Thailand, General Chalermpol is also a good friend and partner. I went to Cobra Gold kickoff, we spent some time together, we laid out what else we could do, and again, we continue to look for those opportunities.

We are always prepared and planning for any HADR [Humanitarian Assistance Disaster Relief] support that might be needed. That is us taking care of humanity should it happen to any of those partners.

So we are plugged in across the board, and I only see it getting more robust and more effective.

Senator DUCKWORTH. Yes, I think also there is intelligence sharing that is important. I know that Singaporeans kind of had a cell there that that helps with, limited intelligence sharing. There are so much that you can do.

My colleague, Senator Rosen, talked a little bit about cyber. I informed her that in 2021, we actually passed legislation that authorized a pilot program that enhances cybersecurity partnership with our forces, with those of Vietnam, Thailand, and Indonesia. I am now planning on introducing legislation to expand this important program to include Malaysia and the Philippines in this year's NDAA.

Admiral Aquilino, can you comment on the value of direct engagement with our overseas partners to help build their cyber skills? You sort of touched on this a little bit, but I think it is really critically important, beyond just speaking directly with us, but also sharing with each other within the region.

Admiral AQUILINO. Yes, thanks, Senator. Certainly our ability to share information and coordinate and cooperate is absolutely dependent on the cybersecurity of those systems. Otherwise, it is just getting to places where it should not go.

You mentioned the CTIF or the Counterterrorism Information Force in Singapore. It is also critical that that sharing gets directly into those facilities to prevent any violent extremism, multilateral, multi-nations, to deliver those effects.

So like I said, General Nakasone has taken great strengths to ensure those neighborhoods have the cybersecurity they need. Our investment in the mission partner environment contributes directly through this zero-trust mindset to ensure we can do it.

Senator DUCKWORTH. Thank you. General LaCamera, I am really interested also in United States-Korea cybersecurity partnerships, and you mentioned this in your testimony. Can you expand on that a little bit here?

General LACAMERA. We are also working with General Nakasone and his folks, and we are also working with the South Koreans. We have our own mission partner environment networks for us to be able to communicate. It is not only important when dealing with the South Korean military but also in the United Nations Command and the Sending States, and making sure that we can coordinate with those countries.

Senator DUCKWORTH. Thank you. I yield back, Mr. Chairman.

Chairman REED. Thank you very much, Senator Duckworth.

Senator Sullivan, please.

Senator SULLIVAN. Thank you, Mr. Chairman. Gentlemen, thank you. I think the country needs to know what an excellent job both of you two are doing in your respective theaters, so I want you to hear that from this Committee. I think both of you are doing exceptional work for our country.

Last year, in the NDAA, this Committee, by the way, unanimously, put in a provision for a floor of 31 amphib ships, 10 big-deck amphibs. The Commandant, a few days ago, testified just how important that was for force projection, crisis response, all over the world, for the Marine Corps and the Navy. How important is a robust complement of amphibs for your theater, both of you?

Admiral AQUILINO. Senator, thanks. The amphibious ready group as it applies with 3-ship ARGs is certainly important to our ability to deter as well as our ability to fight and win. I have articulated the requirements as it exists from INDOPACOM in to the CNO as part of his development approach. Now he owns the whole globe. So right now our requirements are met, and we have advocated to ensure that those requirements are not divested or they are somehow reduced.

Senator SULLIVAN. General? Amphibs, force projection, crisis response, MEU-ARGs [Marine Expeditionary Unit-Amphibious Ready Group]?

General LACAMERA. Yes. Thanks, Senator. We live on a peninsula. Having that capability available allows me to give multiple options or multiple dilemmas to any adversary who would try and disrupt peace and stability in the region.

Senator SULLIVAN. Admiral, we have talked about different kind of deterrence factors with regard to the CCP's [Communist Chinese

Party] decision whether or not to invade Taiwan. Of course, there is the ability, which has already been talked about here, for Taiwan to defend itself, which is in the Taiwan Relations Act, the ability for us, if need be, called upon by the President to help in that regard with our allies.

But there is also this, what I call a third level of deterrence, which is economic, financial, energy, to put forward a very comprehensive suite of sanctions with us and our allies to say to Xi Jinping and others, hey, if you actually undertake a violent military invasion of Taiwan, here are the massive sanctions that are going to crush your economy.

When you think about all instruments of American power, the way the Chinese do, how important do you think that third level of deterrence could be? Because we all want deterrence. No one wants a war in the Taiwan Strait. But we also know if it is going to be started, it will be started by the Chinese. How important is that to look at from the level of deterrence as well, on military factors?

Admiral AQUILINO. Yes, Senator. Again, so the military lens is certainly my lane as it applies to this, but as I look at the Chinese approach for an all forms of national power assault on the international rules-based order. I think it is critical that the United States, and it is also a part of this integrated deterrence strategy the Secretary has tasked us. That all forms of national power have to come together, and the economic lever is a pretty big one, so I concur.

Senator SULLIVAN. Admiral, you and I went to Northern Edge 2 years ago. Impressive. There was a carrier strike group there, a couple hundred aircraft doing night fighting in JPARC [Joint Pacific Alaska Range Complex], really great training for the whole Joint Force. Can you talk a little bit about how important you think Northern Edge is in Alaska for an exercise that brings together all of our services but also our allies, and what we can demonstrate up there in the great State of Alaska?

General LACAMERA. Yes, Senator. Northern Edge, as a matter of fact it is going to happen here again this year, in the not-too-distant future. It is certainly important for us to be able to operate in places that we are comfortable operating. We can train to high-end tactics and capabilities. That said, all of our exercises are important across the globe. Northern Edge is usually one of our largest.

Senator SULLIVAN. General, I was actually out, left the hearing here for a few hours. I greeted an honor flight from Alaska. They just arrived—World War II vet, Korean War vet, Vietnam vets. I love doing this. I never miss when the honor flights come in. We were at the Korean War Memorial. I want to publicly, and I have done it a few times, you and I have talked about, do a shout-out to the Korean Government and the Korean people who just spent over $20 million adding a very important element to the Korean War Memorial, which is the wall of honor, all the United States and Korean killed in action. I encourage all Americans to go look at that. I want to thank again the Korean Government, Korean people, because they paid for that. They paid for that. Pretty special.

How is it going with the new government—I had the opportunity to meet with the new president recently—in terms of their commitment to not only defense, but one thing that I have seen that looks very promising is a new focus on United States-Korea-Japan relations, training. The trilateral aspect of our defense in Northeast Asia is really important. How do you see that going? I want to compliment the new government. They seem to be really putting their shoulder into that, and I think it helps for our deterrence and defense in the region. What is your view on that?

General LACAMERA. Thanks, Senator. In the last year we have been able to increase our combat readiness and focus, not just in command post exercises but at the addition of field training exercise. We have been able to bring in two carrier strike groups. We have been able to do multiple ballistic missile defense exercises. We talked about the other exercises that the admiral does inside of the theater that we have been able to participate in.

President Yoon has really been focusing on combat readiness, and as you discussed with the trilateral piece, the threat is real to the region. KJU [Kim Jung-un], when he fires his missiles, you know, he sends messages to not only South Korea but to Japan and the United States on the capabilities. I think the President is showing tremendous leadership in the region to move forward to secure not just the Korean people but the American people.

Senator SULLIVAN. The trilateral relationship is deepening and getting better, from your perspective?

General LACAMERA. It is. Yes, sir.

Senator SULLIVAN. Great. Thank you, Mr. Chairman.

Chairman REED. Senator Schmitt.

Senator SCHMITT. Thank you, Mr. Chairman. Thank you both for your service.

Admiral, I wanted to ask, I know there has been some discussion, there is $19 billion worth of weapons systems that the Taiwanese have ordered that they have not gotten. I think you and I share the same belief that we need to have a greater sense of urgency with this, as they face a potential invasion from Communist China. What other weapons capabilities do you think, that are not going to take that long, are really important for the Taiwanese to have to defend themselves, that could get there in shorter order?

Admiral AQUILINO. Thanks, Senator. Again, without going into some specific systems, but again, anti-air capability, anti-ship capability, delivered in a variety of means, whether it is missiles, mines, or other things. I think there are some of those that, with some innovative work, could be delivered faster.

Senator SCHMITT. Okay. Admiral, a few days ago the Chinese Ambassador to the Philippines made some significant threats against Taiwan and the safety of 150,000 Filipinos living in Taiwan. This kind of egregious comment is exactly why many countries in the Indo-Pacific are deepening defense cooperation with the United States, as you are aware.

In addition, China continues to conduct provocative operations in the South China Sea, harassing Filipino vessels with lasers and sailing Chinese warships near Filipino holdings in the South China Sea. There has been a commitment, my understanding, to accelerating capability development of the Filipino Armed Forces during

the recent 2+2 meeting to include helping Manila acquire priority defense systems and platforms.

Admiral, in your view what are the next steps we should take with the Philippines?

Admiral AQUILINO. In support of our mutual defense treaty we are providing a variety of capabilities and training and actions with the Philippines. I think the posture initiatives are critical. For the United States to be successful in executing our responsibilities for the defense of the Philippines, those posture initiatives, the new EDCA sites, and delivering that capability and infrastructure is critical. Then we can always continue our operation together.

Exercise Balikatan is going on. It is the largest event in the region for the land component. We have also synchronized at sea. This particular exercise, it is led by the Marine Corps, but it is integral with the Army, the Navy, and the Air Force as a part of Balikatan.

Those continued demonstrations and interoperability is the next piece we can do.

Senator SCHMITT. I think it is just such a key and strategic alliance for us, the Philippines. Would you support—you mentioned infrastructure—would you support a permanent base on the Philippines?

Admiral AQUILINO. I think that decision, Senator, would be certainly critical for the Philippines. I do not think the Philippines are looking for permanent United States bases. That is their sovereign territory. I think what we would like to be able to do is operate with them in places that they would allow us to go at this point in time.

Senator SCHMITT. Okay. Admiral and General, Missouri, as you both know probably, hosts the entire operational fleet of the B–2 Spirit bombers. Could you both discuss, in general terms, the significance of the air leg of the nuclear triad to your deterrence missions?

Admiral AQUILINO. Yes, sir. Certainly the foundational aspect of our strategic nuclear deterrence lies in the triad. So the B–2s, the SSBNs and the ICBM–4s. That modernized force is critical to ensure that our conventional deterrent is foundationally based. For the China portion and the rest of the Indo-Pacific region, it is absolutely critical, and we demonstrate it, aligned with our STRATCOM partner, fairly frequently, and General LaCamera can talk to that.

General LACAMERA. Thanks, Senator. It poses multiple dilemmas. We get questioned about our ability on extended deterrence, and I think it is just another demonstration of the tremendous capability that we bring to any fight worldwide.

Senator SCHMITT. What has been the reaction from our friends and adversaries? What have you witnessed is their reaction to that capability?

General LACAMERA. For us, on the allies side, again, we are looking at this fight from a joint, combined interagency, multidomain, and this is just another arrow in our quiver that we continue to demonstrate. With the testing that KJU has been doing and the support that I get from Admiral Aquilino, and pushing assets,

again, it is just allowing us to build combat readiness, which we have not been able to do.

Admiral AQUILINO. I think for the rest of the region, Senator, it is also important for them. The Australians have allowed us to do two B–2 bomber detachments out of Amberley. So that shows, to me, that the capability is important for them, as well as the rest of the region. We operate, whenever possible, to demonstrating that bomber capability in the theater.

Senator SCHMITT. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Schmitt, and gentlemen, thank you. I have one additional question.

We are currently at impasse in confirming general officers, including, I believe, the 7th Fleet Commander. Admiral Aquilino, what impact does this have on your readiness and the impact also on the offices involved in terms of their whole family situation and also their opportunities outside the service?

Admiral AQUILINO. Senator, thanks for that. Operationally, I am going to have no impact because the 7th Fleet Commander is not going anywhere until a proper replacement is in place. I think the real impact you articulated, right, it is the personal advancement, it is the personal development, it is the family understanding and predictability. Those are the places. So will it hinder our ability to continue to maintain the right people in the right jobs to be able to then potentially advance and take the next right job? Absolutely.

Chairman REED. Again, it seems a situation where, for the next several months, you could get by. But at that point people who are next in line to step up will consider other options outside the service. In fact, we have seen this situation in the Navy because of other situations. Tailhook froze an entire cohort of officers, other incidents in the Navy, and as a result, valuable individuals just could not be promoted and had to retire. If this persists, this will have a serious detriment on readiness eventually. Is that correct?

Admiral AQUILINO. That is absolutely right, Senator, or Chairman, and Glenn Defense Marine is the other example I would think you are inferring to. We did have impact to really quality people in a lot of cases.

Chairman REED. General LaCamera, any other comments in this regard?

General LACAMERA. No. I agree with Admiral Aquilino. I mean, the general officers that I have, I am not giving them up. But again, it does stagnate the next set of general officers or flag officers that are on current promotions lists that are not confirmed. The second and third or long-term effects, there will be impacts, and then when do people decide to leave and you might lose quality.

So I think there is a potential long term.

Chairman REED. I do too, and I hope that we can move quickly and return to regular order and the custom, which is that individuals who served the Nation for 30 years or more have been selected based on their merit as military officers, not any other reason, by panels of other military officers can be confirmed routinely by the Senate, unless there is some particular, specific issue with an individual candidate. That is my hope.

So thank you all, gentlemen, for your testimony today.

[Whereupon, at 11:17 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR MAZIE K. HIRONO

H–2B VISA TEMPORARY RELIEF

1. Senator HIRONO. Admiral Aquilino, the Department of Defense has plans to build a significant amount of infrastructure in Guam as part of our ongoing realignment in the Pacific. The local construction capacity in Guam cannot keep up with the military's vast requirements, which is why the Department must be provided relief from the H–2B Visa temporary need requirement to allow foreign workers to work in Guam and support the construction needs. What will be the impact of not authorizing this H–2B visa temporary relief for Guam?

Admiral AQUILINO. Based on evolving program requirements in Guam, CNMI, and the recovery from typhoon Mawar we are requesting an extended relief from H–2B Visa limitations. If not authorized, the Department of Defense (DOD) Construction Agents (DCAs) will not be able to meet current or anticipated DOD timelines for construction on Guam and the CNMI, significantly degrading the Department's readiness posture and ability to respond to crisis or conflict within the Indo-Pacific area of operations. Costs increases well in excess of reprogramming thresholds are expected for currently planned DOD MILCON projects; although cost impact estimates are still evolving, total increased construction costs over the next 10 years were estimated at over 2 billion dollars prior to typhoon Mawar.

TRAINING, EXERCISES, AND CAMPAIGNING

2. Senator HIRONO. Admiral Aquilino, Campaigning in the Pacific plays a key role in our National Defense Strategy for deterring China. The Services are responsible for providing the forces and funds for your execution in the priority theatre, but based on your independent assessment there appears to be a significant need that the Services are not filling. Admiral Aquilino, there are never enough ships, planes, or battalions, but do you think the Services are appropriately prioritizing the Pacific with their Operations and Maintenance dollars?

Admiral AQUILINO. No, USINDOPACOM components lack the capability to project and maintain forward postured credible forces in the first island chain (FIC) to meet national and combatant command requirements to campaign and support integrated deterrence.

Funding the campaigning components UFR would provide the command and the service components the capability to conduct operations in the first and second island chains at the time of our choosing to reassure allies and partners while achieving integrated deterrence.

3. Senator HIRONO. Admiral Aquilino, in what ways are you using Campaigning to build partnerships in the region?

Admiral AQUILINO. We build partnerships using campaigning in two ways: 1) persistent and capable presence to assure our allies and partners of our commitment to regional security; and 2) consistent joint and multilateral operations and exercises with our allies and partners that build warfighting capabilities and interoperability. Together, presence and combined training and operations—particularly those west of the International Date Line—help sustain us as the partner of choice in the region.

4. Senator HIRONO. Admiral Aquilino, what range modernization efforts and expansion of dual-use facilities do you need to best support INDOPACOM's training?

Admiral AQUILINO. In fiscal years 2023 to 2027, the Pacific Multi-Doman Training and Experimentation Capability (known as "PMTEC") is investing in joint range modernization efforts at the Joint Pacific Alaska Range Complex, the K. Mark Takai Pacific Warfighting Center, and the Pacific Missile Range Facility, Hawaii. Fiscal years 2024 to 2028 investments are focused on extending mobile capabilities west of the International Date Line, as well as facility infrastructure improvements in Japan, Guam and the Philippines. Continued investments in range modernization, especially in joint live, virtual, and constructive capabilities, cyber and space, and integration of artificial intelligence and machine learning across all domains is required to realistically rehearse joint warfighting in highly contested all-domain environments. To achieve these objectives, current U.S. training areas and ranges in the Indo-Pacific require fast-tracking of updated environmental impact statements to

ensure that joint training can occur regardless of what service has title 10 responsibility for the care, maintenance, and operation of these facilities.

PARTNERS AND ALLIES

5. Senator HIRONO. Our partners and allies are our most critical advantage in any potential contingency with China. These relationships only work when they are mutually beneficial. General LaCamera, one of our most important allies is the Republic of Korea. How are we increasing interoperability between our two militaries, and between our other allies and partners in the region?

General LACAMERA. Our network of alliances and partnerships around the world is one of our greatest asymmetric advantages. The United States-Republic of Korea (ROK) Alliance serves as a stabilizing force, as well as an example to others of our Ironclad commitment. From individual and small unit training—developing true "expertise in the basics"—to large-scale combined, bilateral, trilateral, and multinational exercises, we continue to sharpen our warfighting and combat skills. This is the foundation for our combined and joint combat readiness to inflict lethal and non-lethal effects in all domains as necessary.

At the unit-level (2d Infantry Division (Combined) / United Nations Command Security Battalion—Joint Security Area), United States and ROK personnel exercise together often enough to make it truly routine. Additionally, the ROK has increased its participation in tactical exercises off the Korea Peninsula including 2023 events such as Red Flag Alaska, Service Level Training Exercise with the U.S. Marine Corps in 29 Palms, California, participation at the National Training Center with the U.S. Army, and the Rim of the Pacific Exercise (RIMPAC) along with several others. These events provide ample opportunities to improve interoperability and increase combat readiness. To achieve the highest State of combat readiness across the theater, however, we focus on exercising and improving our premier, semi-annual, theater-level command post exercises. These exercises allow us to evaluate combined capabilities, which in turn inform operational planning and allow us to improve our combined and joint effectiveness. Additionally, we seek every opportunity to increase multilateral training exercises in and around the region, incorporating like-minded nations and our other treaty allies.

The Combined and Joint Services actively pursue opportunities to conduct bilateral and multilateral training to respond to wartime contingencies, to enhance interoperability, and build partnership capacity in the Indo-Pacific region. Along with combined exercises in the Korean Theater of Operations, Combined and Joint Services engagements test its Multi-Domain Operations capabilities through leveraging annual and biannual Joint exercises and training. These opportunities ensure we are well-integrated into the greater Indo-Pacific theater. Our enhanced interoperability with strategic partners and Joint Service Allies is the linchpin in increasing the ability to fight and defend together coherently, effectively, and efficiently to achieve tactical, operational, and strategic objectives.

Between the United States, the Republic of Korea, and Japan, we continue to look for opportunities to bolster the trilateral relationship, as well as the ROK-Japan bilateral relationship. During the historic Camp David Summit between the United States, ROK, and Japan in August 2023, our leaders committed to deepening trilateral defense cooperation. Since then, the Department has delivered on this commitment by approving a multi-year, trilateral exercise plan and fully activating a real-time DPRK missile warning data-sharing mechanism. We are expanding exercises to include anti-submarine warfare, maritime interdiction, humanitarian assistance and disaster relief, and ballistic missile defense. Additionally, we continue to incorporate multinational contributions through the United Nations Command to serve as an enabler and force multiplier for the Alliance.

6. Senator HIRONO. Admiral Aquilino, what is the importance of programs like the Blue Pacific Cooperation Initiative and the International Security Cooperation Program?

Admiral AQUILINO. Through the Blue Pacific Cooperative Initiative, USINDOPACOM works directly with our Pacific Island partners in regional fusion centers to identify critical areas of improvement for multilateral information sharing and maritime domain awareness (MDA). Our partners emphasize climate change, illegal, unreported, and unregulated (IUU) fishing, and transnational crime as priority threats in their areas of responsibility. Increased MDA and operational/tactical information-sharing capabilities can create an enhanced network to address these threats and increase regional collaborative efforts. We understand the importance of bolstering—and working through—existing regional Pacific Island architectures and organizations, such as the Forum Fisheries Agency and the Fiji Maritime Sur-

veillance Rescue Coordination Centre, avoiding any duplication of efforts in the region. Therefore, we coordinate extensively to align ourselves with regional and overarching U.S. Government priorities and initiatives, such as the Pacific Islands Forum 2050 Strategy for the Blue Pacific Continent, the Indo-Pacific Maritime Domain Awareness (IPMDA) initiative, and the Partners in the Blue Pacific Initiative. Our enabling partner for this program, Joint Interagency Task Force West (JIATF West), is uniquely positioned to implement the Blue Pacific Cooperative Initiative since most Pacific Island nations lack military capacity and rely on coordinated efforts through a law enforcement and inter-agency nexus. Leveraging existing partner agency relationships—and experience in sharing law enforcement related information-JIATF West is a relevant partner who contributes to the overall U.S. Government vision for strengthening partnerships toward a resilient Pacific region.

7. Senator HIRONO. Admiral Aquilino and General LaCamera, how do you each leverage the State Department and other whole-of-government partner agencies to ensure we are the region's partner of choice?

Admiral AQUILINO. USINDOPACOM leverages each agency's unique authorities and integrates the collaborative efforts of mission country teams and USG departments and agencies in the National Capital Region (NCR) to achieve unity of effort in support of the National Security Strategy (NSS), National Defense Strategy (NDS), National Military Strategy (NMS), and INDOPACOM Theater Strategy and Campaign Plan. We accomplish this unity of effort through the resident Foreign Policy Advisor and his team for State Department coordination and with the other assigned Liaison Officers that represent 12 other agencies. All of the agency advisors and LNOs are members of the INDOPACOM Joint Interagency Coordination Group (JIACG) in the J5 that meets bi-monthly during competition and daily during Crisis response.

General LACAMERA. The United States-ROK Alliance encompasses not only the military, but the whole-of-government partnership. We work in concert with all elements of national power—including diplomatic, economic, and intelligence activities—as part of a whole-of-government effort to address threats to the Homeland, our allies and partners, and our interests in the Indo-Pacific. I believe that contributions of non-DOD departments and agencies are fundamental to achieving U.S. national security objectives and our diplomats should be in the lead for issues related to America's interests in the region and around the world. The U.S. military's presence on the Peninsula contributes to our diplomatic efforts to establish and maintain peace, to persuade and convince regional leaders, and to advance our goals for regional security and stability from a position of strength. We have an excellent relationship and interact daily with our Embassy Country Team counterparts and work very closely on shared issues to ensure our operations and activities are always nested within a broader U.S. Government approach. I speak with the United States Ambassador to the ROK on a weekly basis, and closely coordinate our actions so that we are able leverage our military and diplomatic efforts for a greater effect. Also, as the Commander, United Nations Command (UNC), I meet monthly with the Ambassadors of UNC Member States Through the monthly Ambassadors Roundtable, we foster and maintain a relationship with a network of 17 countries from 6 continents.

NORTH KOREAN MISSILE THREAT

8. Senator HIRONO. Within the last several months, North Korea has continued renewed its threats of nuclear destruction to both the United States and the Republic of Korea. Troublingly, this has been paired with new developments in nuclear and missile technology. This is one reason I remain so closely focused on the missile defense of both Hawaii and Guam. General LaCamera, what is your assessment of the credibility of such threats?

General LACAMERA. The Democratic People's Republic of Korea (DPRK) is capable of delivering on threats against Guam, Hawaii, and the continental United States. Since January 2022, the DPRK has launched 14 developmental long-range ballistic missiles, demonstrating the capability to strike Guam, Hawaii, and the entirety of North America. Pyongyang possesses tested nuclear devices that purportedly can pair with these missiles. Kim Jong-un views his nuclear missile capability as critical to guaranteeing the survival of his regime and almost certainly will resist efforts to force him to give up his arsenal now or in the future. A robust missile defense is one of the crucial components of deterring the DPRK's use of nuclear weapons. We intend to continue to reinforce the advances in missile defense of the ROK, as their capabilities enhance our combined abilities to effectively deter and respond to DPRK missile threats.

9. Senator HIRONO. Admiral Aquilino and General LaCamera, how have you prepared your respective commands for the defense of U.S. bases and territories against the possibility of hypersonic missiles?

Admiral AQUILINO. Our current BMD posture is designed to defeat ballistic threats from rogue actors like the Democratic People's Republic of Korea (the DPRK). United States missile defense policy states that we rely on strategic deterrence for defense of the Homeland from near-peer advanced threats like hypersonic missiles. However, policy states that we will develop missile defense capabilities to defend against any system that may threaten our United States and allied interests abroad, which is why I've strongly advocated to accelerate capabilities like the Guam Defense System and an advanced radar to replace the FAA radar in Hawaii.

General LACAMERA. United Nations Command (UNC), Combined Forces Command (CFC), and United States Forces Korea (USFK) balance the hypersonic threat against ballistic and cruise missile threats. The ROK government approved a plan in April 2023 to move forward with a hypersonic missile defense system. USFK continues to work with USINDOPACOM and OSD (R&E) to address hypersonic and other missile defense capabilities to defend our homelands and develop a United States/ROK alliance hypersonic kill web.

DOD SUBMARINE RESOURCE PRIORITIZATION

10. Senator HIRONO. Admiral Aquilino, I was pleased to hear details recently about the AUKUS submarine partnership with the UK and Australia, but note the key initiatives of the agreement are still several years away from fruition. Admiral Aquilino, with the loss of USS *Connecticut* to repairs until 2025 and continued delays in the *Virginia*-class construction, have you had any conversations with Navy leadership about permanently relocating, or rotationally deploying, East coast submarines to the your AOR to bolster deterrence until AUKUS is fully implemented?

Admiral AQUILINO. I will provide more detail in a classified response.

11. Senator HIRONO. Admiral Aquilino, in your professional opinion, do you have the requisite number of attack submarines to deter Chinese aggression in the Pacific region?

Admiral AQUILINO. I will provide more detail in a classified response.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

12. Senator WARREN. Admiral Aquilino, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

Admiral AQUILINO. The funding for projects within the USINDOPACOM UPL does not fall within the command's annual budget; these projects are resourced by each of the military service budgets. USINDOPACOM advocates for the project funding, but does not determine funding levels within the services' budget submissions.

13. Senator WARREN. Admiral Aquilino, historically, have previous Unfunded Priorities Lists items been included in the following year's base budget? Have Unfunded Priorities Lists items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

Admiral AQUILINO. The funding for projects within the USINDOPACOM UPL does not fall within the command's annual budget; these projects are resourced by each of the military service budgets. USINDOPACOM advocates for the project funding, but do not determine funding levels within the services' budget submissions.

Sec 1254	Description	FY23 Req ($mil)	FY24 Req ($mil)
AA	Operationalize Near-Term Space Control	804 (532 Funded)	1,319
AA	Service Tactical SIGINT Upgrades and PED Enhancements	30 (0 Funded)	136
AA	Resilient TS-SCI Warfighting Architecture (FY23 -JWICS Modernization)	100 (88 Funded)	63
AA	Standard Missile (SM-6) 1B Variant (USN)	443 (193 Funded)	443
AA	Powered Quickstrike (QS-P) (USN)	12 (0 Funded)	12
AA	Hammerhead Mine (USN)	161 (116 Funded)	172
AA	INDOPACOM Campaigning	436 (276 Funded)	786
DD	Military Construction - Construction	662 (614.7 Funded)	1,984
EE	Mission Partner Environment (MPE)	98.1 (92.8 Funded)	153
EE	International Security Cooperation Programs (ISCP)	485.1 (449.3 Funded)	530
FF	Information Operations	36.5 (9 Funded)	37
FF	Asia Pacific Regional Initiative (APRI)	14 (3.7 Funded)	14

14. Senator WARREN. Admiral Aquilino, do you agree that Federal agencies should be required to work within the confines of base budget process?

Admiral AQUILINO. Yes, I do concur. However, USINDOPACOM capability requirement assessments are independent of the Department's budgeting process. As directed by Section 1254 of the Fiscal Year 2023 NDAA, the USINDOPACOM requirements for capability development and posture initiatives are outlined in our independent assessment.

15. Senator WARREN. Admiral Aquilino, Secretary of Defense Austin supports legislation that would repeal the requirement for individual leaders to submit unfunded priority lists under 10 U.S.C. 222a. He stated this publicly in a Senate Armed Services Committee hearing on March 28, 2023 and in a letter that Under Secretary Michael J. McCord sent on behalf on Secretary Austin to me on March 20, 2023. Do you plan to continue to submit unfunded priority lists?

Admiral AQUILINO. USINDOPACOM will continue to submit unfunded priority as required by 10 USC § 222a subsection (d) until legislation is pass to repeal such requirements.

16. Senator WARREN. Admiral Aquilino, if you plan to submit unfunded priority lists in the future, why are you doing so despite Secretary of Defense Austin's support for the repeal of these required lists?

Admiral AQUILINO. USINDOPACOM is required by law per 10 USC § 222a subsection (d) to submit the report of Unfunded priorities to Congress.

INFORMATION ON UNFUNDED PRIORITIES LISTS

17. Senator WARREN. Admiral Aquilino, what was the cost of putting together this Unfunded Priorities Lists?

Admiral AQUILINO. The estimate cost of the UPL report for the Department of Defense is approximately $42,637 in labor cost for fiscal year 2023.

For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

18. Senator WARREN. Admiral Aquilino, please provide a detailed description of the Unfunded Priorities Lists.

Admiral AQUILINO.

- Guam Defense System—Accounts for the $147 million shortfall that would delay the deployment of integrated air missile defense to Guam. The Guam Defense System is a 360-degree persistent, layered, air and missile defense capability to defend Guam from ballistic, cruise, and hypersonic missile threats. At risk is the timely deployment of an initial IAMD deployment and enhanced IAMD deployment capability by 2027.
- Joint Fires Network—This funding request will develop an initial Joint Fires Network (JFN) prototype for the USINDOPACOM AOR that will provide dis-

tributed, resilient joint tactical fire command and control and enable a common joint network with resilient transport to maximize joint kill chains.

- Mission Partner Environment—The Mission Partner Environment (MPE) provides USINDOPACOM the ability to securely communicate, collaborate, plan, and execute with multiple allies and partners and modernizes our headquarters, command, control, communication, computer and information technology infrastructure to assure command and control in a contested environment.
- Maritime Strike Tomahawk (MST)—Tomahawk Land Attack Missile is a long-range, all weather, jet-powered, subsonic cruise missile. Blk V integrates advanced navigation and guidance, and includes a datalink that enables the missile to switch targets while in flight. The Blk Va, MST, has longer range and improved seeker technology for dynamic targeting and maritime strike capability.
- USINDOPACOM Campaigning—Additional funding for campaigning provides USINDOPACOM components the additional capability in terms of transportation and other support costs to mass air, ground, maritime, and special operations forces multiple times per year as part of a coordinated, synchronized, set of operations and activities west of the international date line.
- Persistent Undersea Targeting—Invests in the development and acquisition of fixed distributed systems that provide cuing information used in antisubmarine warfare.
- Military Construction-Design—Funds to be utilized for architectural and engineering services, and construction design in connection with military construction projects.
- Military Construction—Construction—Funds unspecified minor military construction (UMMC) to enable USINDOPACOM to leverage current authorities to develop and deliver footprint requirements in a timely manner.
- Joint Training Team—Resources to support administrative and logistical function of a joint training team conducting a variety of missions including bilateral engagements, travel, training, and support for foreign military sales.
- Joint Task Force Micronesia—Invests in a Joint Task Force to coordinate USINDOPACOM activities in Micronesia. JTF-M is responsible for developing and executing the Micronesia Master Plan by integrating posture plans, military construction projects, land use negotiations, and other joint support activities.
- Precision Strike Missile (PrSM) Increment 2 (USA)—Resources the surface-to-surface missile that replaces and improves upon ATACMS. PrSM will provide joint force commanders with a 24/7, all-weather, anti-ship capability to attack critical and time sensitive area and point targets including threat air defense, missile launchers, command and control centers, assembly/staging areas and high payoff targets.
- Joint Experimentation and Innovation—Funds the theater-wide campaign of joint experiments to inform and strengthen the ability of joint and combined forces to execute all-domain operations in contested environments.
- Standard Missile 6 (SM–6) 1B Variant—Provides the increased capability for ground-based and naval long-range weapons for extended range to target enemy anti-surface warfare capability. This capability is foundational to provide combat formations with precision-strike capabilities that are operationally decentralized and geographically distributed in theater.
- Clandestine Delivered Mine—Upgrades Clandestine Delivered Mine (CDM) systems with technology improvements to enable placement and integration with various delivery platforms.
- Hammerhead Mine—Funds the development of an offensive mining system delivered from an unmanned underwater vehicle to detect, classify, and destroy submarine threats.
- Powered Quickstrike—Resources a family of shallow water, aircraft laid mines used against surface and subsurface targets. Powered Quickstrike (QS-P) enhances component integration and accelerates development through a rapid acquisition pathway.
- Operationalize Near Term Space Control—Resources the next generation of national defense space architecture to enable U.S. military operations and responses to emerging multi-domain threats and adversaries.

- Offensive Cyber-Access and Effects—Resources to develop access and effects for cyberspace operations.
- All Domain Missile Warning and Missile Tracking Architecture—Upgrades the Terminal High Altitude Area Defense (THAAD) processing software with Enhanced THAAD Mission Support Element integration (eTMI) to greatly increase joint force integrated Air and Missile defense protections.
- Space-Based Persistent Custody Sensors—Accelerates the development of space-based sensors necessary to provide persistent and complete coverage of air, sea, and ground-launched missile threats.
- Cyber Security and Network Defenses-Funds USINDOPACOM theater tailored cyber sensors, tools, aids, platforms, and physical replication efforts to support key industrial control system vulnerability and mitigation efforts on DOD facilities.
- International Security Cooperation Program—Resources projects under Title 10 U.S.C Section 333, Train and Equip; U.S.C. Section 332, Institutional Capacity Building; and Maritime Security Initiatives (MSI) authorities. ISCP develops critical capabilities of allies and partners in theater to enhance integrated deterrence.
- Joint Task Force Indo-Pacific—Funds the integration of JTF-IP with USINDOPACOM components, and FVEY partners to maximize resources and information sharing to develop a cogent common intelligence and common operational picture.
- Asia Pacific Regional Initiative—Funds key theater engagements that advance both military-to-military and civil-military activities to counter malign influence in the Indo Pacific.
- HQ Manpower Enhancements—Resources relocation and recruiting incentives directly associated with USINDOPACOM's mission as detailed in the National Defense Strategy (NDS).
- Joint Training, Exercise and Evaluation Program—Resources the Joint Training Plan (JTP) and Joint Exercise Program (JEP), key elements of INDOPACOM's Campaign Plan to provide trained and ready joint forces. JEP events put aggregated combat formations in position to conduct operations and activities to strengthen deterrence, assure allies and partners, counter adversary coercive actions, and increase ally and partner interoperability.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—This request resources enhancements to the U.S. Army Pacific (USARPAC) Processing, Exploitation, and Dissemination (PED) Center to enable greater operational capacity to process, exploit, and disseminate intelligence mission data to the warfighter. The Pacific PED Center is focused on maintaining custody of Peer Adversary ground targets and Joint targets. It complements other PED Centers by providing federated and surge capacity during a crisis or conflict in the INDOPACOM area of responsibility and can support theaters.
- Resilient TS-SCI Warfighting Architecture—Establish a Secure and survivable TS/SCI Warfighter Architecture to provide resilient network connectivity, interoperability, transport, data storage, and forward edge processing to support all aspects of USINDOPACOM C5ISRT in a degraded or denied communications environment across the region.
- Information Operations—Effort provides resource to implement programs and tools to increase the command's focus on competition and domination in the information environment through sustained Information Operations Military Information Support Operations (MISO), Operational Security (OPSEC) and Military Deception (MILDEC).

19. Senator WARREN. Admiral Aquilino, what does the Unfunded Priorities Lists purchase?

Admiral AQUILINO.

- Guam Defense System—Live Fire Test from Guam; Initial IAMD Deployment (AN/TPX-X1) Aegis Guam System, Expeditionary Command Center, C2BMC Downloadable Client, Mk–41 Vertical Launching Station, MRC Prototype, Sentinel A4 radar, and IBCS; Coordinated Defense against HGVs, BMs, MaRVs, and CMs; 360-degree persistent integrated air and missile defense against all threat classes.
- Joint Fires Network—The request will field initial development and deployment of 28 prototype Joint Fires Network nodes across the USINDOPACOM AOR, to

include the integration of Assault Breaker II capabilities. It will also include funding to stand up a Joint Program / Integration Office to continue development and sustain the prototypes.

- Mission Partner Environment—USINDOPACOM is purchasing hardware components for Multi Domain Delivery and Mission Partner Environment zero trust hardening; a combination of COTS and open source software; and integration services for COTS and GOTS software and datasets already developed. Funding will also be used to handle development, integration, and deployment of the systems.
- Campaigning—This request will provide components the ability to conduct operations and vary the scale, size, and duration of these operations in the USINDOPCOM AOR. This funds the transportation and other support costs to mass air, ground, maritime, and special operations forces.
- Maritime Strike Tomahawk (MST)—This funding increases new production of Blk Va missiles and accelerates conversation of existing inventory, which includes both recertification and modernization of Blk IV missiles. It funds recertification of mechanical and electrical components and missile capsule, consumables, fuse components, armed firing devices (AFD). It also funds modifications for weapon modernization, to include: Navigation Communication (NAVCOMS) upgrade and integration of new seeker kit hardware (upgrades sensors, nosecone, ULTRA processing, cooling pump and plumbing, bulkhead, power and signal harnesses, power supply, electrical chase insulators, telemetry unit, wiring, hybrid homopolar permanent magnet generator, and primary power interface (PPI) unit).
- Persistent Undersea Targeting—The specific end item is a more capable set of undersea sensors that can detect adversary and regional maritime activity. In general, these funds are accelerating the cost profile to achieve IOC sooner than currently planned.
- Military Construction—Funds planning and design activities of PDI initiatives as well as projects of interest that close infrastructure gaps in the Guam Cluster, Australia, Philippines, Japan, and Hawaii projects to advance USINDOPACOM's posture requirements.
- Joint Training Team—Funds additional resources for administrative, transportation, and logistical expenses associated with the training team.
- Joint Task Force Micronesia—Funds personnel that will serve as the foundation for the JTF-M. Additional costs will support the renovation of office space on Guam, travel, per diem, and IT services required for the initial stand-up in Hawaii and Guam.
- Precision Strike Missile (PrSM) Increment 2 (USA)—Provides procurement for accelerated fielding of Increment 2 and RDT&E for Increment 4 development to enable fielding in operationally relevant quantities by fiscal year 2027.
- Joint Experimentation and Innovation—This funds the ability to conduct Joint International Experimentation. JIE is centered on Taiwan self-defense, taking existing or relatively mature technologies to demonstrate systems that Taiwan may obtain to bolster deterrence in the Taiwan Strait.
- Standard Missile 6 (SM–6) 1B Variant—Provide RDT&E for SM–6 Blk IB missile development and integration. Additionally, this request funds increase production startup cost, procurement of additional canisters (Mk–29 Mod 1), and production and engineering support.
- Clandestine Delivered Mine—CDMs are shallow-water mines that compliment aerial mining capabilities and are emplaced clandestinely via unmanned undersea and surface delivery platforms. Increment 1 enables delivery by unmanned systems and vessels of opportunity, to enable access to contested environments. Increment 2 enables remote arming and reverse arming.
- Hammerhead Mine—The Hammerhead Maritimes Mine is a moored encapsulated torpedo (Mk–54) that has the capability to detect, classify, and engage anti-submarine warfare targets. The funding request accelerates procurement of Hammerhead maritime mine components, integrates technology upgrades and increase production to enable fielding in operationally relevant quantities by fiscal year 2027.
- Powered Quickstrike—Powered Quickstrike (QS-P) is an enhanced standoff aerial variant of the Mk–62 Quickstrike mine that provides any JDAM-enabled aircraft with a long-range mining capability. Capitalizing on development and acquisition efficiencies of the Quickstrike-Extended Range (QS-ER) variant, QS-

P integrates upgraded technology, a powered wing kit, and alternate warhead to significantly increase range and lethality.

- Operationalize Near Term Space Control—This funding is for additional resourcing needed to expand two U.S. Space Force capabilities. Though the details are classified to protect our military advantages, each effort produces unique and complimentary advantages to USINDOPACOM Joint Force Commanders as well as to USSPACECOM's area of operations.
- Offensive Cyber-Access and Effects—The funding is for additional resourcing needed to operationalize and expand non-kinetic effects in and through cyberspace.
- All Domain Missile Warning and Missile Tracking Architecture—This funding will integrate the THAAD weapon system with the MSE effector to provide enhanced missile defense capabilities.
- Space-Based Persistent Custody Sensors—Funding accelerates the fielding of a classified capability. USINDOPACOM requires a network of space-based sensors necessary to provide persistent and complete coverage of air, sea, and ground-launched missile threats
- Cyber Security and Network Defenses—Funds additional resources needed to improve sensing in USINDOPACOM networks and enhance the ability to defend against the volume, velocity, and variety of threats to military networks.
- International Security Cooperation Program—The requested 11 fiscal year 2024 SSCI projects not marked with full funding cover a variety of capabilities for the partner nations.
- Joint Task Force Indo-Pacific—Funding will support the expansion of existing secure area capabilities by retrofitting what was built under Project P–200 and in 2010, and converting an unsecure area to a space suitable for secure mission operations, equipped with secured rooms and secured video teleconference (SVTC) capability. The proposed enhancement will increase capacity to (45) workstation, and facilitate expanded analysis, planning and synchronization.
- Asia Pacific Regional Initiative—APRI is a USINDOPACOM-specific initiative that utilizes Operations and Maintenance, Navy (OMN) funding for the expansion of U.S. military security cooperation activities with partner nations. The capabilities developed deepen mission partnership and interoperability through subject matter expert exchanges, exercises, and conferences.
- HQ Manpower Enhancements—Incentives and inducements to compel highly qualified talent to accept an employment opportunities at the USINDOPACOM headquarters.
- Joint Training, Exercise and Evaluation Program (JTEEP)—The $69.935 million will address discrete shortfalls in six priority joint exercises: Freedom Shield, Ulchi Freedom Shield, Balikatan, Cobra Gold, Tempest Wind, Garuda Shield.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—Resources will provide an increase in contracted labor at the Pacific PED Center.
- Resilient TS-SCI Warfighting Architecture—This investment will provide: (1) a TS//SCI Regional cloud enabled storage and compute capability in the theater; (2) a fixed Sub-Regional data storage;/compute nodes and expeditionary nodes; and (3) a secure satellite communications kits and associated support equipment for data transport. It will enable the Joint/Combined Force to leverage critical intelligence data essential to the Joint Targeting and Fires architecture across the theater.
- Information Operations—Enhances Military Information Support Operations (MISO) and interagency collaboration capacity, increases digital and print presence from 11 to 15 regional languages for the Indo-Pacific Defense Forum (IPDF), expands collaboration and capacity with Radio Free Asia, increases use of traditional media in Oceania, funds assessments of USINDOPACOM in the information environment, development of camouflage, concealment, and deception (CC&D) capabilities.

20. Senator WARREN. Admiral Aquilino, please include detail on all end items with quantities, contractor Full Time Equivalent, etc.

Admiral AQUILINO.

- Guam Defense System—This includes various integration efforts and quantities for the items associated with Guam Defense System.

- Joint Fires Network—This funding procures 28 prototype systems, the vendor is to yet be determined.
- Mission Partner Environment—

Item Type	Cost ($M)
Multi-Domain Delivery (Single pane of glass)	$17.5
Korea Data Center Hardware/Software	$4
Guam Data Center Hardware/Software	$6
FAK and Mobile Servers	$6
SATCOM / Transport Diversity	$5.5
Total	$39

- Campaigning—No specific end times are purchased with this request.
- Maritime Strike Tomahawk (MST)—This funding increases new production of Blk Va and accelerates conversation of existing inventory, which includes both recertification and modernization of Blk IV missiles. It funds recertification of mechanical and electrical components and missile capsule, consumables, fuse components, armed firing devices (AFD). It also funds modifications for weapon modernization, to include: Navigation Communication (NAVCOMS) upgrade and integration of new seeker kit hardware (upgrades sensors, nosecone, ULTRA processing, cooling pump and plumbing, bulkhead, power and signal harnesses, power supply, electrical chase insulators, telemetry unit, wiring, hybrid homopolar permanent magnet generator, and primary power interface (PPI) unit).
- Persistent Undersea Targeting—Undersea sensors
- Military Construction—

P&D UPR Requirement	Amount ($M)	Location
Logistics & CL III & IV Storage	12.5	Australia – Various locations
APOD, EDCA Expansion, Logistics	1.5	Philippines
CL II & IV Storage, Composite Watercraft	19.5	Japan
Class III & V Storage	7.7	Guam
MDTF/MLR	27.8	Hawaii
Total P&D MILCON	**69**	

UMMC UPR Requirement	Amount ($M)	Location
SPOD Shore infrastructure, Boat Ramp	10.9	CNMI
Joint Range Expansion & Mooring Installation	8.9	Palau
Port Improvements and Shore Infrastructure	6.3	FSM
Regional Maritime Training Center	3.3	PNG
Theater-Wide UMMC	32.7	
Total UMMC and ERC	**62.09**	

- Joint Training Team—Funds additional resources for administrative, transportation, and logistical expenses associated with the training team.
- Joint Task Force Micronesia—This will resource the labor, travel and per-diem of a 42-person Joint Task Force.

Item	Amount ($M)
Labor/Personnel	18.2
Operating Cost (renovations, travel, per diem, IT Services)	7.3
Total	**25.5**

- Precision Strike Missile (PrSM) Increment 2 (USA)—Provides procurement for accelerated fielding of Increment 2 and RDT&E for Increment 4 development to enable fielding in operationally relevant quantities by fiscal year 2027.
- Joint Experimentation and Innovation—Experimentation execution funds manpower for experiment planning, execution, and reporting. Second, it funds material, both commercial and government off the shelf items, required to execute international experiments to include support equipment and/or developmental software and systems for potential leave-behind capabilities. Finally, it funds the logistics required to deploy, install, and remove any equipment required for Joint International Experimentations.
- Standard Missile 6 (SM–6) 1B Variant—Upgrades to airframe, propulsion, and guidance systems, and redesigned 21-inch motor that substantially increases the missile range and speed.
- Clandestine Delivered Mine—This funding request accelerates both development and procurement efforts in order to field in operationally relevant quantities within the FYDP.
- Hammerhead Mine—The funding request accelerates procurement of Hammerhead maritime mine components, integrates technology upgrades and increase production to enable fielding in operationally relevant quantities by fiscal year 2027.
- Powered Quickstrike—The funding will enable accelerating of acquisition planning, systems engineering, contract, and procurement planning and integrate propulsion module and wing kits, conduct initial testing, and demonstrate early prototyping. These efforts, if funded in fiscal year 2024 will enable the service the ability to rapidly demonstrate early operational capability and meet the USINDOPACOM requirements and timelines for fielding and operational use.
- Operationalize Near Term Space Control—The specific end items are described in the classified USINDOPACOM Section 1254 annex, with specific fiscal year 2024 funding at $66 million and $209 million respectively. In general, these funds are expanding current efforts across two lines of effort by the U.S. Space Force.
- Offensive Cyber-Access and Effects—The specific end items are primarily software code and tailored mission-specific access-enabling hardware.
- All Domain Missile Warning and Missile Tracking Architecture—The end items are software modifications to existing THAAD weapons system baseline. No additional hardware items other than potential specific test equipment and/or assets, are required for the end item weapon system.
- Space-Based Persistent Custody Sensors—The specific end items are described in the classified USINDOPACOM Section 1254 annex. In general, these funds are accelerating the cost profile by 1 year to achieve Initial Operational Capabilities sooner than previous plans.
- Cyber Security and Network Defenses—Three types of end items:
  - o Alternate sensors
  - o Cyber navigation aids
- Analytical Collaborative Environment for Cyber
- Cyber Attribution at Scale
- Augury for threat hunting
- Packet Forensics
- SENTRYNODE
- Scaled defensive cyber support
- Pacific Ecosystem for cyber
- SIPRNet Hardening

- International Security Cooperation Program—Training, support equipment, infrastructure support, communications equipment, equipment recapitalization, cybersecurity, boats, vehicles, and airframes.
- Joint Task Force Indo-Pacific—Hardware components of the SCIT networks (servers, laptops, routers, firewalls, and network equipment) are already available and awaiting installation.
- HQ Manpower Enhancements—The ability to leverage and persuade prospective candidates to accept USINDOPACOM vacant civilian headquarters positions.
- Joint Training, Exercise and Evaluation Program (JTEEP)——

Joint Exercise Program (JEP) Event	Lead Partner	Alliance or Frontline Partner	Shortfall
Freedom Shied	ROK	A	$11.707M
Ulchi Freedom Shield	ROK	A	$11.705M
Balikatan	PHIL	A	$16.453M
Cobra Gold	THA	A	$10.116M
Garuda Shield	IDN	FP	$11.900M
Tempest Wind	Various	A/FP	$8.05M
Total			**$69.935M**

- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—Resources will provide an increase in contracted labor at the Pacific PED Center.
- Resilient TS-SCI Warfighting Architecture—Specific hardware is to be determined. This investment will provide: (1) a TS//SCI Regional cloud enabled storage and compute capability in the theater; (2) a fixed Sub-Regional data storage;/compute nodes and expeditionary nodes; and (3) a secure satellite communications kits and associated support equipment for data transport. It will enable the Joint/Combined Force to leverage critical intelligence data essential to the Joint Targeting and Fires architecture across the theater.
- Information Operations—Increased regional presence, IPDF content expansion, add Mongolian language services to Radio Free Asia while expanding Oceania coverage, create USINDOPACOM OIE assessments branch, establish a team of 3 planners to conduct and assess event series, CC&D equipment for U.S. and A&P use.

21. Senator WARREN. Admiral Aquilino, what specific capability will the Unfunded Priorities Lists provide?

Admiral AQUILINO.

- Guam Defense System—Provides MDA funding resources to remain on schedule for delivery of the following requirement:
  a) Live Fire Test from Guam
  b) Initial IAMD deployment (AN/TPY—X1), Aegis Guam System, Expeditionary Command Center, C2BMC Downloadable Client, Mk–41 Vertical Launching Station, MRC Prototype, Sentinel A4 radar, and IBCS.
- Joint Fires Network—The JFN will provide the Joint Force the prototype capability to plan, synchronize, and execute all-domain fires at speed and scale in a major conflict against a peer adversary.
- Mission Partner Environment—USINDOPACOM seeks to modernize our HQ C4IT by fielding a secure environment that delivers multiple information domains on a single pane of glass. This capability will be available to an initial 1,200 HQ users by December 2023. Without additional resources we cannot extend this environment to our Joint Intelligence Operations Center (JIOC) which currently operates legacy NIPR and SIPR services provided by the Defense Intelligence Agency (DIA)
- Campaigning—The land and maritime component forces can conduct long duration multi-domain activities inside the first island chain, including joint all-domain multi-integrated air missile defense live fire exercises. The air component can conduct USAF's distributed Agile Combat Employment (ACE) training and validation events. Special operations forces can establish special operation task

forces inside the FIC to conduct integrated deterrence activities that normalize the presence of special operations forces in theater.

- Maritime Strike Tomahawk (MST)—The Blk Va MST will integrate improved seeker technology for dynamic targeting and maritime strike capability.
- Persistent Undersea Targeting—This will provide the capability to detect maritime assets and provide a key input to all-domain battlespace awareness to the Joint Force Commander. More specific capability information is available at a higher classification level.
- Military Construction—Funds planning and design activities of PDI initiatives as well as projects of interest that close infrastructure gaps in the Guam Cluster, Australia, Philippines, Japan, and Hawaii projects to advance USINDOPACOM's posture requirements.
- Joint Training Team—This will allow for the synchronization of USINDOPACOM partner training, as well as for operations and the integration of critical capabilities to rapidly build the partner's defense capabilities across all seven joint functions.
- Joint Task Force Micronesia—JTF-M will coordinate USINDOPACOM activities in Micronesia and be responsible for developing and executing the Micronesia Master Plan. The JTF will serve as the operational commander responsible for joint support activities necessary to execute All Domain Command and Control, Assault Breaker II, and oversee the integration of associated developmental technologies.
- Precision Strike Missile (PrSM) Increment 2 (USA)—The PrSM Inc 2 and Inc 4 significantly enhance targeting, lethality, and range. Increment 2 adds a multi-mode seeker used to engage moving land and maritime targets. Increment 4 doubles the standoff distance of earlier increments and includes the capability to engage land and maritime targets.
- Joint Experimentation and Innovation—This funds the ability to conduct Joint International Experimentation. JIE is centered on Taiwan self-defense, taking existing or relatively mature technologies to demonstrate systems that Taiwan may obtain to bolster deterrence in the Taiwan Strait.
- Standard Missile 6 (SM–6) 1B Variant—The SM–6 Blk IB provide long-range capability by implementing upgraded software and replacing the existing Mk–104 Dual-Thrust Rocket Motor with a new 21-inch rocket motor. The upgrades enables an anti-surface warfare capability delivered at hypersonic speed and significantly increases range.
- Clandestine Delivered Mine—CDMs are shallow-water mines that compliment aerial mining capabilities and are emplaced clandestinely via unmanned undersea and surface delivery platforms. Increment 1 enables delivery by unmanned systems and vessels of opportunity, to enable access to contested environments. Increment 2 enables remote arming and reverse arming.
- Hammerhead Mine—The Hammerhead Maritimes Mine is a moored encapsulated torpedo (Mk–54) that has the capability to detect, classify, and engage anti-submarine warfare targets.
- Powered Quickstrike—Powered Quickstrike (QS-P) is an enhanced standoff aerial variant of the Mk–62 Quickstrike mine that provides any JDAM-enabled aircraft with a long-range mining capability.
- Operationalize Near Term Space Control—This funding is for additional resourcing needed to expand two U.S. Space Force capabilities. Though the details are classified to protect our military advantages, each effort produces unique and complimentary advantages to USINDOPACOM Joint Force Commanders as well as to USSPACECOM's area of operations.
- Offensive Cyber-Access and Effects—This capability focuses on four lines of effort that enhance cyberspace access and effect capabilities specific to USINDOPACOM needs.
  - o Near-term access operationalization: Specific classified access and effect capabilities that would be available to be operationalized in the near-term.
  - o Mid-term modification to Joint Cyber Access Platform: Leveraging USCYBERCOM's program of record to sustain key classified offensive cyber efforts.
  - o Acceleration and expansion of a key classified effort with a history of providing non-kinetic effects solutions to difficult problems.

- o Focused enabling options: The ORION platform (details classified) to expand the scale and utility of DOD cyber operations needed in the Indo-Pacific region.
- All Domain Missile Warning and Missile Tracking Architecture—Enhanced THAAD-MSE integration. This upgrade will greatly increase joint force integrated Air and Missile defense protection in the short-term with software upgrades.
- Space-Based Persistent Custody Sensors—Funds the development and operationalization of space-based sensors critical to providing battlespace awareness information in the Indo-Pacific. This UPL supports the acceleration of one key classified capability critical to meeting USINDOPACOM operational and tactical custody needs.
- Cyber Security and Network Defenses—USINDOPACOM theater tailored cyber sensors, tools, aids, platforms, and physical replication efforts to support key industrial control system vulnerability and mitigation efforts on DOD facilities.
- International Security Cooperation Program—Provides variety of capabilities for the partner nations and increase collaboration.
  - o Philippines Counter-Terrorism
  - o Thailand Border Security
  - o Thailand Counter Terrorism
  - o Timor Leste Maritime Security
  - o Papau New Guinea Maritime Security
  - o Sri Lanka Maritime Security
  - o Indonesia Asymmetric Maritime Domain Awareness
  - o Vanuatu Border Security
  - o Nepal Disaster Management Institutional Capacity Building
  - o Nepal Defense Professionalization Institutional Capacity Building
- Joint Task Force Indo-Pacific—Expansion of the existing Sensitive Compartmented Information Facility (SCIF) to adequately accommodate the necessary Special Operations Force (SOF), conventional and interagency personnel for planning, analysis and synchronization at the Top Secret (TS) level.
- Asia Pacific Regional Initiative—APRI is a USINDOPACOM-specific initiative that utilizes Operations and Maintenance, Navy (OMN) funding for the expansion of U.S. military security cooperation activities with partner nations. The capabilities developed deepen mission partnership and interoperability through subject matter expert exchanges, exercises, and conferences.
- HQ Manpower Enhancements—Incentives and inducements to compel highly qualified talent to accept employment opportunities at the USINDOPACOM headquarters.
- Joint Training, Exercise and Evaluation Program (JTEEP)—The $69.935 million will address discrete shortfalls in six priority joint exercises: Freedom Shield, Ulchi Freedom Shield, Balikatan, Cobra Gold, Tempest Wind, Garuda Shield.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—Resources will provide an increase in contracted labor at the Pacific PED Center.
- Resilient TS-SCI Warfighting Architecture—This investment will provide: (1) a TS//SCI Regional cloud enabled storage and compute capability in the theater; (2) a fixed Sub-Regional data storage;/compute nodes and expeditionary nodes; and (3) a secure satellite communications kits and associated support equipment for data transport. It will enable the Joint/Combined Force to leverage critical intelligence data essential to the Joint Targeting and Fires architecture across the theater.
- Information Operations—Military Information Support Operations (MISO) employment assures A&Ps, counter's adversary dis/misinformation and amplifies USG narratives that seek to gain and maintain information environment advantages while delivering integrated deterrence.

22. Senator WARREN. Admiral Aquilino, what gap will this fill that is not in the base budget?

Admiral AQUILINO.

- Guam Defense System—This will fill the requirement to continue the integration for various missile defense programs to provide a 360 degree layered defense against ballistic, hypersonic and maneuvering missile threats.
- Joint Fires Network—This will provide the rapid development of a capability to integrate joint fires command and control.
- Mission Partner Environment—This will provide secure mobile/deployable C4IT solution capable of delivering multiple information domains in support of USINDOPACOM operational requirements.
- Campaigning—This will provide USINDOPACOM components the resourcing to increase the size, scale, scope and duration of operations west of the international date line.
- Maritime Strike Tomahawk (MST)—This will provide joint long-range, multi-domain fires critical to conducting contingency operations in the Indo-Pacific, specifically engaging high priority adversary naval combatants at range from surface ships, submarines, unmanned systems and land based launchers.
- Persistent Undersea Targeting—The additional funding will provide upgraded undersea sensing arrays in the Indo-Pacific.
- Military Construction—This funds additional MILCON planning and design activities of PDI initiatives as well as projects of interest that close infrastructure gaps in the Guam Cluster, Australia, Philippines, Japan, and Hawaii projects to advance USINDOPACOM's posture requirements.
- Joint Training Team—Funds additional resources for administrative, transportation, and logistical expenses associated with the training team.
- Joint Task Force Micronesia—This funds personnel that will serve as the foundation for the JTF-M. Additional costs will support the renovation of office space on Guam, travel, per diem, and IT services required for the initial stand-up in Hawaii and Guam.
- Precision Strike Missile (PrSM) Increment 2 (USA)—PrSM increment 2 enables engagements with both land and maritime emitting targets and increment 4 doubles the range of earlier increments. Both increments help to address critical capability gaps and are key components of joint long-range, multi-domain fires critical to conducting contingency operations in the Indo-Pacific.
- Joint Experimentation and Innovation—Experimentation execution funds manpower for experiment planning, execution, and reporting. Second, it funds material, both commercial and government off the shelf items, required to execute international experiments. Finally, it funds the logistics required to deploy, install, and remove any equipment required for Joint International Experimentations.
- Standard Missile 6 (SM–6) 1B Variant—This provides U.S. Naval surface ships with highly capable hypersonic anti-ship missiles to respond to and engage high priority adversary naval combatants at range.
- Clandestine Delivered Mine—This capability addresses operational needs stated in USINDOPACOM Joint Emergent Operational Need (JEON) PC–0012, the Joint Maritime Mining (JMM) Initial Capabilities Document (ICD), the Navy's Subsea Seabed Warfare (SSW) ICD, and the last five USINDOPACOM Integrated Priorities Lists (IPL) submissions.
- Hammerhead Mine—A baseline Hammerhead Mine is currently in development. However, current funding is inadequate to procure and sustain mine components and effectors, incorporate technology upgrades to expand the target library to include surface targets, enable advanced command and control, integrate interface components for the unmanned delivery payload module, provide a surface delivery option, and field in operationally relevant quantities within the FYDP.
- Powered Quickstrike—Powered Quickstrike (QS-P) is an enhanced standoff aerial variant of the Mk–62 Quickstrike mine that provides any JDAM-enabled aircraft with a long-range mining capability. The joint force requires advanced maritime mines delivered at the significantly greater standoff distances than the current in-service mines critical to executing contingency operations in the Indo-Pacific.
- Operationalize Near Term Space Control—Funds the operationalization of vital near-term space system that greatly improves U.S. forces and platform survivability. This UPL item supports the expansion of two capabilities critical to integrated deterrence, and if deterrence fails, to ensure the joint force is postured to fight and win.

- Offensive Cyber-Access and Effects—This UPL supports programs resourcing offensive cyberspace operations access and effects capabilities needed in the USINDOPACOM area of operations. It focuses on the expansion of four areas of effect that enable the joint force to project power in and through cyberspace, which are needed to achieve integrated deterrence, and if deterrence fails, to ensure the joint force is postured to fight and win through non-kinetic effects.
- All Domain Missile Warning and Missile Tracking Architecture—THAAD limitations are held at the classified level to ensure our adversary cannot exploit them.
- Space-Based Persistent Custody Sensors—Current systems are baselined in PB24, funding is required to accelerate availability to critical time to deter adversary.
- Cyber Security and Network Defenses—This funding will improve the detection of current steady-State cyber threats to the Joint Force.
- International Security Cooperation Program—This funding will improve collaboration with Allies and Partners, enhancing the United States asymmetric advantage.
- Joint Task Force Indo-Pacific—USINDOPACOM requires the capability to adequately analyze, plan and synchronize activities among SOF, conventional force, and interagency partners, and will lose the ability to strengthen relationship with allies and partners, relationships that represent a key component of U.S. national power.
- Asia Pacific Regional Initiative—APRI is a USINDOPACOM-specific initiative that utilizes Operations and Maintenance, Navy (OMN) funding for the expansion of U.S. military security cooperation activities with partner nations. The capabilities developed deepen mission partnership and interoperability through subject matter expert exchanges, exercises, and conferences.
- HQ Manpower Enhancements—This is a critical headquarters manpower gap, which directly impacts our "to be 2025" vision that is strategically enables integrated deterrence.
- Joint Training, Exercise and Evaluation Program (JTEEP)—The $69.935 million will address discrete shortfalls in six priority joint exercises: Freedom Shield, Ulchi Freedom Shield, Balikatan, Cobra Gold, Tempest Wind, Garuda Shield.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—Resources will provide an increase in contracted labor at the Pacific PED Center.
- Resilient TS-SCI Warfighting Architecture—This investment will provide: (1) a TS//SCI Regional cloud enabled storage and compute capability in the theater; (2) a fixed Sub-Regional data storage;/compute nodes and expeditionary nodes; and (3) a secure satellite communications kits and associated support equipment for data transport. It will enable the Joint/Combined Force to leverage critical intelligence data essential to the Joint Targeting and Fires architecture across the theater.
- Information Operations—This will allow USINDOPACOM to operate in the information environment. Current funding does not account for strategic competition with two major powers and one rogue State.

23. Senator WARREN. Admiral Aquilino, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

Admiral AQUILINO.

- Guam Defense System—GDS is critical to Defend the Homeland as directed in the National Military Strategy and protect United States capabilities in Guam allowing for increased power projection west of the international date line.
- Joint Fires Network—The JFN provides a significant warfighting advantage that will allows U.S. Forces to transition quickly from competition to contingency operations.
- Mission Partner Environment—The MPE provides the advanced technologies to improve coordination and collaboration with our allies and partners over secured communications infrastructure.
- Maritime Strike Tomahawk (MST)—This capability greatly increases the lethality of the Joint Force against peer adversary naval forces. It supports UNINDOPACOM's strategic approach to "Seize the Initiative" against near-peer adversaries through the presence of combat-credible deterrence and is a critical

capability needed to achieve the objectives set forth in the 2022 National Defense Strategy (NDS).

- USINDOPACOM Campaigning—Theater campaigning provides USINDOPACOM and Service Components the ability to conduct operations within the first and second island chains at the time of our choosing to influence and shape behavior throughout the theater to reassure our allies and partners, keep competitors guessing, and achieve integrated deterrence. This effort supports the National Defense Strategy's approach to strengthen alliances and attract new partners.
- Persistent Undersea Targeting—Undersea sensors are used to support USINDOPACOM decisionmaking throughout the competition, crisis, and conflict spectrum. Due to the large geographical area of the Indo-Pacific AOR, these sensors are critical to freeing up other resources that may otherwise be required to hold custody of key adversary capabilities. Funding the acceleration of this capability decreases the joint force commander's risk in executing assigned plans by freeing up additional resources.
- Military Construction—It enables the required design activities that ensure forward progress toward execution-ready designs and unspecified minor military construction projects that advance posture interests in the Guam Cluster, Australia, Philippines, Japan, and Hawaii. The capabilities provided by this UFR make forward progress in closing existing infrastructure gaps associated with USINDOPACOM's posture interests.
- Joint Training Team—This capability directly supports the National Defense Strategy and USINDOPACOM Theater Campaign Plan and will allow USINDOPACOM to rapidly develop critical partner capabilities by synchronizing and complementing USG efforts.
- Joint Task Force Micronesia—JTF-M will be organized to provide a single, responsible headquarters to provide Senior Military Officer oversight and alignment of operations; manage the expansion of U.S. capabilities through Guam, the Federated States of Micronesia, and the Compact of Freely Associated States; and provide the nucleus of a scalable command and control element that can address future sustainment and warfighting initiatives based in Micronesia.
- Precision Strike Missile (PrSM) Increment 2 (USA)—Fielding PrSM inc 2 and 4 will enable the ability to deter and deny adversary combat maneuverability, air defense operations, and maritime operations. This capability supports USINDOPACOM's strategic approach to "Seize the Initiative" against near-peer adversaries through the presence of combat-credible deterrence and is a critical capability needed to achieve the objective set forth in the NDS.
- Joint Experimentation and Innovation—JEI support the following objectives:
  - o Accelerate implementation of the Joint Warfighting Concept
  - o Enable Combatant Command Theater Security Cooperation Strategy
  - o Support collaboration and promote interoperability with the Joint Force and partner nations through Science & Technology (S&T)
  - o Experiment with leading edge, disruptive technologies, and proposed Concepts of Operation (CONOP), in a relevant, Indo-Pacific operations and exercise;
  - o Enrich technical assessments through integration into multinational coalition exercises
  - o Focus innovations efforts on Taiwan Self-Defense enhancements
  - o Accelerate Key USINDOPACOM programs.
- Standard Missile 6 (SM–6) 1B Variant—The capability greatly increases the lethality of Navy surface ships against peer adversary naval forces. It supports USINDOPACOM's strategic approach to "Seize the Initiative" against near-peer adversaries through the presence of combat-credible deterrence and is a critical capability needed to achieve the objectives set forth in the 2022 NDS.
- Clandestine Delivered Mine—CDMs will provide the Joint Force the capability to clandestinely emplace minefields in key areas of the battlespace in order to limit adversary submarine access and significantly reduce their capability to hold U.S. and allied naval forces at risk. This capability supports USINDOPACOM's strategic approach to "Seize the Initiative" against near-peer adversaries through the presence of combat-credible deterrence and is a key component needed to achieve the objectives set forth in the 2022 NDS.
- Hammerhead Mine—The Hammerhead mine provides the Joint Force the capability to mine key areas of the battlespace in order to limit adversary submarine

access and significantly reduce their capability to hold U.S. and allied Naval forces at risk. This capability supports USINDOPACOM's strategic approach to "Seize the Initiative" against near-peer adversaries through the presence of combat-credible deterrence and is a key component needed to achieve the objectives set forth in the 2022 National Defense Strategy (NDS).

- Powered Quickstrike—Advanced maritime mining options like QS-P can significantly disrupt adversary operational timelines, allow greater time for joint forces to flow into the theater, and provide an extended opportunity for joint force fires to attrite adversary maritime vessels. Additionally, the increased stand-off range and target selection performance will mitigate significant risk to force in a peer-competitor contingency. This capability supports USINDOPACOM's strategic approach to "Seize the Initiative" against near-peer adversaries through the presence of combat-credible deterrence and is a key component needed to achieve the objective set forth in the 2022 NDS.
- Operationalize Near Term Space Control—Operationalizing near-term space control capabilities will ensure the joint force has the ability to leverage cutting edge capabilities to enable joint force movement and survivability against a growing threat. Funding these capabilities decrease the Joint Force Commander's risk in executing assigned plans.
- Offensive Cyber-Access and Effects—These capabilities provide deterrence and response options throughout the spectrum of conflict and provide alternate ways to achieve desired effects. This enhancement will ensure the potential gain of these operations can be achieved in the near-and mid-term timelines as USCYBERCOM continues to build out its Joint Cyber Warfighting Architecture.
- All Domain Missile Warning and Missile Tracking Architecture—Improved THAAD capability support enhanced missile warning, tracking, and ultimately prosecution against advanced missile threats. This enhanced capability not only directly protects the joint force, but also provides deterrent value when demonstrating assured defeat capabilities of joint missile defense systems.
- Space-Based Persistent Custody Sensors—This space-based sensor will be used to support USINDOPACOM decisionmaking throughout the competition, crisis, and conflict spectrum. Due to the large geographical area of the Indo-Pacific AOR and threats to airborne systems, space-based sensors are optimum for providing coverage and increase revisit rate of key operational areas.
- Cyber Security and Network Defenses—Cyber security and network defenses underpin USINDOPACOM operations. These enhancements will address the top priority areas identified to secure USINDOPACOM network and enable cyberspace operations throughout the competition, crisis, and conflict spectrum.
- International Security Cooperation Program—Systematic engagements and training events associated with developing these capabilities will sustain critical bilateral relationships in the Indo-Pacific, supporting strategic objectives of strengthening Allies and Partners and aid in the Department's efforts by deterring strategic competitors in the Indo-Pacific region.
- Joint Task Force Indo-Pacific—The mission of JTF-IP is to conduct special operations in the Indo-Pacific, degrade regional threat networks, and support integrated deterrence, which supports the National Defense Strategy's guidance to employ irregular capabilities to increase a competitor's perception of risk, build ally and partner capacity to deny and remain resilient in the face of malign activities in the gray zone, and act directly and indirectly in low or non-attributable ways to complicate and compromise competitor actions.
- Asia Pacific Regional Initiative—APRI supports the National Defense Strategy and USINDOPACOM's approach to strengthen alliances and attract new partners through security cooperation initiatives.
- HQ Manpower Enhancements—Enables USINDOPACOM to hire critical civilian talent and skill sets who otherwise might decline opportunities to work on the USINDOPACOM headquarters. This supports integrated deterrence as outlined in the National Defense Strategy.
- Joint Training, Exercise and Evaluation Program—JTEEP is included in the Pacific Deterrence Initiative and is a key capability in USINDOPACOM's Seize the Initiative approach to prevent conflict through the execution of integrated deterrence, and should deterrence fail, be prepared to fight and win. JTEEP is a key DOD lever for strategic competition across the continuum of conflict, consistent with key National Strategic, Defense, and Military guidance.

- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—Additional resources will support targeting and joint fires by identifying, tracking, and maintaining custody of assigned targets.
- Resilient TS-SCI Warfighting Architecture—The proposed investment will enable USINDOPACOM to operate in a degraded communication environment.
- Information Operations—USINDOPACOM employs IO to assure A&Ps, counter adversary dis/misinformation, and amplify USG narratives that seek to gain and maintain information environment advantages and deliver integrated deterrence (PRC, North Korea, Russia, and violent extremists.

24. Senator WARREN. Admiral Aquilino, what is the operational requirement? How does this Unfunded Priorities Lists support current or future operations?

Admiral AQUILINO.

- Guam Defense System—GDS is a 360-degree, persistent, air and missile defense capability to defend Guam from ballistic, cruise, and hypersonic missile threats.
- Joint Fires Network—Joint Forces must be capable of planning, synchronizing, and executing all-domain fires at speed and scale against a peer adversary. Joint fires command and control must be distributed to the tactical edge and leverage all sensors and intelligence to form a persistent targeting common operational picture. The architecture must be joint, common, resilient, flexible, and responsive.
- Mission Partner Environment—The capabilities provide the ability to conduct combined warfighting command and control over common, secure networks.
- Maritime Strike Tomahawk (MST)—The joint force must be able to engage high priority adversary naval combatants at range from surface ships, submarines, unmanned systems and land-based launchers. MST is a key component of joint long-range, multi-domain fires critical to executing contingency operations in the Indo-Pacific.
- USINDOPACOM Campaigning—USINDOPACOM components lack the resourcing to project and maintain forward postured combat credible forces in the first island chain.
- Persistent Undersea Targeting—The joint force has a need for all-domain battlespace awareness across the UNINDOPACM AOR. This UFR directly supports future operations by ensuring commanders have full situational awareness of the maritime and undersea environment. This UFR ultimately ensure additional military options to lower the joint force commander's risk in execution operations in the Indo-Pacific.
- Military Construction—These unfunded requests directly support USINDOPACOM's posture interests in Australia, Philippines, Japan, Guam, and Hawaii. The request provides the funding to start critical design activities on large construction projects and UMMC construction funds, investments that make forward progress to closing existing infrastructure gaps associated with USINDOPACOM's posture interests in the these locations.
- Joint Training Team—The operational requirement is to rapidly develop a partner's capabilities. This UFR will allow for the creation of a Joint Training Team that will operationalize training objectives to allow for the rapid delivery of material and non-material capabilities.
- Joint Task Force Micronesia—This organization will:
  - o Integrate JADC2 effects and mission C2, including in conflicts that arise with minimal warning;
  - o Integrate the capabilities of Assault Breaker II, developed by the Defense Advanced Research Project Agency, and related development efforts as they transition to operational deployment;
  - o Exercise of other joint all domain command and control capabilities.
- Precision Strike Missile (PrSM) Increment 2 (USA)—PrSM provides joint force commanders with a 24/7, all-weather capability to attack critical and time sensitive areas, including adversary ships, air defense, missile launchers, command and control centers, assembly/staging areas, and high payoff targets. PrSM Increment 2 enables engagement with both land and maritime emitting targets, and Increment 4 doubles the range of earlier increments. Both increments help to address critical capability gaps and are key components of joint long-range, multi-domain fires critical to executing contingency operations in the Indo-Pacific.

- Joint Experimentation and Innovation—This supports two of USINDOPACOM's "Seize the Initiative" Lines of Efforts: strengthen relationships with allies & partners and increase warfighting advantage. JEI will provide assessments of technologies and concepts within Indo-Pacific operational environments for potential leave behind capability or integration into existing defense architectures. These capability improvements will increase warfighter advantage, defend and assure our allies and partners through science and technology (S&T) engagements, and support the combatting of trans-national challenges.
- Standard Missile 6 (SM–6) 1B Variant—the SM–6 Blk IB is a key component of Joint long-range multi-domain fires critical to executing contingency operations in the Indo-Pacific.
- Clandestine Delivered Mine—Studies and wargaming analysis repeatedly show that naval mines are efficient and cost-effective means to exercise strategic influence over naval and amphibious operations and timeline. CDMs will provide the joint force the capability to clandestinely emplace minefields in key areas of the battlespace in order to limit adversary submarine access and significantly reduce their capability to hold U.S. and allied naval forces at risk.
- Hammerhead Mine—Studies and wargaming analysis repeatedly show that naval mines are efficient and cost-effective means to exercise strategic influence over naval and amphibious operations and timeline. This capability addresses operational needs stated in USINDOPACOM Joint Emergent Operational Need (JEON) PC–0012, the Joint Maritime Mining (JMM) Initial Capabilities Document (ICD), the Navy's Subsea Seabed Warfare (SSW) ICD, and the last five USINDOPACOM Integrated Priorities List (IPL) submissions.
- Powered Quickstrike—The joint force requires advanced maritime mines delivered at significantly greater standoff distances than the current in-services mines. Studies and wargaming analysis repeatedly show that naval mines are an efficient and cost-effectives means to exercise strategic influence over naval and amphibious operations and timelines.
- Operationalize Near Term Space Control—The joint force must be able to conduct its range of military maneuver and execute operations at an acceptable level of risk, which includes its dependence on space-enabled information to provide position, navigation, and timing solutions, satellite communications, and intelligence, surveillance, and reconnaissance products. This ensures additional military options to lower the joint force commander's risk in executing operations in the Indo-Pacific.
- Offensive Cyber-Access and Effects—USINDOPACOM has a requirement for assured cyber effects and non-kinetic effects to be available should deterrence fail to hold adversary networks and platform at risk. With increasing technological sophistication of adversaries and increased reliance on information technology systems, these investments will continue to be of the utmost importance to advantages over our adversaries.
- All Domain Missile Warning and Missile Tracking Architecture—USINDOPACOM has THAAD systems in its theater and a requirement to protect the joint force. A classified requirement related to this capability was identified as a specific material solution that can mitigate the threat to the Joint Force
- Space-Based Persistent Custody Sensors—The Joint Force requires all-domain battlespace awareness across the UINDOPACOM AOR. This UPL directly supports future operations by ensuring commanders have the necessary information available to them to understand adversary actions at the operational-level of war, and if required, conduct decisive military operations at the tactical-level.
- Cyber Security and Network Defenses—The joint force must be able to conduct the full range of military maneuvers and execute operations at an acceptable level of risk, which includes resilient cyber security and network defenses that enable the military to achieve its objectives in crisis or conflict while depending on networks that face steady-State cyber threats.
- International Security Cooperation Program—The specific requirements are described in the classified USINDOPACOM Section 1254 annex V.
- Joint Task Force Indo-Pacific—Funding supports integration of JTF-IP with USINDOPACOM components, and FVEY partners to maximize resources and information sharing to develop a cogent common intelligence and common operational picture.
- Asia Pacific Regional Initiative—APRI is intended to support engagements with developing countries and may support both military-to-military and civil-to-mili-

tary activities (where the focus may be on humanitarian assistance). Proposed APRI events must support theater strategy found in USINDOPACOM's Theater Campaign Plan and relevant country engagement plans. APRI provides an opportunity to add developing nation participation in valuable theater security cooperation exercises by adding troops, bringing in specialized participants, or diversifying the audience with new attendees.

- HQ Manpower Enhancements—This is a critical headquarters manpower gap, which directly impacts our "to be 2025" vision that is strategically enables integrated deterrence.
- Joint Training, Exercise and Evaluation Program—USINDOPACOM joint exercises are key operations, activities, and investments (OAIs) to move combat credible forces and service critical capabilities forward in theater and interoperate with allies and partners. Furthermore, these forces are forward in locations that may not typically permit full-time basing and are postured in a persistent manner given timing and locations of exercises over the course of the year to deter near-peer, adversarial aggression and strengthen partners against coercion.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—The operational requirement is to support all-domain battlespace awareness with a joint fires network through enabling real-time PED of raw intelligence, collected from multiple sources, to enable fused analysis, and support indications and warnings and joint targeting.
- Resilient TS-SCI Warfighting Architecture—The following capabilities are required for both fixed and expeditionary mission during competition, crisis, and conflict: (1) establish a TS/SCI Regional cloud presence in the theater; (2) install and connect sub-regional and forward edge/expeditionary nodes and; (3) procure/connect an expeditionary multi-spectrum, multi-domain data transport service.
- Information Operations—USINDOPACOM requires additional IO capacity to execute OIE during strategic competition with regional near-peer adversaries. In addition, funding provides flexibility to engage dynamically in the information environment against emerging operational requirements or the activation of USINDOPACOM campaign and operation plans.

25. Senator WARREN. Admiral Aquilino, what is the operational impact if this Unfunded Priorities Lists is not funded in fiscal year 2024?

Admiral AQUILINO.

- Guam Defense System—In the event of a crisis or contingency Guam would experience a variety of missile threat capabilities to include increased risk against ballistic, hypersonic, and maneuvering threats from all axis (360-degree).
- Joint Fires Network—If the JFN is not funded, USINDOPACOM will continue to experience significant challenges with executing joint, long rage fires at speed and scale necessary for a conflict with a peer adversary.
- Mission Partner Environment—If MPE is not funded, there is an acceptance of higher risk by relying on older, more vulnerable technologies which USINDOPACOM will rely heavily upon to conduct future operations during contingencies.
- Maritime Strike Tomahawk (MST)—If MST is unfunded, it will not be delivered in operationally relevant quantities until well after 2030, significantly impacting the Joint Force's capability to deter and defeat aggression by near-peer adversaries. Unmitigated risk to force and, by extension, to mission could prove highly detrimental to the achievement of NDS-directed operational and strategic goals.
- USINDOPACOM Campaigning—If this item is not funded, the strategic preparation and theater-wide shaping operations necessary to support the Secretary of Defense-directed objectives will be significantly diminished. USINDOPACOM campaigning efforts are designed to convey U.S. resolve and contribute to integrated deterrence through sustained active presence across the wide expanse of the Indo-Pacific region continuously.
- Persistent Undersea Targeting—The current systems are baselined for improvement in future years, but his system will not available at the timeline directed by Commander, USINDOPACOM.
- Military Construction—Further delays for critical MILCON projects that directly support USINDOPACOM's posture requirements. MILCON projects take approximately 7–8 years from defined requirements to construction completed. If this request remains unfunded, it will further delay that timeline.

- Joint Training Team—Lack of funding will delay the delivery of critical self-defense capabilities.
- Joint Task Force Micronesia—Lack of funding places at risk the timely and effective execution of $12.8 billion in military construction across the FYDP associated with the Defense of Guam. A joint operational command is required within Micronesia to integrate requirements, coordinate lines of effort, plan supporting infrastructure where required, and ensure sufficient manning and resourcing are available to achieve mission success.
- Precision Strike Missile (PrSM) Increment 2 (USA)—If not funded, the PrSM Inc 2 and 5 will not be delivered in operationally relevant quantities until after 2030, significantly impacting the joint force's capability to deter and defeat aggression by near-peer adversaries in near to mid-term.
- Joint Experimentation and Innovation—Without funding, USINDOPACOM will not be able to execute joint experiments focused on developing capabilities for Taiwan Self-Defense as well as experimentation conducted with other allies and partners.
- Standard Missile 6 (SM–6) 1B Variant—If not funded, the SM–6 Blk IB will not be delivered in operationally relevant quantities until after 2030, significantly impacting the joint force's capability to deter and defeat maritime aggression by near-peer adversaries in near to mid-term.
- Clandestine Delivered Mine—If not funded, the CDM will not be delivered in operationally relevant quantities until after 2030, significantly impacting the joint force's capability to deter and defeat aggression by near-peer adversaries. Unmitigated risk to force and, by extension, to mission could prove highly detrimental to the achievement of NDS-directed operational and strategic goals.
- Hammerhead Mine—If this UFR is not funded, the Hammerhead Mine will not delivered in operationally relevant quantities until 2030, significantly impacting the joint force's capability to deter and defeat aggression by near-peer adversaries. Unmitigated risk to force and, by extension, to mission could prove highly detrimental to the achievement of NDS-directed operational and strategic goals.
- Powered Quickstrike—If not funded, QS-P will not be delivered in operationally relevant quantities until after 2030, significantly impacting the Joint Force's capability to deter and defeat aggression by near-peer adversaries.
- Operationalize Near Term Space Control—Each program identified is currently in development but the operational impact of these capabilities will be significantly reduced (<50 percent effective) in the near-team without these additional funds. These efforts ensure USINDOPACOM and USSPACECOM are synchronized in our ability to deliver integrated deterrence in the Indo-Pacific. Without the seamless integration of space capabilities into an all-domain approach to warfighting, the Joint Force Commander is at greater risk of accomplishing defined objectives.
- Offensive Cyber-Access and Effects—If not funded, the capabilities will be delayed for consideration in the fiscal year 2025 budget cycle, increasing the risks to the joint force commander.
- All Domain Missile Warning and Missile Tracking Architecture—THAAD currently has limitations that the classified level. If not funded, known limitations will remain until development effort is completed, posing a risk to the joint force commander.
- Space-Based Persistent Custody Sensors—The current systems are baselined in President's Budget 2024, but this systems will not be available at the timeline directed by Commander, USINDOPACOM.
- Cyber Security and Network Defenses—If not funded, the capabilities will be delayed for consideration in the fiscal year 2025 budget cycle, increasing the risks to network security for the joint force commander.
- International Security Cooperation Program—If not funded, the 11 listed programs will not execute in fiscal year 2024, reducing our ability to strengthening relationships with allies and partners.
- Joint Task Force Indo-Pacific—If not funded, USINDOPACOM will lose capabilities necessary for information sharing with regard to PRC activities and influence in the Indo-Pacific
- Asia Pacific Regional Initiative—USINDOPACOM will lose one of its primary tools to fund initiatives to strengthen relationships with its allies and partners, relationships that represent a key component of U.S. national power. Based on

historical requests, operational impact to projects under APRI include: reduction in support to Pacific Partnership missions, de-scoping or reduction in participation at bilateral dialogs and a reduction in component HQ security cooperation activities.

- HQ Manpower Enhancements—without additional funding, we will lose talent and the opportunity to hire highly skilled candidates who want to work here. This will impede INDOPACOM's ability to most effectively execute its mission as directed in the NDS.
- Joint Training, Exercise and Evaluation Program—USINDOPACOM will lose the ability to strengthen relationships with its allies and partners. USINDOPACOM will also lose the ability to adequately rehearse, assess, and improve warfighting missions.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—If left unsourced, USINDOPACOM will remain limited in its ability to process all sources of multi-domain data (GEOINT, SIGINT, Full Motion Video and OSINT), and support intelligence analysis. As the Department of Defense continues to invest in front-end sensor collection capabilities, there must be a corresponding investment in PED efforts in order to ensure the Joint Force is informed in real-time.
- Resilient TS-SCI Warfighting Architecture—USINDOPACOM intelligence operations is a "no fail" mission. Secure, resilient, and survivable architecture must provide the warfighter with a Regional, Sub-Regional, and Tactical Edge architecture to conduct all-domain battlespace awareness and store, compute, and movement of data in competition through crisis. These networks and the ability to operate in a denied, disrupted, intermittent, and limited (bandwidth) (DDIL) environment is imperative to supporting operations across all phases of conflict.
- Information Operations—USINDOPACOM's ability to operate in the information environment will be degraded, as it begins to lose current capabilities and capacities. USINDOPACOM currently uses baseline appropriations originally created in 2009 to counter violent extremism, without notable growth. Current funding does not account for strategic competition with two major powers and one rogue State.

26. Senator WARREN. Admiral Aquilino, are there plans to include this item in the fiscal year 2025 base budget?

Admiral AQUILINO. The funding for projects within the USINDOPACOM UPL does not fall within the command's annual budget; these projects are resourced by each of the military service budgets. USINDOPACOM advocates for the project funding, but does not determine funding levels within the services' budget submissions.

27. Senator WARREN. Admiral Aquilino, why was this Unfunded Priorities Lists not included in the Fiscal Year 2024 President's Budget submission?

Admiral AQUILINO. The funding for projects within the USINDOPACOM UPL does not fall within the command's annual budget; these projects are resourced by each of the military service budgets. USINDOPACOM advocates for the project funding, but do not determine funding levels within the services' budget submissions.

28. Senator WARREN. Admiral Aquilino, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

Admiral AQUILINO.

- Guam Defense System—Bluehalo, USAF, Northrop Grumman, DOD-Defense Information Systems Agency, Lockheed Martin, Johns Hopkins Applied Physic Laboratory, USN, Innovative Defense Technologies, MDA, USA, USTRANSCOM.
- Joint Fires Network—Lockheed Martin, Anduril, Palantir, J Johns Hopkins Applied Physic Laboratory, MITRE, Two-Six Tech, Raytheon, Northrop Grumman, Space-X, KBR, and Viasat.
- Mission Partner Environment—Multiple Services and OSD System Program Offices, and multiple vendors reachable through existing contract vehicles, including OTAs.
- Maritime Strike Tomahawk (MST)—Raytheon
- USINDOPACOM Campaigning—Multiple vendors across all services.
- Persistent Undersea Targeting—Lockheed Martin, NIWC PAC

- Military Construction—The Design and Construction Agent (DCA) will go through their acquisition process to determine vendor.
- Joint Training Team—N/A
- Joint Task Force Micronesia—N/A
- Precision Strike Missile (PrSM) Increment 2 (USA)—Lockheed Martin
- Joint Experimentation and Innovation—Multiple Services and OSD System Program Offices, and multiple vendors reachable through existing contract vehicles, including OTAs.
- Standard Missile 6 (SM–6) 1B Variant—Raytheon Missile and Defense
- Clandestine Delivered Mine—Lockheed Martin, Boeing, John Hopkins APL
- Hammerhead Mine—General Dynamics Mission System (GDMS) is the primary government contractor developing the Hammerhead mine prototype. Existing contracts can also be leveraged to support dependencies across multiple entities.
- Powered Quickstrike—Boeing
- Operationalize Near Term Space Control—USSF is the lead agency. Specific vendor details are at a higher classification.
- Offensive Cyber-Access and Effects—This effort is executed by multiple vendors, many are contained within existing USCYBERCOM or service contracts.
- All Domain Missile Warning and Missile Tracking Architecture—Lockheed Martin and Raytheon.
- Space-Based Persistent Custody Sensors—USSF is the lead agency. Specific vendor details are at a higher classification.
- Cyber Security and Network Defenses—This effort is executed by multiple vendors, many are contained within existing USCYBERCOM or service contracts.
- International Security Cooperation Program—A variety of vendors are used by the Implementing Agencies. It is unknown until the annual contracts are awarded.
- Joint Task Force Indo-Pacific—Vendor to be determined.
- Asia Pacific Regional Initiative—USINDOPACOM J5 has oversight of APRI and the Resource Program Manager (RPM) is responsible for managing submissions. The RPM works closely with Comptroller and General Counsel in implementing the program. Ultimately, all activities resources by APRI are prioritized and approved by the USINDOPACOM Deputy Director for Policy.
- HQ Manpower Enhancements—N/A
- Joint Training, Exercise and Evaluation Program—JTEEP uses both organic and multiple contracted strategic lift vendors.
- Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements—Multiple vendors are executing this effort through Department of the Army contracts.
- Resilient TS-SCI Warfighting Architecture—USINDOPACOM is working with NGA Warfighter Support (TEX) for the edge node and transport solutions; likely to be fulfilled by NGA's contract vehicle. The OCONUS Cloud solution will be coordinated through DIA CIO.
- Information Operations—Amentum, Booz Allen Hamilton, General Dynamics Information Technologies, Madison Springfield and Peraton, Radio Free Asia is a Grantee for some requirements.

29. Senator WARREN. Admiral Aquilino, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?

Admiral AQUILINO. We defer to the services regarding contact with the vendors.

30. Senator WARREN. Admiral Aquilino, what is your history with this vendor? Please detail when the relationship began, the number of contracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor.

Admiral AQUILINO. We defer to the services regarding their history with the vendors.

31. Senator WARREN. Admiral Aquilino has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

Admiral AQUILINO. We defer to the services regarding previous employment with the vendors.

32. Senator WARREN. Admiral Aquilino, in which city/State will the Unfunded Priorities Lists be executed?
Admiral AQUILINO. We defer to the services regarding specific contract related inquires.

33. Senator WARREN. Admiral Aquilino, is this requirement on an existing contract? If so, with who? What is the history of the contract?
Admiral AQUILINO. We defer to the services regarding specific contract related inquires.

34. Senator WARREN. Admiral Aquilino, what is the anticipated contract award date if the Unfunded Priorities Lists receives funding?
Admiral AQUILINO. We defer to the services regarding specific contract related inquires.

35. Senator WARREN. Admiral Aquilino, what funding lines are associated with this Unfunded Priorities Lists?
Admiral AQUILINO.

Title	Total ($K)	By Appn ($K)	Appn	BLI	PE
Guam Defense System	147,000	147,000	RDTE	0604102C	0604102C
Joint Fires Network (JFN)	174,000	174,000	RDTE	0604331D8Z	0604331D8Z
Maritime Strike Tomahawk (MST) (USA)	395,000	395,000	RDTE	0605235A	0605235A
Maritime Strike Tomahawk (MST) (USMC)	98,000	98,000	RDTE	0603635M	0603635M
INDOPACOM Campaigning	511,000	90,000	O&M	011C	0207441F
		377,000	O&M	111	0202116A
		8,000	O&M	1A1A	0206312M
		36,000	O&M	1CCM	0201160N
Mission Partner Environment (MPE)	39,000	39,000	O&M	1CCM	0201114N
Military Construction - Design	69,000	69,000	MCON	64482044	0901211N
Military Construction - Construction	62,000	62,000	MCON	D90J0003	0201165J
Joint Training Team	49,000	49,000	O&M	1CCM	0201114N
Joint Task Force Micronesia	25,500	25,500	O&M	1CCM	0201114N
Precision Strike Missile (PrSM) Increment 2 (USA) and Increment 4 (USA)	151,000	120,800	RDTE	0605231A	0605231A
		30,200	PROC	8540C29600	0208030A
Joint Experimentation and Innovation	19,000	10,000	RDTE	0604331D8Z	0604331D8Z
		9,000	O&M	1CCM	0201114N
	357,000	277,200	RDTE	0604366N	0604366N

Standard Missile (SM-6) 1B Variant (USN)		79,800	PROC	2234	0204228N
Clandestine Delivered Mine (CDM) (USN)	2,000	2,000	RDTE	0604536N	0604536N
Hammerhead Mine (USN)	54,000	17,820	RDTE	0604601N	0604601N
		36,180	PROC	3215	0204228N
Powered Quickstrike (QS-P) (USN)	85,000	38,600	RDTE	0604601N	0604601N
		46,400	PROC	3231	0204304N
Persistent Targeting for Undersea	117,000	117,000	PROC	2225	0204311N
Operationalize Near-Term Space Control	275,000	275,000	RDTE	1206410SF	1206410SF
Offensive Cyber - Access and Effects	184,000	184,000	RDTE	0306250JCY	0306250JCY
All Domain Missile Warning and Missile Tracking Architecture	108,000	108,000	RDTE	0603881C	0603881C
Space-Based Persistent Custody Sensors	143,000	143,000	RDTE	1203159SF	1203159SF
Cyber Security and Network Defenses	90,000	90,000	RDTE	0305251JCY	0305251JCY
International Security Cooperation Programs (ISCP)	117,000	117,000	O&M	4GTD	1002200T
Joint Task Force Indo-Pacific (JTF-IP)	9,000	9,000	O&M	1CCM	0201114N
Asia Pacific Regional Initiative (APRI)	6,000	6,000	O&M	1CCH	0201490N
Headquarters Manpower Enhancements	5,000	5,000	O&M	1CCM	0201114N
Joint Training, Exercise and Evaluation Program (JTEEP)	69,935	69,935	O&M	8PLI	0804768J
Service Tactical SIGINT Upgrades and PED Enhancements	45,400	45,400	O&M	0202614A	121
Resilient TS-SCI Warfighting Architecture	62,900	35,000	RDTE	0305864L	0305864L
		2,500	RDTE	0305102BQ	0305102BQ
		8,400	PROC	238641	0305864L
		15,000	PROC	25	0305102BQ
		1,000	O&M	4GTU	0305864L
		1,000	O&M	4GTW	0305102BQ
Information Operations	11,300	11,300	O&M	1GTM	0303223D8Z

36. Senator WARREN. Admiral Aquilino, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?

Admiral AQUILINO.

- USINDOPACOM Campaigning-This requirement funds Component operations and allows them to vary the size, scale, scope, and duration of those operations based on the resourcing available.
- Military Construction—Design. Yes. Each appropriation funds separate and distinct requirements and can stand on its own.
- Military Construction—Construction. Yes. Each appropriation funds separate and distinct requirements and can stand on its own.

- Precision Strike Missile (PrSM)—Yes. Each appropriation can stand on its own.
- Joint Experimentation and Innovation—Yes. Each appropriation can stand on its own to fund a portion of the requirement. However, failure to fund the O&M, Navy, will significantly hamper/delay the speed of executing the RDTE appropriation.
- Standard Missile 6 (SM–6) 1B Variant—Yes. Each appropriation can stand on its own.
- Hammerhead Mine—Yes. Each appropriation can stand on its own.
- Powered Quickstrike—Yes. Each appropriation can stand on its own.
- Resilient TS-SCI Warfighting Architecture. The appropriations between DIA and NGA do have to be simultaneous, however all NGA funding should be appropriated simultaneously and all DIA funding should be appropriated simultaneously to ensure capability delivery for UNINDOPACOM.

37. Senator WARREN. Admiral Aquilino, how much was enacted and obligated (or expended for Research, Development, Test, & Evaluation) in fiscal year 2022 to 2023 for this requirement?

Admiral AQUILINO.

Program	FY22 Enacted ($M)	FY23 Enacted ($M)
Guam Defense System	152	892
Joint Fires Network	N/A	N/A
Mission Partner Environment	80.7	98
Maritime Strike Tomahawk (MST- USA)	N/A	395
Maritime Strike Tomahawk (MST- USMC)	N/A	98
USINDOPACOM Campaigning	N/A	355
Persistent Undersea Targeting	N/A	44
Military Construction- Design	424.6	667.2
Military Construction – Construction	1746.6	662
Joint Training Team	N/A	N/A
Joint Task Force Micronesia	N/A	N/A
Precision Strike Missile (PrSM) Increment 2 (USA)	N/A	457
Joint Experimentation and Innovation	N/A	N/A
Standard Missile 6 (SM-6) 1B Variant	343.5	443
Clandestine Delivered Mine	N/A	N/A
Hammerhead Mine	N/A	283.5
Powered Quickstrike	N/A	0
Operationalize Near Term Space Control	N/A	308
Offensive Cyber- Access and Effects	N/A	95
All Domain Missile Warning and Missile Tracking Architecture	N/A	984
Space –Based Persistent Custody Sensors	308.9	846
Cyber Security and Network Defenses	N/A	14

International Security Cooperation Program	299.2	449.3
Joint Task Force Indo-Pacific	8	8.2
Asia Pacific Regional Initiative	4.6	14
HQ Manpower Enhancements	0	13.8
Joint Training, Exercise and Evaluation Program	N/A	232
Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements	N/A	29.7
Resilient TS-SCI Warfighting Architecture	N/A	88
Information Operations	N/A	26.5

38. Senator WARREN. Admiral Aquilino, how much was requested in fiscal year 2024 for this requirement?

Admiral AQUILINO.

Program	FY24 Requirements ($ in Millions)
Guam Defense System	1,556
Joint Fires Network	184
Mission Partner Environment	152.8
Maritime Strike Tomahawk (MST- USA)	395
Maritime Strike Tomahawk (MST- USMC)	98
USINDOPACOM Campaigning	786.2
Persistent Undersea Targeting	117
Military Construction- Design	270.3
Military Construction – Construction	1983.7
Joint Training Team	49
Joint Task Force Micronesia	25.5
Precision Strike Missile (PrSM) Increment 2 (USA)	254
Joint Experimentation and Innovation	45
Standard Missile 6 (SM-6) 1B Variant	443
Clandestine Delivered Mine	10
Hammerhead Mine	172
Powered Quickstrike	32
Operationalize Near Term Space Control	1319
Offensive Cyber- Access and Effects	407
All Domain Missile Warning and Missile Tracking Architecture	2190
Space –Based Persistent Custody Sensors	1024
Cyber Security and Network Defenses	154
International Security Cooperation Program	529.5
Joint Task Force Indo-Pacific	17
Asia Pacific Regional Initiative	13.5
HQ Manpower Enhancements	30
Joint Training, Exercise and Evaluation Program	216.7
Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements	136.4
Resilient TS-SCI Warfighting Architecture	62.9
Information Operations	37

39. Senator WARREN. Admiral Aquilino, is there a tail associated with this Unfunded Priorities Lists?
Admiral AQUILINO.

Program	Associated Tail?
Guam Defense System	Yes
Joint Fires Network	Yes
Mission Partner Environment	Yes
Maritime Strike Tomahawk (MST- USA)	Yes
Maritime Strike Tomahawk (MST- USMC)	Yes
USINDOPACOM Campaigning	No
Persistent Undersea Targeting	Yes
Military Construction- Design	Yes
Military Construction – Construction	Yes
Joint Training Team	No
Joint Task Force Micronesia	Yes
Precision Strike Missile (PrSM) Increment 2 (USA)	Yes
Joint Experimentation and Innovation	Yes
Standard Missile 6 (SM-6) 1B Variant	Yes
Clandestine Delivered Mine	Yes
Hammerhead Mine	Yes
Powered Quickstrike	No
Operationalize Near Term Space Control	Yes
Offensive Cyber- Access and Effects	Yes
All Domain Missile Warning and Missile Tracking Architecture	Yes
Space –Based Persistent Custody Sensors	Yes
Cyber Security and Network Defenses	Yes
International Security Cooperation Program	No
Joint Task Force Indo-Pacific	Yes
Asia Pacific Regional Initiative	No
HQ Manpower Enhancements	Yes
Joint Training, Exercise and Evaluation Program	Yes
Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements	Yes
Resilient TS-SCI Warfighting Architecture	Yes
Information Operations	No

40. Senator WARREN. Admiral Aquilino, is any tail funded in the future years defense plan?

Admiral AQUILINO.

Program	Main FYDP	Any Tail Funded?
Guam Defense System	MDA	Yes
Joint Fires Network	DoD	Yes
Mission Partner Environment	Navy	Yes
Maritime Strike Tomahawk (MST- USA)	USA	Yes
Maritime Strike Tomahawk (MST- USMC)	USMC	Yes
USINDOPACOM Campaigning	Multiple	Yes
Persistent Undersea Targeting	Navy	Yes
Military Construction- Design	Multiple	Yes
Military Construction – Construction	Multiple	Yes
Joint Training Team	Navy	No
Joint Task Force Micronesia	Navy	No
Precision Strike Missile (PrSM) Increment 2 (USA)	Army	Yes
Joint Experimentation and Innovation	Navy	Yes
Standard Missile 6 (SM-6) 1B Variant	Navy	Yes
Clandestine Delivered Mine	Navy	Yes
Hammerhead Mine	Navy	Yes
Powered Quickstrike	Navy	Yes
Operationalize Near Term Space Control	Space Force	Yes
Offensive Cyber- Access and Effects	Multiple	Yes
All Domain Missile Warning and Missile Tracking Architecture	MDA	Yes
Space –Based Persistent Custody Sensors	Multiple	Yes
Cyber Security and Network Defenses	Multiple	Yes
International Security Cooperation Program	DSCA	Yes
Joint Task Force Indo-Pacific	Navy	Yes
Asia Pacific Regional Initiative	Navy	Yes
HQ Manpower Enhancements	Navy	Yes
Joint Training, Exercise and Evaluation Program	Joint Staff	Yes
Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements	Multiple	Yes
Resilient TS-SCI Warfighting Architecture	Multiple	No
Information Operations	DoD	Yes

41. Senator WARREN. Admiral Aquilino, please describe how much the requirement will cost per year for the next 5 years.

Admiral AQUILINO.

	Requirements in $ Millions			
Program	FY25	FY26	FY27	FY28
Guam Defense System	1867.2	1226	376	246.2
Joint Fires Network	25.8	26.6	153.41	28.3
Mission Partner Environment	135.99	129.52	132.1	133.93
Maritime Strike Tomahawk (MST- USA)	687	0	0	0
Maritime Strike Tomahawk (MST- USMC)	417	235	181	119
USINDOPACOM Campaigning	786.2	786.2	786.2	786.2
Persistent Undersea Targeting	148	9	173	136
Military Construction- Design	510.86	442.84	222.36	146.5
Military Construction – Construction	3778.18	4420.81	6035.87	3931.33
Joint Training Team	51	54.8	54.8	54.9
Joint Task Force Micronesia	10	10	10	10
Precision Strike Missile (PrSM) Increment 2 (USA)	400	425	440	450
Joint Experimentation and Innovation	47	52.54	53.36	64.23
Standard Missile 6 (SM-6) 1B Variant	655	574	501	412
Clandestine Delivered Mine	188	0	0	0
Hammerhead Mine	646	258	15	15
Powered Quickstrike	0	0	0	0
Operationalize Near Term Space Control	1273	790	846	670
Offensive Cyber- Access and Effects	460	466	430	408
All Domain Missile Warning and Missile Tracking Architecture	2443	2301	3030	4316
Space –Based Persistent Custody Sensors	1721	1787	1554	1042
Cyber Security and Network Defenses	95	95	70	59.5
International Security Cooperation Program	600	600	600	600
Joint Task Force Indo-Pacific	8.6	8.8	9	9.1
Asia Pacific Regional Initiative	13.5	13.5	13.5	13.5
HQ Manpower Enhancements	25.2	25.6	25.9	26.3
Joint Training, Exercise and Evaluation Program	260.86	220.36	261.49	220.35
Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements	158.4	127.9	120.7	124.7
Resilient TS-SCI Warfighting Architecture	81.5	102.2	79.4	73.9
Information Operations	37	38	38	39

42. Senator WARREN. Admiral Aquilino, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or Unfunded Priorities Lists.

Admiral AQUILINO.

Program	FY22 Enacted ($M)	FY23 Enacted ($M)
Guam Defense System	152	892
Joint Fires Network	N/A	N/A
Mission Partner Environment	80.7	98
Maritime Strike Tomahawk (MST- USA)	N/A	395
Maritime Strike Tomahawk (MST- USMC)	N/A	98
USINDOPACOM Campaigning	N/A	355
Persistent Undersea Targeting	N/A	44
Military Construction- Design	424.6	667.2
Military Construction – Construction	1746.6	662
Joint Training Team	N/A	N/A
Joint Task Force Micronesia	N/A	N/A
Precision Strike Missile (PrSM) Increment 2 (USA)	N/A	457
Joint Experimentation and Innovation	N/A	N/A
Standard Missile 6 (SM-6) 1B Variant	343.5	443
Clandestine Delivered Mine	N/A	N/A
Hammerhead Mine	N/A	283.5
Powered Quickstrike	N/A	0
Operationalize Near Term Space Control	N/A	308
Offensive Cyber- Access and Effects	N/A	95
All Domain Missile Warning and Missile Tracking Architecture	N/A	984
Space –Based Persistent Custody Sensors	308.9	846
Cyber Security and Network Defenses	N/A	14
International Security Cooperation Program	299.2	449.3
Joint Task Force Indo-Pacific	8	8.2
Asia Pacific Regional Initiative	4.6	14
HQ Manpower Enhancements	0	13.8
Joint Training, Exercise and Evaluation Program	N/A	232
Service Tactical SIGINT Upgrades and Processing, Exploitation, Dissemination (PED) Enhancements	N/A	29.7
Resilient TS-SCI Warfighting Architecture	N/A	88
Information Operations	N/A	26.5

43. Senator WARREN. Admiral Aquilino, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

Admiral AQUILINO. USINDOPACOM will continue to advocate for required joint force capabilities in the services future POMs.

44. Senator WARREN. Admiral Aquilino, please provide photos of this requirement for visual aid.

Admiral AQUILINO. Please reference the visual aids contained in the 2023 National Defense Authorization Act (NDAA) Section 1254 Independent Assessment.

DOD CIVILIAN PERSONNEL IN INDOPACOM

45. Senator WARREN. Admiral Aquilino and General LaCamera, how many civilian personnel and contractors are assigned to INDOPACOM and and United States Forces Korea?

Admiral AQUILINO.

Civilian	Contractor	Total
42460	7499	49959

General LACAMERA. U.S. Appropriated Funded Government Service Civilians: 2,670

U.S. Non-Appropriated Funded Service Civilians: 795

U.S. Invited Contractors: 2,909

46. Senator WARREN. Admiral Aquilino and General LaCamera, please provide a breakdown of many civilian personnel and contractors at each installation in INDOPACOM and are (1) teachers; (2) medical personnel, including those mental health services to military personnel; (3) Human Resources personnel; (4) law enforcement personnel; (5) science, engineering, or technical personnel; (6) communications personnel; and (7) contracts, supplies, and logistics personnel.

Admiral AQUILINO.

Category	Civilian	Contractor	Total
Teacher	1988	0	1988
Medical	1158	128	1286
Human Resources	1755	108	1863
Law Enforcement	1473	197	1670
Science, Engineering, & Technology	10930	1780	12710
Communication	2421	535	2956
Contracts, Supplies, & Logistics	6582	1314	7896
Other	16153	3437	19590
Total	42460	7499	49959

General LACAMERA.

Areas of Concentration	Area 1 Camp Casey Camp Hovey	Area 2 Yongsan Garrison K-16 AB	Area 3 & 5 Camp Humphreys Osan AB	Area 4 & 6 Camp Henry & Walker Camp Mujuk & Chinhae Kunsan AB
Teachers	0	0	270	64
Medical	9	5	193	124
Human Resources	3	6	167	22
Law Enforcement	4	9	189	16
Science, Engineering, or Technical	6	7	626	31
Communications	5	13	168	61
Contracts, Supplies, Logistics	15	31	329	116
Contractors	120	124	1753	913

47. Senator WARREN. Admiral Aquilino and General LaCamera, how do civilian personnel and contractors in each of the following areas support military readiness in the region: (1) teachers; (2) medical personnel, including those mental health services to military personnel; (3) Human Resources personnel; (4) law enforcement personnel; (5) science, engineering, or technical personnel; (6) communications personnel; and (7) contracts, supplies, and logistics personnel.

Admiral AQUILINO.

Teacher: Teachers are skilled and adaptable, able to teach a diverse student population with varying educational backgrounds and needs. They have experience in education, bring a fresh perspective and are able to provide innovative and effective teaching methods to support the unique needs of our military children.

Medical: Civilian healthcare professionals provide mental health care, primary care, and other essential services to military members and their families. This helps keep servicemembers healthy, ready and deployable. Our employees in the medical and mental health fields bring a wealth of expertise and experience to military operations. They are skilled in their areas of specialization and provide valuable insights and innovative solutions to medical and mental health challenges.

Human Resources: Employees execute personnel related functions in a variety of roles; including recruitment, training and development, compensation and benefits, employee relations, and workforce planning. They help ensure military have the right people with the right skills in the right positions to meet mission requirements.

Law Enforcement: Employees bring a wealth of expertise and experience to law enforcement operations. Civilian law enforcement professionals help keep U.S. installations and communities in the AOR safe. They investigate crimes, enforce laws, and provide security for servicemembers and their families. By working together with military law enforcement personnel, civilian employees help maintain a secure and stable environment that supports military operations in the region.

Science, Engineering, or Technical: Civilian personnel and contractors from science, engineering and other similar technical fields deliver military readiness in the INDOPACOM AOR by serving as the institutional backbone of knowledge and experience across the total joint force. These personnel are particularly vital in technical fields as they often directly support warfighting platforms or the installations and associated infrastructure from which the warfighting platforms train and operate daily. Furthermore, civilians in the engineering field often provide the long-term strategic vision for installations and can maintain momentum for operational initiatives.

Communications: Effective communication in the USINDOPACOM AOR is essential for mission success, as it enables us to coordinate efforts, share information, and respond quickly and effectively to changing circumstances. Our employees work in a variety of roles, including network administration, radio and satellite communications, information technology, and cybersecurity. They help to ensure that our military has the communication capabilities it needs to operate effectively, particularly in our unique theater of operations.

Contracts, Supplies, and Logistics: Booth civilians and contractors provide essential support services to our military, including supply chain management, transportation, maintenance and repair, and other logistical functions. They work closely with our military personnel to ensure that logistics operations are running smoothly and efficiently both in armistice and in contingency planning.

General LACAMERA. Government civilians and contractors are a crucial support mechanism in the augmentation of military personnel in the Korean Theater of Operations. Military members depart Korea at a greater than fifty percent annual rotation rate. Therefore, the civilian community provides continuity in support of mission readiness. (1) Teachers in Korea play a vital role in supporting our military mission readiness as they are responsible for educating our DOD affiliated children, many of whom face unique challenges and stresses. Department of Defense Education Association (DODEA) personnel in Korea are skilled and able to teach a diverse student population with varying educational backgrounds. Education opportunities enable families to stay together thereby enhancing readiness and morale and enabling longer than 1-year tours which, in turn, increases continuity. (2) Medical Personnel: Civilian and contract medical providers enhance medical readiness for the force by filling the Specialty Care billets that are not organic to the combat medical mission of the 65th Medical Brigade, and by providing a significant percentage of the Primary Care delivered in the Family Practice, Physical Therapy, and Behavioral Health clinics. Additionally, about 80 percent of the staff at Brian D. Allgood Hospital is borrowed military manpower from the 65th Medical Brigade, which must maintain its primary mission of Tactical Field Care through regular unit-level training and field exercises. Civilians and contractors provide the continuity of care nec-

essary to maintain hospital operations during these required military training events. Last, military medical providers are limited to a 1-year or 2-year assignment on the peninsula. Civilians and contract staff on longer-term contracts provide the necessary longitudinal care essential in maintaining the accepted universal Standards of Medical Care and ensuring overall Patient Satisfaction in the Military Health System. (3) Civilian Human Resources Personnel augment our military personnel specialist by providing expertise and sustainability of human resource programs and personnel management. (4) Civilian Law Enforcement Personnel are skilled in their areas of specialization and provide valuable insights to ensure training and awareness regarding law enforcement challenges in Korea as well as continuity of operations. Working together with Military Police and Customs Personnel, civilian employees help to maintain security and properly inform the expat community regarding Korean law. (5) Science, Engineering and Technical Civilian Personnel assist in ensuring our military has the capabilities it needs to carry out its missions effectively. They play a critical role in maintaining sustained and continued technological superiority, essential for the success of military operations. (6) Civilian Communications Personnel provide expertise and continuity. Civilian employees in communications work in a variety of roles, including network administration, radio and satellite communications, information technology, and cybersecurity. (7) Civilian Contracts, Supplies and Logistics Personnel augment military specialists in support of supply chain management, transportation, maintenance and repair, and other logistical functions, ensuring that logistics operations are running smoothly and efficiently both in armistice and, if needed, during crisis and resumption of combat operations.

48. Senator WARREN. Admiral Aquilino, in September 2022, the U.S. Naval Hospital Yokusuka in Japan announced it would cease providing care to Department of Defense (DOD) contractors and civilians, leaving around 4,000 individuals uncertain about their healthcare access. In March 2023, DOD reversed this policy but there remain concerns about the quality and healthcare access for DOD-affiliated civilians and contractors. Please provide a breakdown of many civilian personnel and contractors at each installation in Japan are (1) teachers; (2) medical personnel, including those mental health services to military personnel; (3) Human Resources personnel; (4) law enforcement personnel; (5) science, engineering, or technical personnel; (6) communications personnel; and (7) contracts, supplies, and logistics personnel.

Admiral AQUILINO.

Categories	Civilian	Contractor
Teacher	1544	0
Medical	758	19
Human Resources	169	0
Law Enforcement	250	26
Science, Engineering, or Technical	1295	912
Communication	244	37
Contracts, Supplies, and Logistics	490	180
Other	2523	757
Total	7273	1931

A table with all installations provided:

Installation	Teacher		Medical		Human Resources		Law Enforcement		Science, Eng, Tech		Communication		Contracts, supplies, logs		Other		Total	
	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor	Civilian	Contractor
Atsugi	33	0	11	3	1	0	3	0	23	4	9	1	27	0	172	19	279	27
Camp Butler/Foster	133	0	54	0	72	0	143	26	424	33	115	13	75	11	274	121	1290	204
Iwakuni	128	0	20	9	11	0	2	0	77	0	6	0	54	0	152	0	450	9
Camp Shields	37	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	41	0
Misawa	96	0	10	0	7	0	12	0	33	0	2	0	20	0	254	9	434	9
Kadena	357	0	467	4	20	0	18	0	125	655	10	13	106	149	287	58	1390	879
Sasebo	90	0	12	0	2	0	2	0	55	0	3	0	30	0	75	76	269	76
Hansen			0	0	0	0	0	0	3	0	0	0	3	0	12	0	18	0
Tokyo			3	0	0	0	0	0	3	0	1	0	2	0	14	0	23	0
Kinser	28		1	0	0	0	2	0	1	0	0	0	4	0	6	0	42	0
Yokota	132	0	35	0	10	0	11	0	99	220	16	10	43	0	466	64	812	294
Naha			0	0	0	0	0	0	0	0	2	0	3	0	15	0	20	0
Yokohama			0	0	0	0	0	0	4	0	2	0	4	0	13	28	23	28
White Beach			0	0	0	0	1	0	0	0	0	0	0	0	1	3	2	3
Yokosuka	267		44	3	7	0	21	0	362	0	18	0	30	20	471	76	1220	99
Camp Courtney			7	0	0	0	4	0	1	0	0	0	6	0	15	0	33	0
Camp Zama	81	0	64	0	24	0	17	0	48	0	37	0	51	0	181	45	503	45
Futenma			0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
Sagamihara			3	0	0	0	0	0	0	0	0	0	4	0	22	0	29	0
Chibana			0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
Kyogamisaki			0	0	0	0	0	0	0	0	0	0	0	0	0	107	0	107
Ft Buckner			0	0	0	0	1	0	1	0	2	0	0	0	2	11	6	11
Kure Pier 6			2	0	0	0	1	0	0	0	1	0	1	0	10	0	15	0
Torii Station	25	0	16	0	8	0	5	0	27	0	14	0	16	0	49	7	160	7
Sagami Depo			0	0	0	0	0	0	0	0	1	0	4	0	12	14	17	14
Camp Schwab			1	0	0	0	1	0	5	0	0	0	1	0	2	0	10	0
Shariki			0	0	0	0	0	0	0	0	0	0	0	0	0	112	0	112
Camp Futenma			4	0	0	0	4	0	2	0	4	0	5	0	6	0	25	0
Camp Fuji			2	0	0	0	2	0	2	0	1	0	1	0	5	0	13	0
Camp McTureous	48	0	1	0	0	0	0	0	0	0	0		0	0	2	0	51	0
Lester	37	0	0														37	0
District Superintende	52	0	0		7	0											59	0

Categories	Civilian	Contractor
Teacher	1544	0
Medical	758	19
Human Resources	169	0
Law Enforement	250	26
Science, Engineering, or Technical	1295	912
Communication	244	37
Contracts, Supplies, and Logistics	490	180
Other	2523	757
Total	7273	1931

49. Senator WARREN. Admiral Aquilino, how do civilian personnel and contractors in each of the following areas support military readiness in Japan: (1) teachers; (2) medical personnel, including those mental health services to military personnel; (3) Human Resources personnel; (4) law enforcement personnel; (5) science, engineering, or technical personnel; (6) communications personnel; and (7) contracts, supplies, and logistics personnel.

Admiral AQUILINO.

Teacher: Teachers support military readiness by delivering a quality, accredited pre-kindergarten through 12th grade education to military-connected children around the world. DODEA's teachers ensure that all school-aged children of military families are provided world-class education that prepares them for postsecondary education and/or career success and to be leading contributors in their communities as well as our globalized society.

Medical: Civilian healthcare professionals provide mental health care, primary care, and other essential services to military members and their families. This helps keep servicemembers healthy, ready and deployable. Our employees in the medical and mental health fields bring a wealth of expertise and experience to military operations. They are skilled in their areas of specialization and provide valuable insights and innovative solutions to medical and mental health challenges.

Human Resources: Civilian and contracted H.R. representatives in Japan play a crucial role in managing civilian personnel programs and implementing policies that directly affect the total civilian workforce in country. Their contributions include influencing, developing, managing, and assessing the strategic direction of civilian

human resources plans, programs, and policies. Civilians comprise approximately 13 percent of the total force in Japan.

Law Enforcement: Employees bring a wealth of expertise and experience to law enforcement operations. Civilian law enforcement professionals help keep U.S. installations and communities in the AOR safe. They investigate crimes, enforce laws, and provide security for servicemembers and their families. By working together with military law enforcement personnel, civilian employees help maintain a secure and stable environment that supports military operations in the region.

Science, Engineering, or Technical: Civilian personnel and contractors from science, engineering and other similar technical fields deliver military readiness in Japan and the INDOPACOM area of operations by serving as the institutional backbone of knowledge and experience across the total joint force. These personnel are particularly vital in technical fields as they often directly support warfighting platforms or the installations and associated infrastructure from which the warfighting platforms train and operate daily.

Communications: Effective communication in the USINDOPACOM AOR is essential for mission success, as it enables us to coordinate efforts, share information, and respond quickly and effectively to changing circumstances. The C4 System Directorate provides coordinated communications systems support to the USFJ CDR and provide agile, resilient, and integrated C4 capabilities in support of the US-Japan Alliance and regional contingency operations. Our employees work in a variety of roles, including network administration, radio and satellite communications, information technology, and cybersecurity. They help to ensure that our military has the communication capabilities it needs to operate effectively, particularly in our unique theater of operations.

Contracts, Supplies, and Logistics: Booth civilians and contractors provide essential support services to our military, including supply chain management, transportation, maintenance and repair, and other logistical functions. They work closely with our military personnel to ensure that logistics operations are running smoothly and efficiently both in armistice and in contingency planning. Contracts and contractors lower the cost to the U.S. Government and allow us to operate in otherwise inaccessible areas. For supplying and sustaining the force, both AAFES and DeCA operate on every major U.S. installation and are completely civilian-run. These organizations provide vital support to both servicemembers and families by providing access to food and daily necessities that are not available outside the gate on the local economy.

50. Senator WARREN. Admiral Aquilino, does INDOPACOM provide standard information to new civilian personnel and contractor hires who are being stationed in Japan regarding the difficulty of healthcare access in Japan both in job listings and once they are hired? Please provide a copy of the information provided to new and prospective personnel.

Admiral AQUILINO. No, USINDOPACOM relies on the different service component's business practices as it relates to civilian/contractor hiring management. United States Navy and Army warn potential employee hires on the job announcement:

ACCESS TO MEDICAL AND DENTAL CARE IN JAPAN IS EXTREMELY LIMITED. Please see Additional Information section below.

Additional Information: Employees (and their family members) who require medical or dental care in Japan may experience severe limitations accessing medical care both on the military installation and the local economy, and also could incur costly medical expenses.

United States Air Force announcements do not carry this disclaimer in Japan.

Please see attached job announcement for copy of message.

SUPERVISORY ELECTRONICS TECHNICIAN

DEPARTMENT OF THE NAVY

U.S. Pacific Fleet

Summary

*****ACCESS TO MEDICAL AND DENTAL CARE IN JAPAN IS EXTREMELY LIMITED. Please see Additional Information section below.*****

You will serve as a SUPERVISORY ELECTRONICS TECHNICIAN in the SURVEILLANCE BRANCH of NAVAL SHIP REPAIR FACILITY.

Overview

Open & closing dates

02/24/2023 to 03/02/2023

Salary

$84,546 - $109,908 per year

Pay scale & grade

GS 13

Location

1 vacancy in the following location:

Yokosuka, Japan
1 vacancy

Remote job

No

Telework eligible

Yes—This position is eligible for part time, substantial or ad-hoc telework at the discretion of management.

Travel Required

Occasional travel - You may be expected to travel for this position.

Relocation expenses reimbursed

Yes— Relocation expenses (i.e. PCS) for candidates outside of the commuting area are authorized in accordance with applicable travel regulations and Department of Navy Policy. Relocation incentives as described in 5 USC 5753 may be authorized in accordance with applicable command policy.

Appointment type

Permanent -

Work schedule
Full-time -

Service
Competitive

Promotion potential
None

Job family (Series)
0856 Electronics Technical
(/Search/Results?j=0856)

Supervisory status
Yes

Security clearance
Secret
(/Help/faq/job-announcement/security-clearances/)

Drug test
No

Position sensitivity and risk
Noncritical-Sensitive (NCS)/Moderate Risk
(https://www.usajobs.gov/Help/faq/job-announcement/security-clearances/)

Trust determination process
Suitability/Fitness
(https://www.usajobs.gov/Help/faq/job-announcement/security-clearances/)

National security
(https://www.usajobs.gov/Help/faq/job-announcement/security-clearances/)

Announcement number
ST-11854311-23-NTR

Control number
708396500

This job is open to

Career transition (CTAP, ICTAP, RPL)
Federal employees who meet the definition of a "surplus" or "displaced" employee.

Family of overseas employees
Family members of a federal employee or uniformed service member who is or was, working overseas.

Internal to an agency
Current federal employees of this agency.

Land & base management
Certain current or former term or temporary federal employees of a land or base management agency.

Military spouses

Veterans

Clarification from the agency

Current and former permanent competitive federal employees and VEOA eligibles.

Duties

- You will be responsible for the administration, organization, staffing and operations of SRF-JRMC's C295 Branch.
- You will coordinate and manage Fleet Technical Assistance and recommendations ensuring the integrity of shipboard combat systems.
- You will plan, schedule, and set priorities for subordinate's work and assign technically capable personnel to the jobs.
- You will develop branch head performance standards and evaluate their work performance, advise all subordinates on work and administrative matters, resolve complaints and refer more serious unresolved complaints to upper level management.

Requirements

Conditions of Employment

- Must be a US Citizen.
- Must be determined suitable for federal employment.
- Must participate in the direct deposit pay program.
- New employees to the Department of the Navy will be required to successfully pass the E-Verify employment verification check. To learn more about E-Verify, including your rights and responsibilities, visit e-verify.gov
- Generally, current federal employees applying for GS jobs must serve at least one year at the next lower grade level. This requirement is called time-in-grade. Time-in-grade requirements must be met by the closing date of this announcement.
- This is an overseas position. You will be subject to and must be able to satisfy the overseas requirements of the 26Jul12 DODI 1400.25 V1230: http://www.esd.whs.mil/Portals/54/Documents/DD/issuances/140025/140025v1230.pdf
- This position may require travel to places within and outside the contiguous United States which could include remote or isolated sites. You may be required to travel on military and commercial aircraft for extended periods of time.
- If eligible for permanent change of station, the appointee will be required to sign a transportation agreement to establish a Government time in service requirement of 12 months.
- Must be able to obtain and maintain a U.S. Passport.
- May be required to obtain a VISA dependent on the overseas country's laws/regulations.

- You will be required to sign the Statement of Understanding for Overseas Employment acknowledging receipt and understanding of the statement of living and working conditions for this location.
- Within the Department of Defense (DoD), the appointment of retired military members within 180 days immediately following retirement date to a civilian position is subject to the provisions of 5 United States Code 3326.
- Males born after 12-31-59 must be registered for Selective Service.
- You will be required to successfully complete a pre-appointment physical examination.
- You will be required to obtain and maintain an interim and/or final security clearance prior to entrance on duty. Failure to obtain and maintain the required level of clearance may result in the withdrawal of a job offer or removal.
- This position may require travel from normal duty station to CONUS and OCONUS and may include remote or isolated sites. You must be able to travel on military and commercial aircraft for extended periods of time.
- This position is considered Key/Emergency-Essential. You will be required to provide immediate and continuing support to ensure the success of combat operations or the availability of combat-essential systems.
- Supervisors in the executive branch have a heightened personal responsibility for advancing government ethics. You will be required to review the 14 General Principles of Ethical Conduct at 5 CFR 2635.101.
- This position is subject to work an uncommon tour, including nights, weekends, and holidays to meet mission requirements. Overtime or night differential pay and/or unusual duty hours may be required.

Qualifications

Your resume must demonstrate at least one year of specialized experience equivalent to the next lower grade level (GS-12) or pay band in the federal service or equivalent experience in the private or public sector one year of specialized experience equivalent to the next lower grade level (GS-12) or pay band in the federal service or equivalent experience in the private or public sector leading or directing the work of technical staff (e.g. reviewing work priorities and manpower resources, evaluating work and performance, etc.) AND coordinating the overhaul and repair of shipboard surveillance and combat systems.

Additional qualification information can be found from the following Office of Personnel Management web site:
https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/#url=List-by-Occupational-Series
(https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/#url=List-by-Occupational-Series)

Electronics Technical Series 0856 (opm.gov)
(https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/0800/electronics-technical-series-0856/)

General Schedule Qualification Standards (opm.gov)
(https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/#url=Group-Standards)

Experience refers to paid and unpaid experience, including volunteer work done through National Service programs (e.g., professional, philanthropic, religious, spiritual, community, student, social). Volunteer work helps build critical competencies, knowledge, and skills and can provide valuable training and experience that translates directly to paid employment.

Education

This job does not have an education qualification requirement.

Additional information

Employees (and their family members) who require medical or dental care in Japan may experience severe limitations accessing medical care both on the military installation and the local economy, and also could incur costly medical expenses.

This position is covered by the Department of Defense Priority Placement and Alternate Placement Programs.

Additional vacancies may be filled by this announcement.

Pay retention may be granted when certain conditions are met.

A tentative offer of employment will be rescinded if the selectee fails to meet the pre-employment requirements, including failure to report to any of the scheduled appointments.

If you are unable to apply online and request information about the Alternate Application process, please contact the Department of Navy's Employment Information Center.

Federal annuitant information: The selection of an annuitant is subject to the Department of Defense and Department of the Navy policy on the employment of annuitants. Policy information may be found at:
http://www.secnav.navy.mil/donhr/Documents/CivilianJobs/FedCivAnnuitants.pdf
(http://www.secnav.navy.mil/donhr/Documents/CivilianJobs/FedCivAnnuitants.pdf)

Tour of duty will be 36 Months.

To learn more about the living and working conditions at this military installation and additional Foreign Overseas information, please go to: https://www.secnav.navy.mil/donhr/Overseas/Pages/default.aspx
(https://www.secnav.navy.mil/donhr/Overseas/Pages/default.aspx)

Priority consideration will be given to military spouse preference and family member preference eligible residing in the commute area of the duty location for this position. Commute area is defined as the geographic area surrounding the duty location in which people can reasonably be expected to travel back and forth daily.

Military Spouses and Family Members may apply 30 days before their anticipated arrival date. However, they will not receive preference until arrival at the foreign location. Additional documentation may be required prior to granting preference.

Military spouses and family members who are appointed may not extend longer than 2 months following the transfer of the sponsor from the commuting area of the foreign duty station; 2 months beyond the separation of the appointee's sponsor; or any time beyond the time employee ceases to be a family member.

ICTAP Applicants: To be considered well-qualified and exercise selection priority as an ICTAP candidate, displaced Federal employees must satisfy all qualification requirements for the position and receive a rating in the highly qualified category (score 85) or higher. ICTAP candidates must provide copies of all of the following documentation at the time of application: 1) agency notice; 2) most recent performance appraisal; and 3) most recent SF-50 or notification of personnel action that includes position, grade level, and duty location. Applicants who do not provide this documentation will not receive consideration as an ICTAP candidate. For more information about ICTAP eligibility please review the following link: https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/federal-employees/ictap/
(https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/federal-employees/ictap/)

Certain incentives (such as Recruitment, Relocation or Student Loan Repayment) may be authorized to eligible selectees.

Benefits

A career with the U.S. government provides employees with a comprehensive benefits package. As a federal employee, you and your family will have access to a range of benefits that are designed to make your federal career very rewarding. Learn more about federal benefits
(https://www.usajobs.gov/Help/working-in-government/benefits/)
.

Review our benefits
(http://www.secnav.navy.mil/donhr/Benefits/Pages/Default.aspx)

Eligibility for benefits depends on the type of position you hold and whether your position is full-time, part-time or intermittent. Contact the hiring agency for more information on the specific benefits offered.

How You Will Be Evaluated

You will be evaluated for this job based on how well you meet the qualifications above.

In order to qualify for this position, your resume must provide sufficient experience and/or education, knowledge, skills, and abilities to perform the duties of the specific position for which you are being considered. Your resume is the key means we have for evaluating your skills, knowledge, and abilities as they relate to this position. Therefore, we encourage you to be clear and specific when describing your experience.

When the application process is complete, we will review your resume to ensure you meet the hiring eligibility and qualification requirements listed in this announcement. You will be rated based on the information provided in your resume and responses to the Occupational Questionnaire, along with your supporting documentation to determine your ability to demonstrate the following competencies:

- *ENGINEERING PROJECT MANAGEMENT*
- *MANAGING HUMAN RESOURCES*
- *ORAL COMMUNICATION*
- *PARTNERING*
- *TROUBLESHOOTING ELECTRONIC SYSTEMS AND EQUIPMENT*

You should list any relevant performance appraisals and incentive awards in your resume as that information may be taken into consideration during the selection process. If selected, you may be required to provide supporting documentation.

If after reviewing your resume and supporting documentation, a determination is made that you inflated your qualifications and/or experience, your score may be adjusted to more accurately reflect your abilities or you may be found ineligible/not qualified.

Please follow all instructions carefully. Errors or omissions may affect your rating or consideration for employment.

All eligibility, qualifications, and time-in-grade requirements must be met by the closing date of this announcement.

Required Documents

You are required to provide documentation that supports the eligibility and qualification claims made in your resume and assessment questionnaire. You must submit the applicable documents listed here and those listed with the eligibilities you select in the announcement questionnaire with your application package. Applicants who do not provide supporting documentation that fully support their claims will not be referred to the hiring manager. Cover letter is optional.

A complete resume is required. Your resume must show relevant experience, job title, duties and accomplishments. Your resume must show complete information for each job entry to support minimum qualifications. The following information should be provided in your resume, but it is acceptable to provide elsewhere in your application package: employer's name, starting and end dates (Mo/Yr), hours per week, and pay plan, series and grade level (e.g. GS-0201-09) for relevant federal experience.TIP: A good way to ensure you include all essential information is to use the Resume Builder in USAJOBS to create your resume.

Are you applying for a promotion? If you are a current GS employee applying for a higher grade than the grade that you currently hold you must provide an SF-50 that shows that you have held the next lower grade for at least one year. Some SF-50s effective within the last 52 weeks will not demonstrate you have held the next lower grade for at least one year (e.g. General Adjustment SF-50 from this year). In many cases, we need to see two (2) SF-50s to determine time-in-grade and eligibility for promotion. If you are a DoD employee, you can obtain a copy of your SF- 50(s) from MyBiz (https://compo.dcpds.cpms.osd.mil/)
.

Are you claiming membership in any professional organizations, or possession of a license, certificate or credentials? Check the **Conditions of Employment** section above to see if any are required. If you claim membership, license, certification, or credentials, you must submit a copy of said document in your application package.

Are you using education as a substitute for some or all of the experience requirement? Is there a basic education requirement for this position? Check the **Education** section above to see what is allowed and what is required. Any claims you make in your resume or assessment questionnaire regarding education or degrees MUST be supported by submitting with your application official or unofficial transcripts or a list of courses, grades earned, completion dates, and quarter and semester hours earned issued from your school. While unofficial transcripts are acceptable for initial application, an official transcript will ultimately be required if you are selected for the position. You may submit a copy your degree(s) if specific coursework does not have to be verified.

Are you a veteran claiming 5-point veterans' preference or **claiming sole survivorship preference?** You must submit a copy of your latest DD-214 Certificate of Release or Discharge from Active Duty (any copy that shows all dates of service, as well as character of service [Honorable, General, etc.] is acceptable) OR a VA letter that shows dates of service or service connected disability AND character of service. If you have more than one DD-214 for multiple periods of active duty service, submit a copy for each period of service. If you were issued a DD-215 to amend aforementioned information on the DD-214 you must submit that too. If you are not sure of your preference eligibility, visit the Department of Labor's website: Veterans' Preference Advisor (https://webapps.dol.gov/elaws/vets/vetpref/mservice.htm)

Are you a disabled veteran or claiming 10-point veterans' preference?
If you are eligible to claim 10 point veterans preference you must submit a DD-214 Certificate of Release or Discharge from Active Duty as described above for 5-point preference.

You must also provide the applicable supporting documentation of your disability (e.g. disability letter from the VA) as described on Standard Form-15 (SF-15). http://www.opm.gov/forms/pdf_fill/SF15.pdf (http://www.opm.gov/forms/pdf_fill/SF15.pdf)
.

Are you an active duty service member? Active Duty Service Members are required to submit a statement of service printed on

command letterhead and signed by the command. The statement of service must provide the branch of service, rate/rank, all dates of service, the expected date of discharge and anticipated character of service (Honorable, General, etc.).

Documents submitted as part of the application package, to include supplemental documents, may be shared beyond the Human Resources Office. Some supplemental documents contain personal information such as SSN and DOB and some documents such as military orders and marriage certificates may contain personal information for someone other than you. You may sanitize these documents to remove said personal information before you submit your application. You must provide an un-sanitized version of the documents if you are selected.

How to Apply

Click the Apply Online button to create an account or log in to your existing USAJOBS account.

To apply for this position, you must provide a complete Application Package which includes:
1. Complete resume with relevant experience, job title, duties and accomplishments. Your resume must show complete information for each job entry to support minimum qualifications. The following information should be provided in your resume, but it is acceptable to provide elsewhere in your application package: employer's name, starting and end dates (Mo/Yr), hours per week, and pay plan, series and grade level (e.g. GS-0201-09) for relevant federal experience.TIP: A good way to ensure you include all essential information is to use the Resume Builder in USAJOBS to create your resume.
2. Complete assessment questionnaire. For a quick preview of the assessment questionnaire click here:
https://apply.usastaffing.gov/ViewQuestionnaire/11854311
(https://apply.usastaffing.gov/ViewQuestionnaire/11854311)

3. Supporting documentation

Failure to submit a complete application package will result in an ineligible rating and loss of consideration.

Your complete application (resume, assessment questionnaire, and all supporting documents) must be received by 11:59 pm Eastern Standard Time (EST) on 03/02/2023. Applications received after 03/02/2023 will generally result in an ineligible rating and loss of consideration. If more than one resume is received, only the last resume received and processed will be reviewed.

NOTE: To check the status of your application or return to a previous or incomplete application, log into your USAJOBS account:
https://mydon.usajobs.gov/Account/Login
(https://mydon.usajobs.gov/Account/Login)
select Application Status, and click on the more information link under the application status for this position. Your uploaded documents may take several hours to clear the virus scan process so please plan appropriately.

You are encouraged to apply online. Applying online will allow you to review and track the status of your application.

Do not email or send hard copy resumes/applications to the Contact Information or Agency Information listed in this vacancy announcement. All resumes/applications received at the addresses listed in the Contact Information or Agency Information will be destroyed and will not be considered for this vacancy announcement.

It is the applicant's responsibility to verify that all information in their resume and documents are legible and accurate. HR will not modify answers/documents submitted by an applicant.

Agency contact information

Department of Navy EIC

Email

doneic@us.navy.mil
(mailto:doneic@us.navy.mil)

Address

NAVAL SHIP REPAIR FACILITY
SRF and JRMC
PSC 473 Box 8
Yokosuka
FPO, AP 96349-0008
US

Learn more about this agency
(#agency-modal-trigger)

Next steps

When the application process is complete, your complete application (resume, assessment questionnaire, and all supporting documents) will be reviewed to determine if you meet the hiring eligibility and qualification requirements for which you requested consideration. You will be rated based on the information provided in your resume and responses to the questionnaire, along with your supporting documentation to determine your level of knowledge, skill, and ability related to the job requirements.

Generally, only best qualified candidates will be referred to the hiring manager. Sometimes well qualified andminimally qualified candidates are referred. Occasionally, candidates eligible for priority consideration are referred, and no other candidates are referred.

The hiring manager may choose to conduct interviews.

You will be notified of our rating and referral decision. If you are referred, you will be notified when a hiring decision is made.

NOTE: Due to COVID19, if you have any questions or need assistance, please email the DON Employment Information Center at DONEIC@us.navy.mil

Fair & Transparent

The Federal hiring process is set up to be fair and transparent. Please read the following guidance.

Equal Employment Opportunity (EEO) Policy
(/Help/equal-employment-opportunity/)
Financial suitability
(/Help/working-in-government/fair-and-transparent/financial-suitability/)
New employee probationary period
(/Help/working-in-government/fair-and-transparent/probationary-period/)
Privacy Act
(/Help/working-in-government/fair-and-transparent/privacy-act/)
Reasonable accommodation policy
(/Help/reasonable-accommodation/)
Selective Service
(/Help/working-in-government/fair-and-transparent/selective-service/)
Signature and false statements
(/Help/working-in-government/fair-and-transparent/signature-false-statements/)
Social security number request
(/Help/working-in-government/fair-and-transparent/social-security-number/)

CIVILIAN HARM MITIGATION AND RESPONSE ACTION PLAN

51. Senator WARREN. Admiral Aquilino, what steps has INDOPACOM taken to implement the Civilian Harm Mitigation and Response Action Plan (CHMR-AP) thus far?

Admiral AQUILINO. INDOPACOM's J5 staff spearhead our civilian harm mitigation and response (CHMR) effort across the command. A cross-functional team meets regularly to guide the hiring process and to prioritize and sequence implementation. Incoming CHMR staff will be able to hit the ground running. INDOPACOM staff have readily absorbed the intended elements of good practice for civilian harm mitigation that build on existing procedure. Notably, our Joint Fires Element has integrated additional civilian harm mitigation measures into command targeting policy and has begun regularly integrating civilian harm mitigation vignettes and lessons learned into joint fires and targeting working groups.

52. Senator WARREN. Admiral Aquilino, what steps will INDOPACOM take within the next year to implement the Civilian Harm Mitigation Response-Action Plan?

Admiral AQUILINO. Our CHMR priority is to tailor and adapt pre-and post-strike Civilian Harm Mitigation and Response (CHMR) requirements and capabilities to ensure mission success in potential large-scale, multi-domain, and high-tempo combat in the Indo-Pacific context. Our cross-functional effort will be led by a CHMR Officer empowered to prioritize and direct CHMR-AP implementation consistent with urgent command priorities for enhanced mission readiness. With this lens, we will continue to tailor command-specific procedures to theater-specific considerations and operational requirements. INDOPACOM's large command post exercises offer the best opportunities to comprehensively test and refine CHMR procedures in large-scale combat scenarios and, in so doing, make meaningful progress against several CHMR-AP objectives. As we do so, the perspectives and capabilities of our key allies and partners is critical. In the coming year, I anticipate a robust dialog with allies and partners to set the conditions for shared practice to mitigate and respond to civilian harm in multinational operations.

53. Senator WARREN. Admiral Aquilino, how do you intend to monitor and assess the efficacy of the current implementation plan?

Admiral AQUILINO. Our progress to implement the Civilian Harm Mitigation and Response Action Plan (CHMR-AP) warrants regular attention throughout the INDOPACOM battle rhythm. CHMR must be integrated across command policies, procedures, and plans; it is not merely a temporary program conducted on the margins of our core business. A critical indicator will be how civilian harm risks are anticipated and addressed in our most critical operational plans and addressed in conjunction with allies and partners. The comprehensive integration of civilian harm considerations and dedicated CHMR capabilities in our large exercises will offer the best insight into the efficacy of our implementation efforts.

54. Senator WARREN. Admiral Aquilino, what steps is INDOPACOM taking to tailor new civilian harm mitigation and response requirements and capabilities to possible large-scale combat operations, including through integration into strategy, doctrine, planning, professional military education, training, and exercises?

Admiral AQUILINO. Tailoring civilian harm mitigation and response (CHMR) capabilities for potential large-scale multi-domain combat operations is exactly our focus for CHMR-AP implementation at INDOPACOM. For example, the intelligence products of our Civilian Environment Team will need to be focused on high-density urban centers and life-sustaining urban infrastructure in close proximity to military targets. We will additionally need to tailor specific pre-and post-strike mitigation and response measures to keep pace with command decisionmaking and a high operational tempo in a variety of contingency and operational plans. Global integrated exercises are critical opportunities for INDOPACOM to rehearse, stress-test, and refine CHMR procedures and capabilities. In 2024, INDOPACOM's large command post exercises offer the best opportunities to comprehensively test and refine CHMR capabilities in large-scale combat scenarios. These exercises will also enable us to fully define the resource requirements for effective civilian harm mitigation and response in large-scale multi-domain combat operations. I have directed my team to ensure that CHMR-AP is fully integrated as an exercise objective in Exercise Keen Edge 24 and we are the first combatant command globally to have taken such a step.

IMPACT OF HOLDS ON MILITARY NOMINATIONS

55. Senator WARREN. Admiral Aquilino and General LaCamera, Senator Tuberville placed a blanket hold on high-level DOD military nominees. What are the impacts of the current holds on national defense strategy regarding INDOPACOM and United States Forces Korea, including China's actions in the Indo-Pacific region?

Admiral AQUILINO. The current hold on high-level DOD military nominees will significantly impact some of our highest levels of leadership in USINDOPACOM if it persists beyond the summer timeframe. Delays in nomination may lead to subsequent delays in senior leader rotations by 12 months or more. These actions bring to doubt some of our assurances in the region, particularly to those allies and partners who we are trying to persuade to choose the United States as the partner of choice.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

56. Senator WARREN. Admiral Aquilino and General LaCamera, what are the impacts of the current holds on continuity of U.S. military operations in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. Without these leaders in place, the U.S. military will incur an unnecessary and unprecedented degree of risk at a moment when our adversaries may seek to test our resolve. Delays in confirming a large number of one-and two-star general and flag officers jeopardizes our current and future readiness status.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

57. Senator WARREN. Admiral Aquilino and General LaCamera, what are the impacts of the current holds on oversight of the U.S. military in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. The importance of timely General and Flag officer confirmation is critical. These leaders are responsible for executing strategy, acquiring new technologies, enhancing tactical effectiveness, conducting joint training, and strengthening global alliances.

Furthermore, these general and flag officers also provide direct leadership and mentorship to thousands of enlisted servicemembers and junior and field grade officers across the Department.

General and flag officers have the authority to make decisions and commit resources, develop key policies, work with our allies and partners, and confront our rivals and foes.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

58. Senator WARREN. Admiral Aquilino and General LaCamera, what are the impacts of the current holds on military families and facilities in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. The current confirmation holds are disrupting our senior military leader's families, specifically within USFK and our component commands. The confirmation holds are delaying moves needed to ensure we have the right talent in the right place during this period of increased tension. Additionally, families are feeling the stress and uncertainty, both of which may result in the loss of our best talent for opportunities that offer greater stability. Moreover, confirmation holds impacts decisionmaking on facility investments needed in the INDOPACOM AOR.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

59. Senator WARREN. Admiral Aquilino and General LaCamera, what high-level military positions within INDOPACOM and United States Forces Korea will be impacted by these holds if they last for another 3 months?

Admiral AQUILINO. At this time, we are fortunate to not have a direct impact within the headquarters but are closely tracking the impact the hold is having throughout the service components and USFK.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

60. Senator WARREN. Admiral Aquilino and General LaCamera, what are the impacts of these future holds on national defense strategy regarding INDOPACOM and United States Forces Korea, including China's actions in the Indo-Pacific region?

Admiral AQUILINO. If future holds are similar to this one, it will most certainly negatively affect the predictability and precedent in military leadership changes that our allies and partners have become accustomed to. A future hold could undermine the influence that we have on our allies and partners by projecting unreliability and uncertainty.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

61. Senator WARREN. Admiral Aquilino and General LaCamera, what are the projected impacts of these future holds on the continuity of U.S. military operations in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. Delays in confirmation will soon foist vacancies on the most senior military positions across each of the Services, imposing new and unnecessary risks on U.S. warfighters across multiple theaters of operations.

Confirmation holds makes it harder for the United States to fulfil its global leadership responsibilities, including to our treaty allies and our valued partners around the world. Our smoothly running normal processes and predictable military transitions have long set helpful expectations among allies and partners. Now, however, this hold has created unnecessary uncertainty. That diminishes our global standing as the strongest military in the world, which is in large part based on our stable processes and orderly transitions.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

62. Senator WARREN. Admiral Aquilino and General LaCamera, what are the projected impacts of these future holds on oversight of the U.S. military in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. General and flag officers have the authority to make decisions and commit resources, develop key policies, work with our allies and partners, and confront our rivals and foes. The full impact of this hold may not be immediately noticeable because of the resilience built into our military organizations, but over time, the hold will cause cascading impacts to our readiness and needlessly hinder our ability to meet our strategic objectives in the Indo-Pacific,

The absence of experienced and Senate-confirmed senior leadership limits our ability to deepen our cooperation with our allies and partners through multilateral training and cooperative engagements. Recent exercises, such as Balikatan 2023 with the Armed Forces of the Philippines or joint U.S.-Israeli naval activity in the Bab el-Mandeb Strait, may become even more difficult if delays in confirmation force other leaders to take on the responsibilities of officers held up by the Senate. This hold could force senior leaders to become dual-hatted, which would force them to juggle competing priorities and sap their ability to excel.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR."

63. Senator WARREN. Admiral Aquilino and General LaCamera, what are the projected impacts of these future holds on military families and facilities in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. Continued holds in the senior leader promotion process will not only cause disruption to our senior leader families but the stress and uncertainty will be felt across the force. If promotion holds continue, we risk losing the diverse talent and skillsets needed to win.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

64. Senator WARREN. Admiral Aquilino and General LaCamera, what impacts do these holds have on military medical readiness in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. The projected impact on military medical readiness in USINDOPACOM is minimal. Although there is one DHA/U.S. Army Medical Command dual-hatted FOGO position in the region that is affected, the successor is in position.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

65. Senator WARREN. Admiral Aquilino and General LaCamera, what impacts do these holds have on cybersecurity in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. There is no immediate impact to INDOPACOM. However, general and flag officers provide oversight to the Department's military and civilian staffs, help decide how we employ our forces, and take care of our members, civilians, and families. The delays that we are seeing will have an overall impact to the force by imposing unnecessary risks to operations.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

66. Senator WARREN. Admiral Aquilino and General LaCamera, do any of these holds send a damaging message to our allies in INDOPACOM and United States Forces Korea?

Admiral AQUILINO. We continue to engage with our allies and partners at the senior military levels of leadership regardless of the hold on high level DOD nominees; however, inconsistency and unpredictability in routine leadership changes do not contribute to assuring our allies and partners that we are reliable in keeping our commitments.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

67. Senator WARREN. Admiral Aquilino and General LaCamera, what message do these holds send to China and North Korea?

Admiral AQUILINO. Secretary Austin stated that these holds are certainly disruptive to our normal way of doing business and very disruptive to the families to the officers affected by these holds, and I echo the Secretary's message. However, I can assure you that Indo-Pacific Command stands ready to deter aggression across our AOR and should deterrence fail, win decisively.

- INDOPACOM appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the INDOPACOM AOR.

General LACAMERA. USFK appreciates that the hold on senior military nominees was lifted allowing those individuals to fill critical billets across the joint force, including in the USFK AOR.

QUESTIONS SUBMITTED BY SENATOR GARY PETERS

COMMON OPERATING PICTURE

68. Senator PETERS. Admiral Aquilino, our adversaries have developed sophisticated anti-access & area denial capabilities, inclusive of long-range missiles, advanced air defenses, as well as offensive Cyber and Electronic Warfare weapons designed to degrade and deny the U.S., and our allies and partners, ability to respond to any contingency in your Area of Responsibilities.

Given these advancements, how are you characterizing and learning from the conflict in Ukraine to inform your employment of platforms and systems designed to provide you with an accurate Common Operating Picture (COP)?

Admiral AQUILINO. USINDOPACOM has reviewed the "lessons learned" from the Russia-Ukraine conflict and remains resolute in upholding our commitment to strengthen Taiwan's self-defense capabilities in accordance with U.S. policies. The Russia-Ukraine conflict further informs our requirement to develop advanced warfighting capabilities that outpace our challengers and bolster regional deterrence from a position of strength. These include improved command and control; decision superiority; and a persistent, target-quality, common operating picture (PT-COP) that allows us to integrate with allies and partners and deliver compound, all-domain, effects at a time and place of our choosing.

NATIONAL GUARD SECURITY COOPERATION TAIWAN

69. Senator PETERS. Admiral Aquilino, you have 12 Active State Partnership Programs operating in your A-O-R. The Strategy, Plans, and Policy is a tremendous force multiplier by allowing us to leverage the skills and capabilities resident with our National Guard to build ties and interoperability with nations around the world, especially in INDO-PACOM, our theater of priority.

Would you benefit from streamlined authorities and lines of funding to help strengthen the ability of the National Guard to support security cooperation efforts with Taiwan?

Admiral AQUILINO. INDOPACOM has the authorities it needs to conduct security cooperation (SC). What INDOPACOM presently lacks are the requisite funding authorities for non-State Partnership Program partners to optimize the resources needed, particularly funding of National Guard personnel to support missions away from home station.

There should be a total force review of the funding available to the Reserve component to align their capabilities to emergent and focused SC missions. The State Partnership Program (SPP) is tied to Section 341 and affiliate partner countries. I need the National Guard to have access to greater levels of funding for the SPP-affiliates and a mechanism to access funds to support non-SPP countries. For example, any assistance with speeding up the process or funding to help build Taiwan's capacity and further develop our long-term relationship would greatly help with their ability to conduct self-defense.

QUICK STRIKE-POWERED JOINT DIRECT ATTACK MUNITION

70. Senator PETERS. Admiral Aquilino, your unfunded priorities list this year, again includes funding—almost $100 million this year—for the Quick strike-Powered Joint Direct Attack Munition standoff naval mine system.

Can you please explain the importance of this capability—and its related Maritime Strike Weapons—to your plans? Why are standoff munitions like this so important to the defense of Taiwan?

Admiral AQUILINO. The Quickstrike is a family of shallow-water, aircraft-laid mines that expand flexible deterrence and response options to support our allies and partners across the region. Powered Quickstrike mines provide cost-effective risk reduction to force while shaping battlespace from safe stand-off ranges. The 2023 National Defense Authorization Act (NDAA) Section 1254 Independent Assessment calls for a significant increase in maritime munitions that include missiles, mines, and torpedoes because they are required to deter and disrupt all forms of PRC maritime aggression in competition, crisis, and contingency operations.

JOINT FIRES NETWORK

71. Senator PETERS. Do you have any concerns with DOD's ability to field Joint Fires Network solutions on a timeline you are comfortable with? How would you characterize the progress of these efforts so far?

Admiral AQUILINO. USINDOPACOM, in partnership with USD R&E, remains on track to develop a Joint Fires Network (JFN) that provides actionable targets, real-

time battlespace awareness, and advanced all-domain joint fires to create compound effects in concert with our allies and partners. Through recent experimentation, we have demonstrated a nascent capability to provide joint battle management.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

TRAINING WITH PARTNERS

72. Senator COTTON. Admiral Aquilino, what are the benefits to INDOPACOM from U.S. training of foreign partners on weapon systems such as the F–16 and F–35?

Admiral AQUILINO. Joint and combined fighter aircraft training promotes interoperability and enhances overall defense capabilities while strengthening INDOPACOM's strategic relationships with allies and partners.

- Interoperability. Training with foreign partners increases interoperability which yields increased efficiency and effectiveness during contingencies (conflict or humanitarian assistance/disaster response (HA/DR) events). Allies and partners with F–35s/F–16s will pursue participation in funded INDOPACOM field training exercises (FTXs) to advance their joint/combined proficiencies in fighter skillsets with the U.S. Air Force. The U.S. Air Force's willingness to train alongside and be interoperable with allies and partners is one of the leading factors in a country's view of their security partner of choice.
- Messaging. All training with foreign partners provides an inherently positive message about U.S. solidarity with countries in the region.
- Access, Basing, and Overflight (ABO). Common training throughout the AOR builds the needed level of trust and cooperation to operate modern weapon systems from varying locations. This expands U.S. Forces' familiarity with and normalizes U.S. fighter presence at new operating locations in addition to advancing efforts for access in contingencies. As ABO is a critical concern in the event of conflict, training engagements are a substantial tool in INDOPACOM's toolkit to increase the likelihood of conflict-phase ABO.

73. Senator COTTON. Admiral Aquilino, are there any impacts to INDOPACOM if Singaporean F–16, and later F–35 training is delayed?

Admiral AQUILINO. INDOPACOM works closely with the Singapore Armed Forces to meet our bilateral objectives through numerous exercises and training opportunities both inside and outside the United States. Should there be delays that impact Singapore F–16 or their future F–35 training, INDOPACOM will work closely with our Singapore military counterparts to ensure sustainment of Singapore's training and readiness requirements.

Training between USAF and RSAF is critical to INDOPACOM in two key areas:

- Interoperability with Partners and Allies. RSAF is one of the more capable partners in the region and our joint training efforts allow participants the opportunity for "high-end" training scenarios that are currently available with only a select few countries in the region.
- Posture and Deterrence Support. RSAF currently has one squadron of F–16s stationed at Luke AFB, AZ, and this unit will be relocated to Ebbing Air National Guard Base, AR in fiscal year 2025. RSAF is also one of the few countries in the region that was approved to receive the F–35s. The RSAF initial order of F–35s will be delivered to Ebbing in fiscal year 2028.

RSAF has also agreed to provide expanded space/access at Changi Airbase East (CAB-E) to INDOPACOM. This will greatly enhance our force posture options in the region. Additionally, since 2019, DOD has had a Memorandum of Understanding with Singapore to bed down an RSAF fighter squadron at Andersen AFB, Guam. The co-location of RSAF fighters at Andersen will greatly enhance INDOPACOM's combined deterrence posture at Andersen AFB by complicating targeting calculus for our adversaries considering offensive action against that strategic location.

Singapore is funding a portion of the Ebbing and Andersen expansion through FMS cases. They are funding all of the expansions at CAB-E, including the areas that will be allocated for U.S. use. Delaying the training/basing location at Ebbing could adversely impact the Andersen and CAB-E programs which are critical elements of INDOPACOM plans. All locations will enhance our partnership and add additional training opportunities for these two aircraft (F–16/F–35) and others.

74. Senator COTTON. Admiral Aquilino, can you please explain the benefits realized from joint military exercises with partner nations? Is there a need to train to-

gether if we expect to conduct operations together? What are the risks of not conducting this training?

Admiral AQUILINO. One of Secretary Austin's priorities is to strengthen our relationships with allies and partners in the region. An effective approach is to incorporate allies and partners into our joint exercises. It is critical that our allies and partners realistically rehearse, with us, warfighting against a peer adversary in highly contested all-domain environments to deliver Integrated Deterrence, and if required, transition to combat operations if deterrence fails. The sheer size of our area of responsibility requires a coalition of warfighters who are able and willing to not only fight and win but allow U.S. forces to be staged forward and distributed throughout the Indo-Pacific region. Enhanced training requires conducting complex, multi-domain exercises with our allies and partners to continue to deliver interoperability and to operate at the high end and serves to further solidify our relationships.

75. Senator COTTON. Are there any currently conducted or planned training exercises with the Taiwanese? Can you provide any specifics on those exercises? Can you explain how training with the Taiwanese improves the ability to deter and if necessary, defeat Chinese aggression?

Admiral AQUILINO. Training engagements are a key tool through which we work with Taiwan and other partners to bolster deterrence across the Indo-Pacific, including vis-á-vis PRC aggression. More details about exercises with Taiwan are available at a higher classification level.

COMMERCIAL INTEGRATION

76. Senator COTTON. Admiral Aquilino, how has INDOPACOM worked with industry partners to integrate commercial technological advances with our warfighting capability?

Admiral AQUILINO. USINDOPACOM works with industry partners to explore innovative concepts and emerging technologies through limited objective experiments (LOEs) to expand warfighting capabilities, improve operational readiness, and ensure credible war plans.

77. Senator COTTON. Admiral Aquilino, what are your largest challenges to integration of commercial technologies? Are there any actions Congress can take to help alleviate those challenges?

Admiral AQUILINO. The USINDOPACOM innovation ecosystem processes a continuous stream of valuable yet un-delivered experiments and prototypes to the joint warfighter. USINDOPACOM can cost-effectively and rapidly leverage commercial tech experiments and prototypes. As a combatant command, USINDOPACOM is ideally suited to partner with the Defense Innovation Unit (DIU) to introduce game-changing capabilities to the warfighter and Congress can help through its continued support of the DIU.

INTELLIGENCE SHARING AND CLASSIFICATION ISSUES

78. Senator COTTON. Admiral Aquilino, we saw the vital need for the expeditious dissemination of sensitive information to allies and partners in the lead up to the conflict in Ukraine. Does INDOPACOM believe similar sharing of information would be required to counter Chinese mobilization and galvanize international support prior to an invasion of Taiwan? Is INDOPACOM prepared for such a possibility?

Admiral AQUILINO. Sharing of sensitive information with our allies and partners is absolutely critical in developing a common understanding of threats that will lead to a coordinated response to coercive behaviors and actions. We continue to work diligently across the Intelligence Community (IC) and Department of Defense (DOD) to share lessons learned from the Russia-Ukraine conflict and apply them as applicable to the Indo-Pacific theater.

79. Senator COTTON. Admiral Aquilino, is INDOPACOM satisfied with the extent of information sharing from the national and military intelligence community (DIA, CIA, others) to operational and tactical units? What, if any, do you see as the main challenges to effective intelligence sharing? Is INDOPACOM evaluating any mechanisms to speed up getting the right information into the hands of those conducting operations?

Admiral AQUILINO. We rely heavily on the collective efforts of the Intelligence Community to arm us with the information we require to understand and defeat any enemy. We continue to work to overcome classification restraints that impede

our ability to provide this information to those who need it and to innovate and develop mechanisms to increase the efficiency and effectiveness of sharing.

80. Senator COTTON. Admiral Aquilino, are there any classification barriers that inhibit or degrade testing, training, or operations within your command by preventing necessary information from reaching operators and/or partners? Specifically, OSD has recently raised concerns that over classification and SAPs prevent sharing of information with Allies and industry that harms our ability to deter. Do you share that concern? What steps should be taken to ensure the United States can share and synthesize needed information across the force to achieve joint multi-domain effects in your theater?

Admiral AQUILINO. We recognize the need to balance safeguarding of sensitive information with the need to get that information into the right hands. We do effectively share information, but we can and must do more to streamline the flow of the information to ensure we can operate with our allies and partners in times of crisis.

QUESTIONS SUBMITTED BY SENATOR MIKE ROUNDS

SPECTRUM

81. Senator ROUNDS. Admiral Aquilino and General LaCamera, there is an effort by some in Congress to require sharing of all or some of the 3.1–3.45 band of the electromagnetic spectrum, also known as the S-band, between the Department of Defense and commercial interests in the private sector.

As I understand it, the 3.1–3.45 band is primarily used by Department of Defense ground-, air-and sea-based radars and sensors to detect airborne and missile threats. For example, the Navy's Aegis Combat System's AN/SPY radar uses that band and is one of the few systems able to track the new threat posed by low flying, highly maneuverable hypersonic missiles.

Can you confirm that U.S. forces assigned to you in INDOPACOM and USFK rely upon systems critical to our national security that reside on this portion of the spectrum? If so, can you share examples of either specific systems that currently operate there or some of the missions and capabilities which rely on this portion of the spectrum?

Admiral AQUILINO. Yes, there are currently Aegis ships deployed in the INDOPACOM AOR providing missile defense which operate using an S-Band radar. This band is critically important to DOD missions and the recent Emerging Mid-Band Radio Spectrum Sharing (EMBRSS) Feasibility Assessment found that spectrum sharing in this band is not feasible unless certain conditions are met.

General LACAMERA. United States Forces Korea currently operates four systems in the S-band (3.1–3.4GHz) frequency range in support of air, ground, and sea radars and sensors to detect airborne and missile threats. First, the Airborne Warning and Control System (AWACS) aircraft operates two radars in the S-band to conduct command, control and surveillance for air and maritime operations. This aircraft provides detection and tracking of enemy aircrafts and relays datalink information to friendly forces. Second, a Counterfires Mobile Radar (TPQ–53) is operated by our ground forces to detect and track mortars, artillery, and rocket launches and determine the point of origin. This radar allows for quick acquisition of enemy artillery allowing our forces to seek shelter and rapidly engage threats. Third, Counter Rocket, Artillery, and Mortar (C-RAM) system is used to detect and track incoming rockets, artillery, and mortars to include small unmanned aerial systems. C-RAM is capable of engaging targets and destroying threats before impact. Fourth, U.S. Navy cruisers and destroyers operate in the vicinity of Korea and utilize the Navy's Aegis Combat System's AN/SPY radar for ballistic missile defense and tracking low flying, highly maneuverable hypersonic missiles. The four systems are either currently operating or have authorization to operate in the Korean Theater, allowing the United States to rapidly detect and engage aerial threats including aircraft, missiles, and small munitions.

82. Senator ROUNDS. Admiral Aquilino and General LaCamera, providing this Committee with your best military advice, can you characterize the risk to mission and the risk to the force if action were taken to enable the auction of portions of this band prior to the analysis of the results of the statutorily required DOD-NTIA study, which is required to be completed by September 2023?

Admiral AQUILINO. At the UNCLASSIFIED level, I can tell you that there would be significant operational risk to our electromagnetic spectrum capabilities that pro-

vide critical EMS advantage and defensive posture were we to lose the use of this portion of the spectrum.

General LACAMERA. The phaseout of the S-band would hinder United States Force Korea mission to defend the Republic of Korea and our forces. These systems currently operate in the S-band to deliver operational capabilities to U.S. Forces. Limitations to the S-band would impact early warning notifications, missile defense, and counterstrike capabilities across the theater. Further analysis would be needed capture a holistic view of capabilities effected and conduct a proper risk to mission.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

COUNTERING HYPERSONIC WEAPONS

83. Senator ERNST. Admiral Aquilino, what are the current and future hypersonic threats you face in your Area of Responsibilities?

Admiral AQUILINO. Russia claims to have fielded at least three systems, the Avangard hypersonic glide vehicle (HGV) carried by ICBMs, the Tsirkon ship-launched cruise missile, and the Kinzhal air-launched missile; Russia has employed small numbers of Kinzhal missiles in Ukraine. Russia is almost certainly developing additional hypersonic systems.

The PRC has one fielded hypersonic missile system, the medium range DF–17 and is actively developing and testing a number of others. In July 2021 a hypersonic ICBM circumnavigated the globe and the developmental DF–27 IRBM has the potential to range Hawaii. The PRC almost certainly desires to expand and diversify its hypersonic capabilities across multiple classes which could be employed by land, air and sea-based delivery platforms.

The DPRK claims to have successfully flight tested hypersonic missiles earlier this year. It is likely the DPRK is, in fact, pursuing this capability but is unlikely to have reliable, fielded hypersonic missile systems for some time.

84. Senator ERNST. Admiral Aquilino, do you have the intermediate and long-range defensive capabilities needed to counter current and future hypersonic threats?

Admiral AQUILINO. Our current BMD posture is designed to defeat ballistic threats from rogue actors like the DPRK. U.S. missile defense policy states that we rely on strategic deterrence for defense of the Homeland from near-peer advanced threats like hypersonic missiles. However, policy states that we will develop missile defense capabilities to defend against any system that may threaten our U.S. and Allied interests abroad, which is why I've been strongly advocating for the acceleration of defensive capabilities like the Guam Defense System and an advanced radar to replace the FAA radar in Hawaii.

MUNITIONS INDUSTRIAL BASE CONCERNS

85. Senator ERNST. Admiral Aquilino, what industrial base investments do we need to make now to make sure that we and our allies have what we need to deter China?

Admiral AQUILINO. Recent analysis on the industrial base highlights constraints that impact all munitions procurement, including long-lead times of critical components/subcomponents that range from 12 to upward of 28 months. To maintain our competitive advantage, investments to improve the energetics, survivability, and effectiveness of existing weaponry is necessary, along with authorities that enable advanced and multi-year procurement of critical components, and funding to support the DIB with increased production capacity for critical munitions.

TAIWAN FORCE READINESS

86. Senator ERNST. Admiral Aquilino, some of Taiwan's military is not trained on key asymmetric systems like Javelins, Harpoons, and Stingers. Which of Taiwan's forces do you think should train on these key asymmetric systems?

Admiral AQUILINO. In accordance with the Taiwan Relations Act, INDOPACOM works in conjunction with the American Institute in Taiwan and the partner to identify and subsequently advise and assist the appropriate Taiwan forces on asymmetric capabilities, which remains a priority of the Department of Defense. We believe all of Taiwan's forces, including conscripts and reserves, need to be trained in the use of asymmetric systems—to include systems like Javelins, Harpoons, and Stingers.

87. Senator ERNST. Admiral Aquilino, please describe the current status of Taiwanese military recruiting efforts, any shortfalls, and any efforts INDOPACOM is taking to support these efforts.

Admiral AQUILINO. The National Guard Bureau is assisting INDOPACOM in identifying gaps in Taiwan's recruiting efforts, Taiwan's own reserve reforms, and the extension of its conscription requirements from 4 months to 1 year. We applaud Taiwan's efforts thus far and will continue to assist as requested by the partner.

88. Senator ERNST. Admiral Aquillino, since Taiwan has recently announced an expansion of mandatory service time for its citizens to 1-year of training, how soon do you assess that this new service requirement will be implemented and to what extent?

Admiral AQUILINO. Taiwan started implementing this requirement in January 2024, with a growing proportion of conscripts serving for 12 months in each subsequent year. In the interim, we are coordinating through the American Institute in Taiwan to better understand and assist where necessary. We know that Taiwan is taking this expansion seriously and is working to ensure the training is meaningful and substantive as it relates to Taiwan's self-defense requirements.

89. Senator ERNST. Admiral Aquilino, what percentage of Tier 1 units covering asymmetrical capabilities are less than 80 percent staffed? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

Admiral AQUILINO. Specific details are available at a higher classification.

90. Senator ERNST. Admiral Aquilino, what are the operational consequences of this gap? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

Admiral AQUILINO. Specific details are available at a higher classification.

FOREIGN MILITARY SALES TO TAIWAN

91. Senator ERNST. Admiral Aquilino, in your personal opinion, how does the $19 billion backlog on Foreign Military Sales to Taiwan affect risk in your Area of Responsibilities?

Admiral AQUILINO. The Harpoon Coastal Defense System and F–16s account for a large portion of the $19 billion of foreign military sales in delayed delivery. These are critical capabilities that would greatly benefit Taiwan's self-defense and we are acutely monitoring how challenges across the U.S. defense industrial base may impact the implementation of these FMS cases with Taiwan and other partners.

92. Senator ERNST. Admiral Aquilino, are there any restrictions on exporting High Mobility Artillery Rocket System (HIMAR) launchers to Taiwan through Foreign Military Sales? If so, why?

Admiral AQUILINO. I am not aware of any restrictions on exporting HIMARS to Taiwan. Taiwan has an active FMS case for 29 HIMARS launchers that we are keenly monitoring to ensure they are delivered on-time.

TAIWAN ABSORPTION

93. Senator ERNST. Admiral Aquilino, would Taiwan's inability to absorb United States military assistance in the form of equipment within 1-year increase risk within your Area of Responsibilities?

Admiral AQUILINO. INDOPACOM is working with the Department and the partner to mitigate absorption capacity and rate concerns through advice and assistance on non-materiel requirements, such as training and sustainment, prior to delivery of equipment. The goal is that Taiwan's forces cannot only absorb the delivery of defense articles materially, but also operationally. Increasing Taiwan's capability and capacity thereby would reduce risk within my AOR.

94. Senator ERNST. Admiral Aquilino, would you support a requirement to certify Taiwan's absorption capacity?

Admiral AQUILINO. In accordance with the Taiwan Relations Act, U.S. military assistance to Taiwan also includes non-materiel defense services, including working with Taiwan on how its forces can most quickly and effectively absorb the capabilities they acquire through security cooperation programs and military-to-military engagement.

UNFUNDED REQUIREMENTS

95. Senator ERNST. Admiral Aquilino, you requested $1 billion in long-range strike programs, including the SM–6, Precision Strike Missile, and the maritime-strike Tomahawk Land Attack Missile. If Congress fails to fund, and the defense industrial base fails to execute, these programs, how does your risk increase?

Admiral AQUILINO. The 2023 National Defense Authorization Act (NDAA) Section 1254 Independent Assessment advocates for accelerated investment in certain anti-ship missiles, such as Maritime Strike Tomahawk, Precision Strike Missile Inc 2 and Inc 4, and SM–6 Blk IB, that are needed to hold adversary maritime forces at risk. Accelerated investments in the development and timely delivery of advanced maritime mines, including Clandestine Delivered Mine, Hammerhead, Powered Quickstrike, are essential elements of the joint force's capability to deter and defeat maritime aggression. USINDOPACOM's strategic approach, "Seize the Initiative," requires these specific munitions for combat-credible deterrence and are critical enablers for achieving the strategic goals and objectives set forth in the 2022 National Defense Strategy (NDS).

96. Senator ERNST. Admiral Aquilino, would you agree that ground-launched, theater-range strike systems could buy-down some risk in your AOR?

Admiral AQUILINO. Agree, and the systems in my 2023 National Defense Authorization Act (NDAA) Section 1254 Independent Assessment articulate capabilities that enable a layered, integrated defense system. Investment recommendations include the Aegis Weapon System, Lower Tier Air Missile Defense, and the Strategic Mid-Range Capability weapon system. We're also working non-kinetic solutions and shifting currently fielded systems to mitigate risk in the AOR.

COMPACTS OF FREE ASSOCIATION (COFA)

97. Senator ERNST. Admiral Aquilino, since the states are critical partners spanning the length of the Western Pacific, could you please elaborate on the importance of these three Compact (COFA) Pacific Island partners for broader Indo-Pacific military operations? What are the importance of the, specifically in defense of Taiwan?

Admiral AQUILINO. U.S. relationships with Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia, collectively known as the Freely Associated States (FAS), are governed by the COFA agreements. The FAS are a critical part of the strategic sea lines of communication, linking the United States with our allies and partners in Oceania and Southeast Asia. The COFA agreements are a cornerstone of the U.S. security architecture in the Indo-Pacific region, and provide the U.S. guaranteed and unfettered access to the countries, including the right to establish defense sites, and the right to limit third country military access to the FAS. COFA Title III allows for the designation of U.S. defense sites, which enable execution of force posture projects. The rights afforded to the United States by the COFA agreement are unparalleled in the Indo-Pacific and are well worth the defense obligations incurred. The exclusive military access in these countries provided to the U.S. via the COFA agreements commits the U.S. to the defense and security of the FAS.

Countries in the second island chain, including the FAS, provide a critical logistical network that enables U.S. troops to move through and within the FAS uncontested. Our ability to strengthen our defenses and capabilities in the Western Pacific greatly increases our ability to project military power in the region, enhance Taiwan's self-defense, and deter authoritarian nation-states (PRC) that possess the military and economic capacity, and intent, to change the current rules based international order.

98. Senator ERNST. Admiral Aquilino, do you believe that more work needs to be done in coordinating activities to counter China's malign influence in the Compact of Free Association nations?

Admiral AQUILINO. We have an extremely close relationship and partnership with the Freely Associated States (FAS). There are foreign malign actors conducting subversive, undeclared, coercive, or criminal activities worldwide affecting every nation and the COFA states are no exception. The People's Republic of China (PRC) has pursued closer ties with Pacific Island countries (PICs) for several decades and has significantly increased engagement in the region. Two of Taiwan's four Oceania diplomatic allies are COFA nations: Palau and RMI. Under Title III of the COFA, we need to ensure the FAS are aware of foreign malign influence threats to empower our partners and collectively counter these attempts and protect their sovereignty. Therefore, information sharing is extremely important with our COFA nation part-

ners and an area we hope to buildupon in the future to mitigate foreign malign influence attempts.

It is clear that there is a perceived threat to our influence and economic interests in the region. Over the past decade, the PRC has cemented itself as the leading trade and investment partner of the Pacific Island nations and a major provider of foreign assistance and loans. China is actively pursuing gray zone measures to advance their interests. They view the Pacific Island region as a low-investment, high reward opportunity to advance their agenda in a region where the U.S. is not paying sufficient attention. Recently, former President Panuelo of the Federated States of Micronesia (FSM)'s released a letter describing multiple instances of bribery, threats, and interference in local elections. More needs to be done to explore what our different instruments of national power can do to fight back against this type of gray zone behavior.

99. Senator ERNST. Admiral Aquilino, do you think that the current level of coordination between Compact of Free Association nations and the Department on malign activity and other grey zone issues is sufficient?

Admiral AQUILINO. My teams have excellent coordination with our embassy and Department of Defense (DOD) teams working inside the COFA states. They help keep us up to date on the changing operational environment and we continually work with them to modify our efforts to meet the changing threat. Competing priorities and limited resources remain a limiting factor in the amount and degree of support provided. In this regard, we strive to work by, with, and through our allies and partners with like-minded objectives to achieve mutual goals.

The level of coordination between COFA nations and DOD on malign activity and other grey zone issues has increased over the past 5 years. In 2019, the Department established Defense Attaché Office Kolonia in the FSM to assist coordination efforts in this matter. Additionally, during our semi-annual Joint Committee Meetings with each COFA nation, we share regional threat information and areas of concern. However, as the threat environment increases, there is always more coordination and work to be done. Information sharing with our partners is an extremely effective tool in this space.

100. Senator ERNST. Admiral Aquilino, since Palau has recently established the position of National Security Coordinator to coordinate with the Department, do you believe this is a model that should be supported in the other Compact of Free Association states?

Admiral AQUILINO. In Palau the national security coordinator (NSC) is the primary liaison for all DOD activity in the host nation. This position works daily with the President and is able to provide consistent guidance and feedback for all military operations within the country.

Each COFA State is uniquely distinct from one another; however, the establishment of the national security coordinators across all the COFA states will greatly benefit the Department. As you are aware, the United States Armed Forces is the military for the Freely Associated States. Therefore, there is no direct host nation counterpart for the U.S. Military to coordinate operations, activities, and investments. Due to the high volume of DOD activities in the COFA states, this model should be supported and replicated to streamline our efforts. The NSC as a touchpoint is vital.

101. Senator ERNST. Admiral Aquilino, what efforts has your command taken to support the development of National Security Coordinators or similar positions on the three Compact of Free Association states?

Admiral AQUILINO. The Department made the initial recommendation to the Republic of Palau to establish the national security coordinator position—independent from the Ministry of Justice—due to the high volume of DOD activities. In the Federated States of Micronesia (FSM), we have led discussions with FSM senior leadership to evaluate creating a similar position there. A dedicated individual or (wider national security council) could act as a forum to consider national security and advise the President on defense and foreign policy matters. Outmigration of qualified personnel and resource limitations have constrained efforts for further development of this structure in FSM. For the Republic of the Marshall Islands (RMI), we have noted that the appointment of a National Security Coordinator would increase our coordination and cooperation efforts between U.S. Army Garrison Kwajalein and the host nation.

102. Senator ERNST. Admiral Aquilino, in your professional opinion, do you support increased engagement with the Compact of Free Association States on mari-

time domain awareness, including to combat illegal, unreported, and unregulated fishing, as well as the return of Civic Action teams to all three Compact of Free Association states?

Admiral AQUILINO. Yes. In addition to illegal, unreported and unregulated (IUU) fishing, the COFA states have concerns regarding PRC research vessels surveying undersea communication cables and deep seabed mineral deposits posing threats to critical infrastructure and economic security. We have increased our engagement in maritime domain awareness and recently signed the expanded shiprider agreement with the Federated States of Micronesia (FSM). Through remote coordination, this agreement, the first of its kind, will enable the U.S. to act on behalf of the country to combat illicit maritime activity when an FSM law enforcement officer is not present. The shiprider agreement bolsters maritime law enforcement operations and maritime domain awareness and provide a mechanism to conduct integrated operations within the Pacific.

Palau is the only COFA State with a Civic Action Team (CAT) Camp. Active in Palau since the late 1960's, they serve the community by taking on important construction projects, providing ongoing medical assistance, tutoring for students, and planning multiple community events throughout the year. The Civic Action Team in Palau and the uniforms seen around town are a constant reminder that the U.S. is present and has not forgotten their commitment to Palau. In 2003, the CAT sites in the FSM were closed. In the October 2022, during the Joint Committee Meeting, FSM requested the return of all the CAT Camps to each of the four states of the FSM. The CAT Camps provide valuable support to the COFA states, especially through their Medical Civic Action Program (MEDCAP) and Apprentice Training Program. The MEDCAP provides an in-camp clinic, outreach to outlying areas, and health education programs for local residents. The Apprentice Training Program assists the development of general engineering skills and certifies local residents in skilled trades. Graduates of the Apprentice Training Program contribute to the overall infrastructure development of these nations and lessen dependence on foreign assistance. The CATs are vital for all of the Freely Associated States.

INDEPENDENT ASSESSMENT

103. Senator ERNST. Admiral Aquilino, in your 2023 National Defense Authorization Act Section 1254 independent assessment to Congress, you include an increase for U.S. Special Operations Command funding for your Area of Responsibilities from $80.5 million to $356.75 million from fiscal year 2026 to fiscal year 2027. Why there is a 443 percent increase in funding between these two fiscal years, a significant increase from assessed costs in fiscal year 2024 and 2025?

Admiral AQUILINO. Specific details are available at a higher classification.

104. Senator ERNST. Admiral Aquilino, why does fiscal year 2027 include this increase instead of other fiscal years?

Admiral AQUILINO. The increase stems from the funding required for DOD wide MILCON projects. Specific details are available at a higher classification.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

INDOPACOM RESOURCING

105. Senator SULLIVAN. Admiral Aquilino, as you pointed out in your testimony, this decade presents a period of increased risk including from the People's Republic of China nuclear and conventional buildup and its malign behavior and "no limits" partnership with Russia. While INDOPACOM has done much to posture our Nation to counter China's aggression, there is still more to do. What do you need to better posture INDOPACOM to counter the People's Republic of China growing aggression?

Admiral AQUILINO. The 2023 National Defense Authorization Act (NDAA) Section 1254 Independent Assessment outlines the capabilities and posture that is required to achieve integrated deterrence as outlined in the 2022 National Defense Strategy. This report prioritizes the investments that are needed in INDOPACOM to maintain or restore the comparative military advantage of the United States with respect to the PRC. Specific details are included in the report at a higher classification.

INTEROPERABILITY

106. Senator SULLIVAN. Admiral Aquilino, in your testimony you spoke of the value of a robust network of allies and partners and detailed how INDOPACOM is strengthening relationships with our AUKUS and Quad partners. So much of each

service's strategy in the event of a conflict with China depends on our capability to forward stage personnel and equipment. How are exercises in your AOR enhancing interoperability with allies and partners?

Admiral AQUILINO. Exercises are the cornerstone of enhancing joint and combined multinational military interoperability and demonstrate our mutual commitment to maintain a free and open Indo-Pacific. USINDOPACOM continues to encourage complex multilateral exercises that bring large groups of countries together to increase interoperability among our allies & partners, and to demonstrate unified resolve. Additionally, our exercise program advances integration of all-domain operations, to include space effects and defensive cyber activities. Enhanced training requires conducting complex, multi-domain exercises with our allies and partners to continue to deliver interoperability and to operate at the high end and serves to further solidify our relationships. We strive to include our AUKUS and QUAD partners in almost every exercise we conduct.

We have made significant progress improving interoperability of U.S. and allies and partners. Examples include: the Enhanced Defense Cooperation Agreement with the Philippines, which permits the United States to build infrastructure and preposition equipment at agreed upon locations; and our Mission Partner Environment that modernizes 13 separate coalition command, control, communication, computer, and information technology network systems into a single secure cyber system to deliver combined command and control capability throughout the theater. The outcome of our efforts enhances combined warfighting interoperability through rapid, widespread sharing of information with like-minded nations to operate with our joint force. Our joint exercises are rehearsals that test these locations and/or technologies to enhance our ability to deter and defend the region with our allies and partners.

107. Senator SULLIVAN. Admiral Aquilino, how are exercises in your Area of Responsibilities advancing Joint warfighting concepts?

Admiral AQUILINO. The USINDOPACOM innovation ecosystem processes a continuous stream of valuable yet un-delivered experiments and prototypes to the joint warfighter. USINDOPACOM can cost-effectively and rapidly leverage commercial tech experiments and prototypes. As a combatant command, USINDOPACOM is ideally suited to partner with the Defense Innovation Unit (DIU) and other organizations to introduce game-changing capabilities to the warfighter and Congress can help through its continued support of the DIU.

MARINE LITTORAL REGIMENTS IN INDOPACOM

108. Senator SULLIVAN. Admiral Aquilino, in February 2023 Secretary Austin announced that a Marine artillery regiment based in Okinawa would be reorganized as a Marine Littoral Regiments by 2025. 3d Marine Littoral Regiments, stationed in Hawaii, participated in Exercise Balikatan 2022 and 2023 in the Philippines. Under Marine Corps Force Design 2030, MLRs are postured to serve as a Stand-in Force and execute Expeditionary Advanced Base Operations. This requires them to disperse along the First Island Chain to provide strike and surveillance capabilities. What feedback have you received on MLRs from allies and partners in the region?

Admiral AQUILINO. During the January 2023 U.S.-Japan Security Consultative Committee meetings, the Government of Japan expressed support for the activation of a Marine Littoral Regiment (MLR) in Okinawa and committed to continued cooperation with the United States to improve the defensive posture in Japan with improvements to both Japanese and U.S. military capabilities.

The Armed Forces of the Philippines (AFP) have been very receptive to 3d MLR deployments to the Philippines for bilateral training and exercises, as well as to assist in developing the capabilities of the Philippines Marine Corps' nascent Coastal Defense Regiment through subject matter exchanges. The AFP and its naval services have embraced opportunities to work with 3d MLR to identify sites for MLR employment and exchange skills as both nations' Marine Corps develop new units with anti-ship, anti-air, and maritime domain awareness (MDA) capabilities. Of note, the Marine Corps' participation in Balikatan 2022 and 2023 was extremely well received by the AFP. With additional Enhanced Defense Cooperation Agreement (EDCA) sites agreed to, as well as other non-EDCA sites, USINDOPACOM hopes to gain additional employment options for MLR in the Philippines.

109. Senator SULLIVAN. Admiral Aquilino, what United States and allied military capabilities do the Chinese believe are most threatening to their ability to conduct a successful military invasion of Taiwan?

Admiral AQUILINO. A potential PRC invasion of Taiwan would be among the most difficult endeavors the PLA could possibly undertake, with enormous vulnerabilities that would threaten operational success. The PRC would correctly find many U.S. and allied capabilities to be of concern, including our ability to provide precision fires against all types of targets; our multi-dimensional undersea warfare capabilities; our expeditionary ability to rapidly deploy and employ advanced capabilities; our ability to disrupt PRC intelligence systems, command and control, and logistics; our vastly superior experience and sophisticated approach to training and readiness; and our ability to integrate and employ these capabilities alongside a coalition of like-minded and similarly capable allies and partners.

U.S. SUPPORT TO UKRAINE AS MESSAGE TO INDOPACOM PARTNERS

110. Senator SULLIVAN. Admiral Aquilino, during this year's posture hearing you were asked if the U.S. could simultaneously support Ukraine and Taiwan in preparation for a potential cross-Strait conflict. You affirmed the U.S. had the capability, which I believe is correct. I also believe our stance with Ukraine is a message to the lengths we will go to support our partners in the INDOPACOM Area of Responsibilities. Have you seen a positive response from our Indo-Pacific partners for our support to the Ukrainians?

Admiral AQUILINO. I think our support of Ukraine sends an important message. The United States is a global power with global responsibilities and strategically, it's critically important that we support Ukraine because doing so sends a message to both our partners and potential adversaries.

PRC-RUSSIA DRILLS AND EXERCISES

111. Senator SULLIVAN. Admiral Aquilino, the People's Republic of China and Russia have conducted several air and naval exercises in the Indo-Pacific over the last 2 years. How are those exercises evolving over time?

Admiral AQUILINO. The frequency of PRC-Russian naval and air exercises has increased over the past several years. However, we have seen little progress in the advancement of tactical integration between forces. Although recent activities indicate an incremental change to air integration, it is not to an extent which would force change to our already robust operational responses. The United States enjoys a vast network of allies and partners across the Indo-Pacific who work closely together daily and can operate seamlessly in both peacetime and in conflict. Russian and PRC forces do not enjoy the same level of interoperability and their exercises demonstrate that their forces lack the coherence and trust that true partnerships enjoy and require.

SOUTH KOREAN MILITARY SUPPORT TO UKRAINE

112. Senator SULLIVAN. General LaCamera, South Korea has been reluctant to provide the Ukrainians with military aid despite their robust defense industrial capacity. On April 19, 2023, South Korean President Yoon stated if the humanitarian disaster continues in Ukraine it might be hard for Seoul to continue its decision to not provide military assistance. Ukraine expends large numbers of artillery shells and is in need of more, a key capability gap that South Korea can help fill. What is your perspective on South Korea's willingness to supply arms to Ukraine?

General LACAMERA. The Republic of Korea is responding to Russia's premeditated, unprovoked, and unjustified war by providing various types of assistance. Our joint actions demonstrate the unity and resolve of the United States and the Republic of Korea. We will continue to consult and coordinate with the ROK on how best to support Ukraine.

113. Senator SULLIVAN. General LaCamera, South Korea has concluded several larger foreign military sales to European countries in the last few years. In 2022, South Korea's arms exports rose 140 percent to a record $17.3 billion, including deals worth $12.4 billion to sell tanks, howitzers, fighter jets and multiple rocket launchers to Poland, one of Ukraine's closest allies. The contracts for Poland's tanks and howitzers were signed in late August with South Korea's top defense contractors. It took little more than 3 months for the first shipment to arrive. What is your assessment of South Korea's capacity to provide modern military equipment to allies and partners?

General LACAMERA. The Republic of Korea has had success in initial shipments to U.S. allies and partners with follow-on deliveries scheduled out until 2030. It remains to be seen whether their industry can keep pace, especially due to existing challenges regarding availability of sub-components, some of which come from U.S.

suppliers. Nevertheless, it is promising that the ROK intends to open localized production facilities by 2026 in the countries with which it is signing major defense export deals, such as Poland. The ROK is already establishing production facilities for the K9 self-propelled howitzer in Australia. These activities present potential opportunities to integrate U.S. subcomponents and munitions on Korean platforms, which will enhance interoperability among our allies and partners. These trends also highlight the ROK's potential to contribute to a regional sustainment framework in support of our National Defense Industrial Strategy.

SOUTH KOREAN SUPPORT TO TAIWAN

114. Senator SULLIVAN. General LaCamera, since the New Year, North Korea has launched several ballistic missiles around the Korean peninsula. This rise in activity coincided with some of the largest joint United States and South Korean military exercises in the last 5 years. As South Korea's share of the global arms export market increases, and it acquires F–35s and ballistic missile submarines, its military power will rise substantially. Do advances in South Korea's military power factor into its decisionmaking should a conflict occur in the Taiwan Strait?

General LACAMERA. Any Taiwan-related crisis would have a regional impact, but the Republic of Korea's specific actions in such a scenario would be a sovereign decision. USFK's top priority is to deter the DPRK and to defend the ROK from external aggression. Our ironclad commitment to the Alliance is based not only on shared interests, but also shared values, including the importance of preserving peace and stability in a free and open Indo-Pacific.

115. Senator SULLIVAN. General LaCamera, is South Korea's military expansion aimed solely at deterring and defeating an attack from the Democratic People's Republic of Korea?

General LACAMERA. Response to this is more appropriate in a classified setting. The mutual defense treaty with the ROK does not name an adversary. Similarly, the ROK's Indo-Pacific Strategy expands the ROK's foreign policy beyond the Korean Peninsula and embraces the fact that peace and stability in the Indo-Pacific is directly related to the ROK and active participation in regional affairs is vital to its own national interests. The ROK's Indo-Pacific Strategy is forward-leaning and includes non-military elements, including engaging the global community on climate change, supply chain, digital economy, cybersecurity, non-proliferation, counterterrorism, and other emerging regional and global issues. The Yoon Administration has made it clear that it wants the ROK to become a "global pivotal state" that builds its bilateral and multi-lateral ties across the region and world. We welcome the Yoon Administration's Indo-Pacific Strategy, which aligns well with and parallels the United States' vision for a free, fair, and prosperous Indo-Pacific.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

WEDNESDAY, APRIL 26, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

THE DEPARTMENT OF ENERGY AND NATIONAL NUCLEAR SECURITY ADMINISTRATION ATOMIC ENERGY DEFENSE ACTIVITIES

The Committee met, pursuant to notice, at 9:31 a.m., in room G50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Blumenthal, Kaine, King, Warren, Peters, Manchin, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Scott, Tuberville, Mullin, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Good morning. Let me call the hearing to order. The Committee today meets to receive testimony on the Department of Energy's atomic energy defense programs. I would also like to welcome our witnesses, Secretary of Energy Jennifer Granholm and Administrator of the National Nuclear Security Administration (NNSA), Jill Hruby.

I also want to thank your department's workers for their service to our Nation. Maintaining the effectiveness, safety, and reliability of the United States nuclear deterrent is fundamental to our national security.

Today, our nuclear deterrent consists of a triad of ballistic missile submarines, heavy bombers, and land based intercontinental ballistic missiles. This triad is the bedrock not only of our national defense, but also the security of our allies and partners who depend on the United States nuclear umbrella. Critical to the triad's effectiveness is its modernization.

The technology materials required to maintain our nuclear capabilities, especially warheads and delivery systems, are constantly evolving. However, the National Nuclear Security Administration, or an NNSA, is struggling to keep pace with these modernization demands.

The NNSA is experiencing a tremendous workload as it strives to modernize not just all three legs of the triad, air, sea and land, but also five major warhead programs. Each of these triad legs and warhead programs require considerable resources, personnel, and time to be successful. Further compounding this challenge, the NNSA is undertaking a major rebuilding of its nuclear infrastructure.

Much of our nuclear infrastructure dates back to the Manhattan Project in World War II, and while the original facilities held up well through the first two cycles of triad modernization in the 1960's and 1980's, they have essentially aged out for a third cycle currently underway. It is critical that the NNSA successfully balance the workload of its infrastructure and production facilities modernization.

With that in mind, the fiscal year 2024 budget request for the defense functions of the Department of Energy is $32.6 billion. This figure accounts for about 63 percent of the Department of Energy's overall budget request.

Within this proposal, the NNSA has requested $23.8 billion, a 7.6 percent increase over last year's enacted level. One of the key challenges facing NNSA is finding skilled workers. This difficulty is being felt across the defense enterprise and indeed across the entire economy but is it particularly acute when it comes to nuclear security.

Construction of our nuclear facilities requires specialty steel and concrete, as well as highly trained electricians and welders to handle these materials, which exacerbates the problem. I would ask for an update on the NNSA's efforts to recruit and retain these skilled workers. Another key challenge for NNSA is a requirement to achieve a plutonium pit production rate of 80 hits per year by 2030.

This production is intended to be accomplished at Los Alamos National Laboratory, as well as a second site at Savannah River. However, the plant at Savannah River was originally built to convert mixed oxide fuel and therefore must be converted for pit production. The cost of this conversion had risen significantly from $4 billion to between $6 billion and $11 billion.

Furthermore, the project timeline has stretched from the 2030 target to between 2032 and 2035. The Committee would like an update on this issue and when the Department will have an integrated master schedule that accounts for all aspects of the pit production enterprise to meet this longstanding defense requirement of 80 plutonium pits per year. I would also note that the 2024 budget request increases the defense portion of environmental cleanup to $7 billion.

I hope our witnesses will update us on our efforts to continue cleaning up former defense productionsites, particularly at the Hanford Nuclear site. These are commitments that have been made to local communities that we cannot neglect.

The Hanford site has 177 million gallons of radioactive waste stored in underground tanks, some of which are leaking. The Energy Department is working to remove the first 40 percent of the low activity radioactive waste from these tanks, and I commend these efforts.

I understand there are discussions underway on how to remove the highly—high activity radioactive waste from this site and others and would ask our witnesses to share how you are working with the State and local communities on these efforts.

Again, I want to thank our witnesses for appearing today. I look forward to your testimony. As a reminder for my colleagues, there will be a closed session immediately following this hearing in room SVC–217. Now, let me recognize Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman, and thank you, Madam Secretary and Madam Administrator, for being here. I want to especially thank the Chair for his very clear opening statement.

It is obvious to me, based on the facts that he outlined, that we are nowhere near where we need to be and this Committee needs to take action in our NDAA [National Defense Authorization Act] to catch up. The United States prevailed in the cold war largely because we maintained a strong and credible nuclear deterrent.

Today, the United States and its allies have entered a dangerous new era of nuclear competition. For the first time in history, we must contend with two nuclear armed peer adversaries, each intent on undermining America's interests. Just a few years ago, Beijing was something of an afterthought in the nuclear world.

Since then, China has expanded its conventional and nuclear forces at an unprecedented rate. China has built hundreds of new ballistic missile silos, completed the world's third nuclear triad, and massively expanded its nuclear weapons stockpile. Xi Jinping also directed the Chinese military to develop missiles that can put nuclear warheads into orbit around the Earth, the so-called fractional orbital bombardment system.

Such a capability would allow China to attack at any point on the planet with almost no warning—a terror weapon, if ever there was one. For its part, Russia continues to maintain the largest, most modern, and most diverse nuclear arsenal in the world. Vladimir Putin has shown us during his invasion of Ukraine that he believes nuclear weapons are still a powerful tool for keeping adversaries in check.

Considering the conventional losses Moscow has endured in Ukraine, it seems plausible that Russia might grow even more dependent on the security its nuclear arsenal provides. We have also seen recent evidence that China and Russia are now cooperating on nuclear issues. This year, China purchased over 28 tons of highly enriched uranium from Russia, which is likely to be used to produce plutonium for additional nuclear weapons.

Not to be outdone, North Korea may now possess enough missiles to overwhelm our Homeland missile defenses, and they show no sign of slowing down. Half a world away, Iran continues to expand its stockpile of nuclear weapons as it inches closer to its own nuclear weapon. Unlike our adversaries, the United States has not been urgently adapting our nuclear forces. Instead, we see long overdue modernization program simply plodding along.

I see an Administration intent on defending policies that grow increasingly out of touch with reality, rather than doing the hard

work to adapt our forces to current and future threats. For example, the Biden administration again chose to eliminate funding for the sea launched cruise missile program, SLCM–N [nuclear-armed sea-launched cruise missile], even as China, Russia, and North Korea field thousands of tactical nuclear weapons to threaten the United States and its allies.

This move directly conflicts with clear, bipartisan direction from Congress last year to continue this effort. We would like to hear the logic behind such a move. Beyond the SLCM–N, every single United States nuclear modernization program has been delayed, reduced in scope, or canceled over the past decade.

In particular, the National Nuclear Security Administration has an extensive backlog of projects to update its Manhattan Project area infrastructure. Much of which is over 70 years old, as the distinguished Chairman just told us.

The inability of the National Nuclear Security Administration to meet the statutory requirement to produce 80 plutonium pits per year by 2030 is also deeply disturbing. The inability to do so is deeply disturbing.

This Committee has been told there is nothing that can be done to rectify this, but considering the rising threats from China, Russia, North Korea, and Iran, complacency is unacceptable. We cannot effectively compete with and deter our adversaries with a nuclear capability that is undersized, under prioritized, and incapable of adapting to changing threats.

Thank you, Mr. Chairman.

Chairman REED. Thank you very much, Senator Wicker. Before I recognize the Secretary, there is a quorum present—and such a quorum is now present. I ask the Committee to consider the list of 1,279 pending military nominations.

All these nominations have been before the Committee the required length of time. Is there a motion to favorably to report this list of 1,279 pending military nominations to the Senate?

Senator WICKER. So, moved.

Chairman REED. Is there a second?

VOICE. Second.

Chairman REED. All in favor say aye.

[Chorus of ayes.]

[The list of nominations considered and approved by the Committee follows:]

MILITARY NOMINATIONS PENDING WITH THE SENATE ARMED SERVICES COMMITTEE WHICH ARE PROPOSED FOR THE COMMITTEE'S CONSIDERATION ON APRIL 26, 2023.

1. **MG John W. Brennan, Jr., USA to be lieutenant general and Deputy Commander, US Africa Command** (Reference No. 386)
2. **VADM Karl O. Thomas, USN to be vice admiral and Deputy Chief of Naval Operations for Information Warfare, N2/N6, Office of the Chief of Naval Operations/Director of Naval Intelligence** (Reference No. 387)
3. **LTG Michael S. Cederholm, USMC to be lieutenant genera9and Commanding General, I Marine Expeditionary Force** (Reference No. 457)
4. In the Army Reserve there is 1 appointment to the grade of colonel (Jorge M. Arzola) (Reference No. 466)
5. In the Army there is 1 appointment to the grade of major (James F. Cantorna) (Reference No. 467)

6. In the Army there are 2 appointments to the grade of major (list begins with Sandeep R. Rahangdale) (Reference No. 468)
7. In the Army there is 1 appointment to the grade of major (Song Qu) (Reference No. 469)
8. In the Army there is 1 appointment to the grade of major (Timothy S. McKiddy) (Reference No. 470)
9. In the Army Reserve there are 6 appointments to the grade of colonel (list begins with Kevin J. Huxford) (Reference No. 471)
10. In the Army there is 1 appointment to the grade of major (Jerome C. Ferrin) (Reference No. 474)
11. In the Army there is 1 appointment to the grade of major (Nathan D. Morris) (Reference No. 475)
12. In the Navy there are 2 appointments to the grade of lieutenant commander (list begins with Ryan E. Dinnen) (Reference No. 476)
13. In the Navy there is 1 appointment to the grade of lieutenant commander (Jillian M. Mears) (Reference No. 477)
14. In the Navy there is 1 appointment to the grade of captain (Mary J. Hessert) (Reference No. 478)
15. **BG Derin S. Durham, USAFR to be major general** (Reference No. 487)
16. **In the Army Reserve there are 3 appointments to the grade of brigadier general (list begins with Brandi B. Peasley)** (Reference No. 488)
17. **BG William Green, Jr., USA to be major general** (Reference No. 489)
18. **MG Mark T. Simerly, USA to be lieutenant general and Director, Defense Logistics Agency** (Reference No. 490)
19. **MG Ryan P. Heritage, USMC to be lieutenant general and Deputy Commandant for Information, Headquarters, US Marine Corps** (Reference No. 491)
20. **VADM Craig A. Clapperton, USN to be vice admiral and Commander, Fleet Cyber Command/Commander, TENTH Fleet/Commander, Navy Space Command** (Reference No. 492)
21. **Col. Brian R. Moore, USAF to be brigadier general** (Reference No. 501)
22. In the Army there is 1 appointment to the grade of major (Chet M. Korensky) (Reference No. 506)
23. In the Army there is 1 appointment to the grade of major (Anthony L. Ghezzi) (Reference No. 507)
24. In the Army there are 464 appointments to the grade of lieutenant colonel (list begins with Matthew Acosta) (Reference No. 511)
25. In the Army there are 433 appointments to the grade of lieutenant colonel (list begins with Mark P. Adams) (Reference No. 512)
26. In the Army there are 304 appointments to the grade of lieutenant colonel (list begins with Alexander Acheampong) (Reference No. 513)
27. In the Army there are 35 appointments to the grade of lieutenant colonel (list begins with Emmanuel T. Adeniran) (Reference No. 514)
28. In the Navy there is 1 appointment to the grade of lieutenant commander (list begins with Matthew A. Bubnis) (Reference No. 523)
29. In the Air Force there is 1 appointment to the grade of colonel (Brian J. Bohenek) (Reference No. 524)
30. In the Navy there are 2 appointments to the grade of lieutenant commander (list begins with Andrew R. Flora) (Reference No. 526)
31. In the Space Force there are 2 appointments to the grade of colonel (list begins with Micah R. Kelley) (Reference No. 527)
32. In the Space Force there are 2 appointments to the grade of lieutenant colonel and below (list begins with Erica J. Balfour) (Reference No. 528)
33. In the Space Force there is 1 appointment to the grade of colonel (Craig E. Frank) (Reference No. 529)
34. In the Space Force there are 2 appointments to the grade of lieutenant colonel (list begins with Marouane Balmakhtar) (Reference No. 530)

TOTAL: 1,279

Chairman REED. The motion carries. Thank you very much. Madam Secretary, you are recognized.

STATEMENT OF THE HONORABLE JENNIFER M. GRANHOLM, SECRETARY OF ENERGY, DEPARTMENT OF ENERGY

Secretary GRANHOLM. Thank you so much, Chairman Reed, and Ranking Member Wicker, and esteemed Members of the Committee. I am honored to be here representing the Department of Energy before you today, along with NNSA Administrator, Jill Hruby.

I thank you for the strong and consistent and bipartisan support this Committee has shown the Department and our weapons enterprise. Over the last 2 years, Congress has entrusted the Department of Energy with significant resources to buildup America's clean energy manufacturing and to vault our country into the lead of global clean energy markets, and these endeavors are critical to energy independence and economic competitiveness in the 21st century.

At the same time, the American people have long counted on the Department to meet national security missions that are essential. The geopolitical circumstances of the day make clear that these national security missions are as urgent as ever.

Russia's invasion of Ukraine, China's nuclear expansion have reinforced the imperative to maintain a safe, secure, and effective nuclear deterrent. Amid rising saber rattling and active aggression against our allies, we cannot afford to lose an edge.

As countries around the world begin to turn toward civil nuclear power for greater energy and climate security, we face a need for deeper investment in nonproliferation and counterterrorism measures. As the future of nuclear technology comes into view, we must remember and uphold our pledges to the communities that live alongside our research and production programs and have done so for decades.

The President's Budget Request for fiscal year 2024 recognizes and responds to each of these priorities. It would position the Department of Energy to advance clean-up of legacy nuclear activities, to promote American leadership on the safe and peaceful use of clean energy, and to strengthen our national defense. Let me take just a minute to detail some key elements, starting with NNSA.

The budget calls for a $1.7 billion increase over the amount enacted for the NNSA in fiscal year 2023. That includes a 10 percent increase for weapons activities. It is the largest requested funding level in the history of the NNSA. It reflects the Biden-Harris administration's ironclad commitment to enhancing our national security, defending our citizens, and standing with our allies.

Along with the modernization of the nuclear stockpile and restoring production capacity, this request would empower the NNSA to respond to new threats and opportunities in nuclear nonproliferation and counterterrorism.

It will allow us to maintain the Navy's current nuclear propulsion systems, while developing the next generation of nuclear-powered warships. Both of which are vital to the United State's contributions to the new Australia, the United Kingdom and the

United States (AUKUS) partnership, and to our technological advantage over adversaries. Importantly, the budget will also allow the NNSA to build the Federal workforce that is necessary to meet our increasing mission requirements.

Further, the President has requested necessary resources for our Office of Environmental Management, which oversees the largest environmental cleanup program in the world. In particular, the request enables us to ramp up our work in tackling tank waste. We have treated over 400,000 gallons of tank waste at the Hanford site.

We are now processing record amounts of waste at Savannah River, 6 million gallons. The request also funds infrastructure upgrades at the—and the operation of treatment systems in South Carolina, in Idaho, and Washington State, so we can build on those results to date. It supports further efforts to address contamination issues across our sites, while tending to the communities and tribal nations that are impacted by these issues.

This budget will help the office recruit and train a new cohort of legacy management workers and leaders. Over the last 2 years, we have made important progress on each of these crucial missions, yet we know that challenges remain.

This budget request prepares us for the depth of the work still ahead. I am proud to lead such a gifted and dedicated team, and we are all grateful to have your partnership and support on these indispensable matters. Thank you once again for the opportunity to speak with all of you, and I look forward to your questions.

Chairman REED. Thank you very much, Madam Secretary. Madam Administrator, please.

STATEMENT OF THE HONORABLE JILL M. HRUBY, ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION

Administrator HRUBY. Thank you, Chairman Reed, Ranking Member Wicker, and Members of the Committee for the opportunity to appear before you. It is an honor to be here alongside Secretary Granholm to discuss the Department of Energy's enduring National Security missions.

NNSA appreciates the consistent, strong support from the Secretary and from Members of this Committee for our work and our workforce. The deteriorating international security environment is a constant reminder of the importance and urgency of NNSA's mission.

NNSA's fiscal year 2024 budget request of $23.8 billion allows us to respond to today's challenging global environment. NNSA is executing five weapon modernization programs while revitalizing our infrastructure and investing in our scientific and engineering capabilities.

The refurbished B61–12 and the W88 Alt 370 weapons are being delivered on time. The other three systems, the W80–4, the W87–1, and the W93 are progressing well in their developmental phases.

All modernization activities are closely coordinated and synchronized with the Department of Defense (DOD), and we appreciate their strong partnership. Infrastructure investments in the NNSA complex have been prioritized, with some work ongoing at each of our labs, plants, and sites.

The large-scale nuclear infrastructure projects are facing the most challenges due to supply chain bottlenecks, inflation, and labor shortages common throughout the construction industry and the United States right now. These unique NNSA nuclear capabilities take more time to design and build and require specialized knowledge and skills.

I want to assure you that we are actively taking steps to address the issues that have arisen on these projects. We are also making meaningful investments on our nonproliferation, counterterrorism, emergency response, and naval nuclear propulsion programs.

These programs play a vital complementary role to our weapons program—activities, reduce global nuclear risk, provide critical support to Ukraine, and are a key part of the AUKUS partnership. We remain committed to achieving our objectives across all our priorities. Thank you. I look forward to your questions.

[The prepared joint statement of Ms. Jennifer Granholm and Ms. Hruby follows:]

JOINT PREPARED STATEMENT BY SECRETARY JENNIFER GRANHOLM AND MS. JILL HRUBY

Chairman Reed, Ranking Member Wicker, and esteemed Members of the Committee, thank you for the opportunity to appear before you today on behalf of the Department of Energy (DOE) and the National Nuclear Security Administration (NNSA). We recognize and appreciate the Committee's consistent support for DOE's enduring national security missions.

As the Secretary of Energy and Under Secretary for Nuclear Security, we recognize the unique challenges posed by a deteriorating international environment and remain committed to strengthening our nuclear deterrent while reducing global nuclear risks, promoting the peaceful use of nuclear technology to combat climate change, and engage in responsible environmental stewardship and cleanup.

The Nation's nuclear weapons stockpile remains the cornerstone of our deterrent and a key tool in reassuring our allies. The Department is aware that we have no margin for error and that we must increase the pace of our nuclear modernization efforts. This heightened pace must be paired with further progress on nonproliferation and counterterrorism measures to prevent terrorists from acquiring nuclear and radiological material and expertise. This is especially significant as the global civilian nuclear power sector expands, and new nuclear technologies are introduced as a means of fighting climate change. Additionally, the Department will continue to provide the U.S. Navy's submarines and aircraft carriers with militarily effective nuclear propulsion plants and is looking forward to being an effective contributor to the new AUKUS partnership.

The fiscal year 2024 budget reflects the Administration's commitment to these priorities, allowing the Department to enhance our national security, engage in cleanup from our legacy nuclear activities, and promote American leadership on the safe and peaceful use of clean energy.

NNSA'S FISCAL YEAR 2024 BUDGET OVERVIEW

The President's Fiscal Year 2024 Budget Request for NNSA is $23.8 billion, an increase of $1.7 billion, or 7.6 percent, above the fiscal year 2023 enacted level.[1] This funding request reflects the requirements in the nuclear weapons program of record, the National Security Strategy, the Nuclear Posture Review, and other national security strategies and requirements. The funding request supports an expanded mission due to the global environment and takes into account increased costs and delays in construction projects. We are mindful and deeply appreciative of the sustained support from Congress, multiple administrations, and the American people.

[1] Fiscal year 2023 enacted levels throughout this document do not reflect the mandated transfer of $99.7 million from Naval Reactors to the Office of Nuclear Energy for operation of the Advanced Test Reactor.

The fiscal year 2024 budget request for the *Weapons Activities* account is $18.8 billion, an increase of $1.72 billion, or 10 percent, above the fiscal year 2023 enacted level. The request will be supplemented with prior year balances of $61.6 million.

The budget request represents the Administration's firm commitment to a safe, secure, reliable, and effective nuclear deterrent underpinned by world-class science and modern resilient infrastructure and protected with advanced physical and cybersecurity measures. The fiscal year 2024 request reflects the increased urgency needed to modernize weapons and refurbish, revitalize, and reinvest in the nuclear enterprise and workforce.

Stockpile Management

The fiscal year 2024 budget request for Stockpile Management is $5.2 billion, an increase of $251 million, or 5.1 percent, above the fiscal year 2023 enacted level. Activities include: (1) weapons modernization, (2) stockpile sustainment, (3) production operations, (4) weapons dismantlement and disposition, and (5) nuclear enterprise assurance.

W88 Alt 370: The W88 Alt 370 program has entered Phase 6.6, *Full-Scale Production,* and is currently on schedule to meet Department of Defense (DOD) deployment schedules. The budget request of $179 million is $17 million higher than the fiscal year 2023 enacted level, with the increase needed to mitigate risks encountered in Pantex production.

B61–12 LEP: The B61–12 LEP has entered Phase 6.6, *Full-Scale Production.* The B61–12 LEP consolidates multiple variants of the B61 gravity bomb and improves the safety and security of the weapon. Production is currently on schedule to meet DOD deployment schedules. The budget request of $450 million, $222 million lower than the fiscal year 2023 enacted level, is informed by carryover and reflects completion of production of many components.

W80–4 LEP: The W80–4 LEP has entered Phase 6.4, *Production Engineering.* NNSA revised the first production unit (FPU) schedule in response to COVID–19 impacts, slower than planned hiring and increased attrition, and increased component technical challenges. NNSA's revised schedule is fully aligned with the U.S. Air Force's (USAF) Long Range Standoff Missile's schedule for initial and full operating capability. The budget request of $1.01 billion is $113 million lower than the fiscal year 2023 enacted level, consistent with long-standing plans and with typical warhead program profiles, with expenditures ramping down from the current peak as the program moves through its remaining phases.

W87–1 Modification Program: The W87–1 will replace the aging W78 warhead using a modification to the existing W87–0 design. The W87–1 will deploy new technologies that improve safety and security, address obsolete designs and materials, and simplify warhead manufacturability. The W87–1 has entered Phase 6.3, *Development Engineering,* and expenditures are ramping up accordingly. The fiscal year 2024 request of $1.07 billion is $389 million higher than the fiscal year 2023 enacted level. This request fully supports the increased activity needed to execute Phase 6.3 in fiscal year 2024. The request is informed by the recently completed Weapon Design Cost Report, the associated Independent Cost Review by the Office of Cost Estimating and Program Evaluation, and analysis of achievable execution rates by the enterprise.

W93 Program: The W93 is a third warhead for our submarine launched ballistic missiles and is a new warhead. The key nuclear components will be based on currently deployed and previously tested nuclear designs that will not require nuclear explosive testing to certify. The W93 program is a separate but parallel program to the replacement warhead program in the United Kingdom. In February 2022, the W93 entered Phase 2, *Feasibility Study and Design Options.* The budget request of $390 million, an increase of $149 million over the fiscal year 2023 enacted level, reflects the ramp-up associated with Phase 2 and is informed by improved cost estimates.

Stockpile Sustainment

Sustaining today's stockpile is the top priority for NNSA. The Stockpile Sustainment program executes warhead maintenance, limited life component exchanges, minor alterations, surveillance, assessments including annual assessments and significant findings investigations, surety studies and capability developments, and management activities for all weapons systems in today's stockpile. The fiscal year 2024 budget request for Stockpile Sustainment is $1.28 billion, a decrease of $44.6 million, or 3.4 percent, below the fiscal year 2023 enacted level.

Production Modernization

The production modernization program re-establishes and modernizes the manufacturing capabilities for nuclear weapons that degraded or were eliminated after the cold war. The fiscal year 2024 budget request for Production Modernization is $5.6 billion, an increase of $439 million, or 8.6 percent, above the fiscal year 2023 enacted level. This funding is focused on the timely establishment of nuclear weapon production capabilities for primaries, secondaries, tritium and depleted uranium, and non-nuclear components.

Primary Capability Modernization includes plutonium pit production and the High Explosives and Energetics (HE&E) Program. NNSA's most pressing recapitalization effort is reconstitution of plutonium pit production. NNSA is statutorily required to produce no fewer than 80 plutonium pits per year (ppy) by 2030. The Department and the Nuclear Weapons Council have previously notified Congress that NNSA will not meet the 80 ppy by 2030 requirement. However, NNSA remains firmly committed to achieving 80 ppy as close to 2030 as possible. The Department remains in close coordination with DOD to maintain the reliability and effectiveness of the nuclear stockpile until pit production capabilities are fully established.

NNSA is proceeding with a two-site approach for producing at least 80 ppy, with the Los Alamos National Laboratory Plutonium facility set to produce 30 ppy and the Savannah River Plutonium Processing Facility (SRPPF) set to produce at least 50 ppy. At LANL, fiscal year 2024 funds will be used to support an increase in engineering evaluations and certification activities to produce war reserve (WR) plutonium pits in tandem with increased equipment purchases and installation activities. NNSA expects the first WR pit to be produced near the end of calendar year 2024 and an increased number of WR pits to be produced each subsequent year. At SRPPF, fiscal year 2024 funds will continue to support design activities and earlier work onsite preparation, demolition and removal of old equipment and materials from the main process building, and long-lead procurements.

NNSA is also restoring, modernizing, and enhancing its enriched uranium, depleted uranium, and lithium manufacturing processes to meet requirements for nuclear weapon secondary stage production. NNSA is making significant, long-term investments in each of these areas while remaining mindful of current difficulties in large-scale construction. For example, NNSA is relocating its enriched uranium processing capabilities into the Uranium Processing Facility (UPF) at the Y–12 National Security Complex (Y–12) and other enduring facilities to reduce mission dependency on building 9212, which is over 75 years old. UPF will provide for the long-term viability and security of enriched uranium processing while improving worker and public safety and promoting environmental stewardship. Ongoing supply chain issues, delayed equipment delivery, contractor performance, inflation, and shortages of qualified labor have contributed to cost growth and schedule delays beyond the originally scheduled completion date of December 2025. In addition to UPF, NNSA is refurbishing buildings 9215, 9204–2E, and 9995 to establish modern processes and extend their operational lifetimes into the 2040's. A key change will be the establishment of electrorefining to provide purified uranium metal and eliminate the current high-hazard chemical process. NNSA is also continuing investments in the Depleted Uranium (DU) Modernization Program initiated at Y–12 in fiscal year 2021. This program will reconstitute lapsed DU alloying and component manufacturing capabilities at Y–12 while investing in new technology to improve efficiency, reliability, and capacity. The equipment at Y–12 formerly used in this process has been inoperable for the last 15 years, and its reconstitution is a critical component of successful weapons modernization.

To address increased mission demand for future mission requirements, NNSA has developed a lithium modernization strategy that includes restarting processes while constructing the Lithium Processing Facility (LPF). LPF will replace the lithium manufacturing processes within Y–12 buildings 9204–2 and 9202, which are lithium recovery, purification, component fabrication operations and salvaging. These buildings are in disrepair and do not possess the capabilities or capacity to meet demands beyond 2035. LPF will provide modern technologies and a safer environment for both workers and the public.

Multi-year modernization plans for tritium reflect increased future demand. NNSA is already increasing production levels at the Tennessee Valley Authority and extracting produced tritium at the Savannah River Site (SRS). NNSA is designing and initiating site preparations for the Tritium Finishing Facility (TFF) at SRS, which will replace a 1950's-era facility. The fiscal year 2024 budget request reflects a prioritization decision to complete the site preparation subproject but move the remainder of the project out in time to focus resources on SRPPF and other higher-priority construction projects. NNSA also supports a Domestic Uranium Enrichment (DUE) program to provide sufficient capacity of unobligated Low Enriched Uranium

(LEU) for tritium production and Highly Enriched Uranium (HEU) for naval propulsion fuel, as well as obligated or unobligated High Assay LEU (HALEU) for research reactors. New funding is requested to begin conceptual design activities for an unobligated enrichment technology pilot plant.

The Non-Nuclear Capability Modernization (NNCM) program funds the capability and capacity for non-nuclear components (external to the primary or secondary stage of the nuclear explosive package) in weapon systems. Non-nuclear components provide arming, fuzing, and firing functions and safety and use control features, among others. Providing these functions requires a wide range of technologies and components including radiation-hardened microelectronics, neutron generators, gas transfer systems, power sources, electrical assemblies, cables, connectors, structural elements, pads/cushions, and a multitude of other parts that are incorporated into the systems that support or weaponize the nuclear explosive package. NNCs make up more than half the cost of weapons due to the number and complexity of the elements, and the need for qualification in extreme environments over the warhead life. The fiscal year 2024 request includes funding to provide equipment for increased manufacturing capacity at the Kansas City National Security Campus (KCNSC); reconstitute thermal spray capability at Sandia National Laboratories; recapitalize radiation and major environmental test facilities at Sandia National Laboratories for design and qualification; and provide tools and equipment for the Microsystems Engineering, Science, and Applications (MESA) Complex at Sandia National Laboratories as the only approved source of trusted, strategically radiation hardened microelectronics. Fiscal year 2024 funding will also be used to develop production modernization strategies for weapon staging and warhead assembly operations at Pantex.

Stockpile Research, Technology, and Engineering

The fiscal year 2024 budget request for Stockpile Research, Technology, and Engineering (SRT&E) is $3.2 billion, an increase of $246.6 million, or 8.4 percent, above the fiscal year 2023 enacted level. The SRT&E portfolio covers activities that serve as the foundation for science-based stockpile activities, including the capabilities, tools, and components that are used every day to assess the active stockpile and to certify warhead modernization programs without the need for underground nuclear testing. NNSA's unparalleled science and technical capabilities, and commitment to their constant improvement, helps cultivate the knowledge and expertise to maintain confidence in the stockpile.

The Enhanced Capabilities for Subcritical Experiments (ECSE) fiscal year 2024 request is $292.3 million, an increase of $15.1 million, or 5.5 percent, above the fiscal year 2023 enacted level. ECSE will produce experimental data in underground tunnels at the NNSS that enables high fidelity assessment of the current stockpile and certification of the future stockpile without the need to return to underground nuclear explosive testing. ECSE experiments are designed to remain subcritical throughout the experiment to adhere to the current U.S. policy of a "zero yield" nuclear testing moratorium.

The fiscal year 2024 budget request for the Stockpile Responsiveness Program (SRP) is $69.8 million, an increase of $6.1 million, or 9.6 percent, above the fiscal year 2023 enacted level. SRP is responsible for exercising and enhancing capabilities through the entire nuclear weapons lifecycle to improve the responsiveness of the United States to future threats, technological trends, and international developments not addressed by current warhead modernization programs. SRP is investing in efforts to address issues in design for manufacturability, digital engineering, component, and system prototyping and testing.

The fiscal year 2024 budget request for Weapons Technology and Manufacturing Maturation (WTMM) is $327.7 million, an increase of $41.5 million, or 14.5 percent, above the fiscal year 2023 enacted level. The WTMM program invests in system-agnostic technology development and advanced manufacturing capabilities to reduce the technological risks and life-cycle costs of maintaining and enhancing the stockpile. Technology and manufacturing maturation enables the development and delivery of design-to-manufacturing capabilities to meet the current programs of record and future nuclear weapons design and production needs of the nuclear security enterprise.

The fiscal year 2024 budget request for the Inertial Confinement Fusion Program (ICF) is $601.6 million, a decrease of $28.3 million, or 4.5 percent, below the fiscal year 2023 enacted level, reflecting the use of projected carryover for fiscal year 2024 requirements. The ICF program provides high energy density (HED) science capabilities and expertise that support research and testing across the breadth of the Stockpile Stewardship Program. Its twofold mission is to meet immediate and emerging HED science needs to support the deterrent of today, and to advance the

R&D capabilities necessary to meet those needs for the deterrent of the future. In a breakthrough on December 5, 2022, the ICF Program reached fusion ignition and achieved net energy gain for the first time in history.

The fiscal year 2024 budget request for Advanced Simulation and Computing (ASC) is $782.5 million, a decrease of $7.5 million, or 1.0 percent, below the fiscal year 2023 enacted level. ASC will provide NNSA with leading edge simulation capabilities to support weapons design, science-based stockpile stewardship, and stockpile certification activities. The fiscal year 2024 budget request will continue funding maturation of next-generation simulation and computing technologies. Additionally, *El Capitan,* the first exascale computer for national security, is expected to come online at LLNL for classified computing in 2024. At over two exaflops, it will be the world's fastest supercomputer.

Academic Programs and Community Support

Starting in fiscal year 2024, NNSA is proposing to elevate Academic Programs from a congressional-control level within SRT&E to a stand-alone Government Performance and Results Act (GPRA) Unit/control level, and to also establish a Community Capacity Building Program to provide benefits to disadvantaged communities, including Tribal Nations and rural communities, that are affected by activities at NNSA's sites. These changes will enable improved program integration, agility, development, and alignment to critical workforce needs, promote the President's goal of advancing diversity, equity, inclusion, and accessibility through the Federal Government, and bolster underserved communities affected by activities at the NNSA sites in the areas of job creation, community restoration, infrastructure projects, and educational resources. The fiscal year 2024 budget request is $152 million, an increase of $40 million, or 36 percent, above the fiscal year 2023 enacted level. [2]

NNSA depends on a strong and diverse base of national expertise in specialized technical areas such as nuclear science, radiochemistry, materials at extreme conditions, high energy density science, advanced manufacturing, and high-performance computing. This budget supports managing academic solicitations and competitive awards in these disciplines, enabling connections between these academic research communities and the nuclear security enterprise, and attracting and retaining this pipeline of developed talent to ensure the future workforce of NNSA can meet the evolving needs of the enterprise. NNSA is also building the pipeline for technicians and skilled craft trades to meet ongoing and emerging needs at national laboratories, plants, and sites. The Apprenticeships for Complete and Committed Employment for Specialized Skills (ACCESS) program—outlined in the fiscal year 2020 NDAA—was motivated by the need to support apprenticeships for specialized skills that are vital to the nuclear security enterprise.

INFRASTRUCTURE AND OPERATIONS

A well-organized, well-maintained, and modern infrastructure system is the bedrock of a flexible and resilient nuclear security enterprise. NNSA's infrastructure consists of $134 billion in assets and facilities. More than 60 percent are beyond their life expectancy, with some of the most important dating back to the Manhattan Project. When the cold war ended NNSA was left with large and aged buildings, environmental contamination, and the need to close facilities for some key weapon components such as plutonium pits. Going forward, NNSA needs to be creative in facility design and cultivate capabilities that can rapidly scale up or down depending on the international environment and mission need while being minimally disruptive to contracts, workforce, facilities, and the environment. This includes developing strategic partnerships with industry and using new acquisition approaches to purchase facilities rather than pursuing traditional Federal construction projects. NNSA is increasingly exploring the use of its real eState authority to achieve timely acquisition of modern, non-complex infrastructure to support the mission.

The fiscal year 2024 budget request for Infrastructure and Operations is $2.77 billion, an increase of $164.5 million, or 6.3 percent, above the fiscal year 2023 enacted level. This increase will enable NNSA to operate and modernize NNSA's infrastructure to support expanded mission objectives and future enterprise resilience. A significant portion of the requested increase will support the Kansas City Non-Nuclear Expansion Transformation plan. NNSA is currently pursuing acquisition of 245 acres of land immediately adjacent to the Kansas City National Security Campus (KCNSC), because the current KCNSC manufacturing capacity is inadequate to support the modernization program of record. The increase also enables NNSA to address external factors such as supply chain delays, inflation, and labor shortages

[2] Comparison made using a comparable budget structure to that proposed for fiscal year 2024.

which have raised costs and extended timelines for projects, making it difficult to deliver projects within the baselines established. To address these challenges, NNSA is focused on improving early stage project and portfolio level planning, identifying and applying lessons learned through independent project reviews, and taking actions to streamline project delivery and increase buying power. NNSA is grateful for the additional authority in the National Defense Authorization Act (NDAA) for fiscal year 2023, which raised the minor construction threshold from $25 million to $30 million and provided a 3-year pilot program to raise the threshold to account for inflation. This will make a critical difference in NNSA's ability to further innovate minor construction and complete low-risk projects on time even during a period of higher-than-normal inflation.

Using data-driven risk-informed tools, NNSA pinpoints when and where infrastructure investments are needed and develops innovative execution initiatives to streamline processes, accelerate delivery, and increase buying power. For example, in fiscal year 2019 NNSA established the EMC^2 pilot program to streamline commercial-like construction projects. The initial program quickly expanded from four projects to ten in 2021, including the addition of five office buildings at LANL to support plutonium pit production. In fiscal year 2022, NNSA completed the LLNL's Emergency Operations Center in just 13 months after receiving full construction funding, the first project under this pilot program. This year, NNSA held the ribbon cutting for the Y–12 Fire Station and the Y–12 Emergency Operations Center. Both projects began construction in 2021 and were ready for full operations in just 2 years.

DEFENSE NUCLEAR SECURITY

Defense Nuclear Security's fiscal year 2024 budget request is $1.02 billion, an increase of $144.7 million, or 16.6 percent, above the fiscal year 2023 enacted level. The Office of Defense Nuclear Security's primary mission is protecting the facilities, assets, and people responsible for successfully carrying out NNSA's national security missions. Growth in NNSA's mission portfolio, and the associated growth in projects in secure areas such as LAP4, UPF, and SRPPF, along with increased resources necessary to meet core security requirements, has led to increased program requirements for Defense Nuclear Security.

Full funding of the fiscal year 2024 budget request will support these larger requirements as well as high-priority initiatives for the Physical Security Center of Excellence and the Center for Security, Technology, Analysis, Response, and Testing. Additionally, this increase includes additional funding for the West End Protected Area Reduction (WEPAR) project at Y–12 to address cost increases associated with contractor performance, delays in other projects outside WEPAR's scope, and external factors affecting projects enterprise wide.

INFORMATION TECHNOLOGY AND CYBERSECURITY

The fiscal year 2024 budget request for information technology and cybersecurity is $578.4 million, an increase of $132.7 million, or 29.8 percent, above the fiscal year 2023 enacted level. This request funds current operations and continues investments across NNSA to modernize both unclassified and classified systems and the execution of a robust and effective cybersecurity capability.

The fiscal year 2024 budget request supports the cost necessary to maintain a secure and resilient cyber program. The request invests in operations, mission support, infrastructure modernization, labor growth, and associated investments to execute statutory requirements, Executive Order 14028, policy requirements, and Office of Management and Budget memorandums. The fiscal year 2024 requested increase reflects investments in endpoint detection and response, zero trust architecture, operational technology, enterprise cybersecurity tools and services, and cyber workforce growth at the labs, plants, and sites.

The request funds cybersecurity programs at NNSA's laboratories, plants, and sites to address the significant increase in technology use and keep pace with expanded NNSA mission requirements. The funding increase supports the ongoing modernization of NNSA's network architecture and classified systems, including the Emergency Communications Network. The fiscal year 2024 request includes the costs associated with classified infrastructure and capabilities, implementation of cloud infrastructure, and unclassified IT services. These improvements reflect NNSA priorities in improving both unclassified and classified collaboration tools and network services, as well as providing redundancy and improved performance for mission partners around the world.

DEFENSE NUCLEAR NONPROLIFERATION

From its inception, the Office of Defense Nuclear Nonproliferation (DNN) has developed and implemented policy and technical solutions to minimize or eliminate proliferation sensitive materials and limit or prevent the spread of materials, technology, and expertise necessary for nuclear and radiological weapons. Longstanding and growing cooperation with partner governments; international organizations such as the IAEA, the World Customs Organization, and INTERPOL; and the private sector help develop and implement solutions. These programs work side-by-side with both NNSA's Weapons Activities and Naval Reactors programs to implement best practices for nonproliferation and materials security in our own programs. The fiscal year 2024 budget request for the DNN account is $2.51 billion, an increase of $19 million, or 0.8 percent, above the fiscal year 2023 enacted level. The request will be supplemented with prior year balances of $20 million. This account funds all nonproliferation-related activities in the offices of Defense Nuclear Nonproliferation (DNN), Emergency Operations (EO), and Counterterrorism and Counterproliferation (CTCP).

DNN is working in a global landscape that has radically changed in the last 12 months. Russia's unprovoked full-scale invasion of Ukraine; the expansion and diversification of Russian and Chinese nuclear arsenals; the destabilizing activities of Iran and the Democratic People's Republic of Korea (DPRK); the expected growth in nuclear material, technology, and technical expertise resulting from the global expansion of nuclear power and nuclear technology adoption; and the associated risk of illicit smuggling and procurement networks all complicate nuclear nonproliferation missions and demonstrate the need for additional resources and deeper engagement with allies and partners. DNN will utilize these resources to improve capacity and capabilities, develop and incorporate cutting-edge technology required to address future threats, and deepen cooperation with partners.

Globally and domestically, DNN has had success in reducing and eliminating nuclear materials. To date, DNN has removed or confirmed the disposition of nearly 7,300 kilograms of weapons-usable nuclear material from 48 countries and Taiwan, eliminated the need for weapons-grade material at 108 civilian research reactors and isotope production facilities, and converted a cumulative 1,298 kilograms of plutonium to an oxide form in preparation for final disposition. Additionally, DNN has overseen the first three shipments of downblended surplus plutonium from the K area at SRS to the Waste Isolation Pilot Plant in New Mexico and removed 101 cesium blood and research irradiators form U.S. facilities. Working with domestic and international producers, DNN also provided financial and technical assistance for the conversion of the medical isotope molybdenum–99 (Mo–99), which is used in over 40,000 procedures in the U.S. every day, production facilities from using highly enriched uranium to low enriched uranium. As a result, all major global Mo–99 production facilities now use low enriched uranium, eliminating a proliferation threat from a major global industry.

DNN's Nonproliferation and Arms Control Program (NPAC) continues to cooperate closely with the International Atomic Energy Agency (IAEA) to provide subject matter expertise and bolster the international verification regime through technology development and implementation for safeguards, arms control, and emerging challenges. The greater use of nuclear technology is an issue of increased salience for NPAC. In particular, nuclear energy programs are rapidly expanding as countries seek sources of zero-carbon electricity to combat climate change and enhance energy security. Promoting stringent safeguards and security policies and developing new monitoring and verification technologies all in partnership with like-minded countries are key to preventing proliferation. Additionally, NNSA provided technical advice to the interagency and our AUKUS partners on the full suite of requirements that underpin nuclear stewardship to implement the strongest possible safeguards and verification measures while achieving the overall objectives of AUKUS.

DNN also sustains a robust research program that is vital in the development of technical capabilities which support nonproliferation, counterterrorism, and emergency response missions. This program also sustains and develops the foundational nonproliferation technical competencies that promote the agility needed to support a broad array of nonproliferation missions and potential threats. Our DNN R&D program additionally sustains experts in labs and universities, including people and test beds, and develops ways to get ahead of emerging threats.

DNN also recently established a Bioassurance program which coordinates closely with DOE's Office of Science in leveraging national laboratory capabilities and technical expertise by making complementary investment in biological sciences and engineering, computational capability, and classified workspaces to advance funda-

mental understandings of biology and adapt those understandings to bio-resilience and advancing capabilities for detection and attribution of biological weapons development activities. The Department appreciates Congress' support for the establishment of this program.

NUCLEAR COUNTERTERRORISM AND INCIDENT RESPONSE

The fiscal year 2024 request for Nuclear Counterterrorism and Incident Response (NCTIR) is $493.5 million, an increase of $23.6 million, or 5 percent, above the fiscal year 2023 enacted level. The NCTIR program supports two subprograms: Counterterrorism and Counterproliferation (CTCP) and Emergency Operations (EO).

The CTCP subprogram advances the Nation's technical capabilities to understand, defeat, and attribute nuclear threat devices, including INDs and lost or stolen nuclear weapons; provides technical guidance on physical security requirements for nuclear materials; and conducts Nuclear Threat Reduction exchanges with the United Kingdom and France to prevent, counter, and respond to nuclear terrorism and nuclear proliferation.

CTCP also manages NEST, NNSA's multi-mission emergency response capability comprised of scientific and technical experts who are trained and equipped to respond rapidly in the event of a nuclear or radiological incident or accident worldwide. NEST includes nuclear forensics capabilities that enable technical personnel to identify the origin of nuclear material interdicted outside of regulatory control or used in a nuclear attack.

Russia's full-scale invasion of Ukraine has resulted in an increased operational posture for CTCP since February 2022. In fiscal year 2023, CTCP received supplemental appropriations of $110.3 million to support the U.S. Government's response to Russia's ongoing war in Ukraine. CTCP is using these funds for radiation detection and monitoring of Ukrainian nuclear facilities; personal protective equipment; emergency diesel generators; and procurement of diesel fuel and consumables for Ukraine's nuclear power plants. CTCP will continue to deliver incident response training and build capacity among responders in Ukraine and other partner nations.

The EO subprogram provides both the structure and processes to ensure a comprehensive and integrated approach to all-hazards emergency management across the Department. The EO program aims to improve readiness and effectiveness of the DOE Emergency Management System and the nuclear security enterprise response regardless of the nature or location of the emergency. Fiscal year 2024 funding provides for 24/7/365 Consolidated Emergency Operations Center communications and coordination support to the DOE/NNSA Emergency Management Enterprise, nuclear security enterprise, and Departmental senior leadership.

NAVAL REACTORS APPROPRIATION

With 79 ships, or more than 40 percent of the Navy's major combatants,[3] relying on nuclear propulsion technology, maintaining a qualitative edge in this area remains critical to our national security posture. Providing the Nation's submarines and aircraft carriers with unparalleled mobility, flexibility, responsiveness, and endurance is vital in today's complex geopolitical environment. The ability to maintain robust fleet capabilities on long-term missions is essential for the security of global trade and our allies. The Office of Naval Reactors remains the foundation of this national achievement in global security. Continuous progress in the Naval Nuclear Propulsion Program gives the U.S. Navy a decisive edge in naval warfare and enhances the security and reliability of the sea-based leg of our nuclear triad.

The fiscal year 2024 budget request for *Naval Reactors* is $1.96 billion, a decrease of $117.3 million, or 5.6 percent, below the fiscal year 2023 enacted level. This decrease reflects the revised funding profile for the Spent Fuel Handling Recapitalization Project that was recently re-baselined, and near-complete refueling and overhaul of the S8G Prototype land-based reactor in New York. The budget request supports the continued safe and reliable operation of the nuclear-powered fleet and provides for the continued maintenance, oversight, and operations at the four Naval Nuclear Laboratory sites and the associated contractor workforce. Funding also supports requirements for the office's major initiatives: *Columbia*-class ballistic missile submarine reactor systems development; development of the next generation SSN(X) attack submarine; and continued progress on base technology development, infrastructure recapitalization at program sites, and decontamination and decommissioning efforts.

[3] Major combatants, in this instance, include aircraft carriers, submarines, and surface combatants based on the "Active in Commission" column from the Naval Vessel Register

Consistent, sustained funding is vital for the support of these efforts and will allow Naval Reactors to meet current and future force needs; this foundational support of Naval Reactors is critical to our ability to deliver on AUKUS. The *Columbia*-class lead ship remains under construction and the Spent Fuel Handling Recapitalization Project at the Naval Reactors Facility in Idaho is ongoing. Additionally, work is underway to invigorate long lead-time technology development for the current and future nuclear fleet while supporting specific requirements to meet the Navy's timeline for the next-generation attack submarine ship authorization.

NNSA WORKFORCE

NNSA's workforce represents the backbone of the Nation's nuclear security enterprise. The fiscal year 2024 budget request is $539 million, an increase of $64 million, or 13.5 percent, above the fiscal year 2023 enacted level. The fiscal year 2024 request supports staffing levels sufficient to provide oversight and leadership for our growing mission requirements in the modernization, recapitalization, nonproliferation, and counterterrorism programs. NNSA seeks to recruit and retain top talent in a wide array of fields including science, engineering, crafts and trade, business, foreign affairs and social sciences, and project and program management.

NEW AND CRITICAL PHASE OF THE ENVIRONMENTAL MANAGEMENT MISSION

As important as the missions of today and tomorrow are, the cold war left an indelible mark on America. It is the mission of the Office of Environmental Management (EM) is to address the legacy of nuclear weapons development and government-sponsored nuclear energy research that has played a significant role in domestic security and prosperity.

As the largest environmental cleanup program in the world, EM plays a key role in the Department's overarching mission to protect the planet. The Department's fiscal year 2024 budget request of $8.3 billion will help EM continue to make progress in fulfilling the government's responsibility to clean up the environment in communities that supported nuclear weapons programs and government-sponsored nuclear energy research. EM's vital mission also helps to support and enable DOE's ongoing national security and scientific research missions.

Over the last 30 years, EM has achieved significant progress for the environment, completing cleanup at 92 out of a total of 107 sites. That progress continues today. In 2022, EM teams across the country crossed the finish line on key demolitions, treated and relocated millions of gallons of waste, and deepened our engagements with local Tribes and communities all while curbing pollution and contributing to climate solutions.

Deactivation and demolition work at the Oak Ridge National Laboratory and the Y–12 National Security Complex is reducing environmental risks and enabling research and national security missions. At the Hanford site in Washington State, EM has cocooned the seventh reactor along the Columbia River leaving just one more to go. EM has also treated over 400,000 gallons of radioactive and chemical waste from large underground tanks at the Hanford Site where work is progressing toward startup of a system that will convert this waste into glass for disposal. This Spring, the EM team in Idaho met a key commitment to the State of Idaho by completing the transfer of EM-owned spent nuclear fuel to onsite dry storage and marked a historic achievement with the startup of a new tank waste treatment capability that will address one of the Department's greatest challenges at the site.

At the Savannah River Site in Aiken, South Carolina EM is processing record amounts of tank waste and continues to advance the Advanced Manufacturing Collaborative facility which will help meet the needs of the Department's cleanup mission and help develop a diverse and talented next generation workforce.

More than 200 transuranic waste shipments were received last year at the Waste Isolation Pilot Plant (WIPP) in New Mexico from five generator sites. In addition, EM has launched demolition of the West Valley Demonstration Project's Main Plant Process Building, a priority that will continue this year and will further advance under the fiscal year 2024 budget request. The Nevada National Security Site is preparing to demolish four Test Cell C buildings this year and will continue to reduce the cleanup footprint there in fiscal year 2024.

The fiscal year 2024 request include $7.5 billion for defense environmental cleanup activities, which covers most major EM sites and includes the Uranium Enrichment Decontamination and Decommissioning Fund contribution. The request builds on recent progress, reflects the Department's strong commitment to protecting the environment, enabling national security and scientific research missions, as well as delivering for communities most impacted by the legacy of the past. The request supports a ramp up in EM's ability to tackle tank waste—one of the Department's

largest environmental challenges and financial liabilities. The request will also enable continued progress in infrastructure improvements at the Waste Isolation Pilot Plant and support waste shipments from across the EM program. In addition, EM will continue to advance facility demolition and risk reduction projects across the program.

The request of $1.97 billion for the Office of River Protection will enable EM to advance commissioning and startup of the Direct Feed Low Activity Waste system and includes a $600 million investment to ramp up work on the Waste Treatment Plant's High Level Waste facility. Also at Hanford, the request of $1.02 billion for the Richland Operations Office will enable continued risk reduction activities including advancing the transfer of cesium and strontium capsules to dry storage and treating another 2 billion gallons of contaminated groundwater.

At the Savannah River Site, the request of $1.74 billion supports utilization of capabilities to accelerate the tank waste mission. The request will also maintain a high State of readiness for H Canyon, the only chemical separations facility remaining in operation in the United States.

At the Idaho Cleanup Project, the request of $447 million supports operations of the Integrated Waste Treatment Unit which will ultimately treat about 900,000 gallons of liquid waste by turning it into a granular solid.

Along with providing for continued Waste Isolation Pilot Plant operations, the budget request supports key modernization and infrastructure recapitalization priorities. Shipments of legacy transuranic waste to the Waste Isolation Pilot Plant will progress from sites across the DOE complex, including the Los Alamos National Laboratory in New Mexico.

EM's fiscal year 2024 budget also facilitates the Department's broader national security and scientific research missions. With the first-ever demolition of a reactor in the central campus area at the Oak Ridge National Laboratory and the successful cleanup of a portion of the Y–12 National Security Complex that will be utilized by the NNSA for a new Lithium Processing Facility, EM's steady progress is a part of a broader vision focused not only on cleaning up the past, but also helping prepare for expanding national security and research missions in Oak Ridge, Tennessee. The request builds on that progress with $519 million for Oak Ridge to continue cleanup operations at the Oak Ridge National Laboratory and Y–12 National Security Complex excess facilities.

In addition to enabling impactful progress at EM sites, the fiscal year 2024 request reflects a planning approach that will boost the Department's ability to complete its cleanup mission and deliver for impacted communities. Today, the environmental management mission is at an important crossroads. After 30 years of mitigating the most pressing risks, the program is embarking on a new and critical phase of the mission that requires addressing some of the toughest challenges.

To address these challenges, the Department will need a deep and diverse bench of Science, Technology, Engineering, and Math talent. The fiscal year 2024 request invests in building a workforce for the future that promotes diversity, equity, inclusion, and accessibility. That includes high-quality jobs in environmental cleanup where workers from all backgrounds can make a living and make a difference. The budget request includes $56 million to continue EM's recently expanded Minority Serving Institutions Partnership Program.

While the mission is rooted in the environmental legacy of the past, EM is also focused on the possibilities for the future. As cleanup progresses, EM is opening up possibilities for a clean energy future, good paying jobs and thriving communities and Tribal Nations. The fiscal year 2024 request represents a significant investment in helping the communities grow and thrive. The budget request includes support for the Tribal Nations, Alaska Native communities, and communities near EM sites ensuring they are safe, providing opportunities for local input into clean up priorities and helping build a vibrant future. The request includes Payment in Lieu of Taxes funding for communities near Hanford and Savannah River to support schools, roads and other local priorities. A $40 million investment is included for the Community Capacity Building initiative as well as support for EM's participation in the Department's cross-cutting Justice40 Initiative. This initiative has led to expanded grants to support community and Tribal engagement as well as STEM and Community Based Education programs.

The Department will continue to work hand-in-hand with workers, unions, Tribal Nations, local communities, and Congress to protect the environment, plan for continued cleanup and foster successful visions for the future.

ENHANCING CYBERSECURITY

Cybersecurity Threats to the Energy Sector

Within the United States energy sector, an incredible transition is underway. New sources of energy generation are coming online; new digital tools and technologies are being leveraged to improve reliability and efficiency; and new market forces are shaping how we interact with energy daily, in vehicles, homes, and businesses across the country. With these changes come new risks and new opportunities to advance our cybersecurity posture.

The Department's Office of Cybersecurity, Energy Security, and Emergency Response (CESER) is focused on securing the Nation's energy infrastructure against all hazards, reducing the risks and impacts of cyber and other disruptive events, and supporting State, local, tribal, and territorial governments (SLTT), as well as industry, with response and restoration when a disruption occurs.

As this Committee knows well, DOE has tremendous expertise both at headquarters and across the 17 National Laboratories to help us tackle cyber threats to the U.S. energy sector. DOE, through CESER, leads numerous efforts to push the boundaries of what is possible in energy cybersecurity.

I will highlight three initiatives that CESER is leading to enhance energy cybersecurity: 1) the Energy Threat Analysis Center (ETAC) pilot efforts; 2) Energy Cyber Sense; and 3) additional efforts to integrate cybersecurity into next generation energy systems.

Enhancing Cyber Threat Collaboration

The congressionally chartered Cyberspace Solarium Commission and the recently released National Cybersecurity Strategy (NCS) call out the need for shared responsibility between the public and private sectors, as much of the Nation's energy infrastructure is privately owned and operated. The NCS specifically highlights DOE's pilot of the ETAC as an example of the new and innovative capabilities that the Nation needs to build to effectively collaborate at the scale and speed needed to defend critical infrastructure. In coordination with CISA and the private sector, the ETAC pilot will bring experts from government and industry together to analyze and address cyber threats to the energy sector. The work of the pilot will inform a feasibility study, which will provide a roadmap for the future of the ETAC. Through this new, persistent, operational approach to cyber collaboration, we will close gaps in our collective situational awareness of threats, improve our ability to mitigate and defend against them, and support the Nation's response to incidents within the energy system.

Securing Energy Sector Supply Chains

The Infrastructure Investment and Jobs Act (IIJA) made crucial investments in the cybersecurity of our energy sector supply chains. The IIJA called upon DOE to establish an Energy Cyber Sense program to strengthen the cybersecurity of hardware and software the sector depends on to operate the energy systems of today. Energy Cyber Sense will serve as a hub for CESER activities related to development of supply chain policies, standards, testing, educational awareness, and others to allow the Department to take a broad view of addressing this cyber risk. Lessons learned from this program will be shared with energy sector asset owners and manufacturers who are best positioned to address them. A flagship initiative of Energy Cyber Sense is the Cyber Testing for Resilient Industrial Control Systems, or CyTRICS TM program, which leverages the best-in-class test facilities and analytic capabilities of the DOE National Laboratories to inform improvements that strengthen the security and resilience of hardware and software in the energy sector. CyTRICS TM partners with top manufacturers and utilities in the sector to identify systemic supply chain vulnerabilities that can help us engineer out cyber weaknesses in next-generation energy systems.

Building in Security into Energy Systems

It is far more efficient and effective to build in security measures as new technologies are designed than it is to bolt on cybersecurity solutions once hardware or software is in use. In addition to our supply chain investments focused on security, CESER is also focused on a number of efforts to realize security by design in the energy sector including the development of cybersecurity baselines for owners and operators and investments in research, development, and demonstration (RD&D) to bring new solutions to the market.

In 2022, several states began exploring the development of cybersecurity baselines for utilities operating within their jurisdiction. To prevent a patchwork approach to the implementation of cyber baselines, CESER provided funding to the National Association of Regulatory Utility Commissioners (NARUC) to kick off an effort to es-

tablish a set of cybersecurity baselines for distribution electric systems and distributed energy resources. The focus of this engagement is to establish cybersecurity best practices that will demonstrably buy down the cyber risk to our country's energy infrastructure. This effort will help create a more stable, more predictable business environment for energy innovators over time while having a real impact on the overall cybersecurity of our energy systems.

DOE is also actively working to reduce risks to the electricity, oil, and natural gas systems through threat-informed RD&D of next generation tools and technologies that provide U.S. energy companies cutting-edge cyber protection, monitoring, detection, response, containment, forensics, and recovery capabilities. Last year, CESER released a $45 million Funding Opportunity Announcement (FOA) to strengthen the cybersecurity of next generation energy systems that will create, accelerate, and test technology to protect our energy systems from cyber attacks. Further, CESER executed a $12 million FOA to establish a network of university-based, regional cybersecurity research and development centers across the Nation. Finally, CESER awarded $12 million for six university-based RD&D projects focused on the development of cutting-edge cyber-physical platform tools and technologies that can detect and mitigate incidents in electric power systems. DOE will also continue to implement the Cybersecurity for the Energy Sector Research, Development, and Demonstration Program pursuant to Section 40125 of the IIJA. This $250 million program is designed to support the development and deployment of advanced cyber applications, technologies, and threat collaboration efforts through cooperative agreements and contracts with utilities, the National Labs, manufacturers, and vendors. The first Lab Call for this program is expected in the coming weeks.

CONCLUSION

At DOE, we continue to make progress in fields that enhance American national security during a time of significant global challenges. NNSA's weapons activities, nonproliferation and counterterrorism, and naval reactors programs all play key roles in reducing global nuclear threats and supporting our nuclear deterrent which remains the cornerstone of our national defense. The Department faces an expanded mission at a time of supply chain disruptions, inflation, great power competition, and increased impacts from climate change. We are determined to succeed and continue providing for the American people. We appreciate the trust and resources the Committee has placed in us to meet this moment and are thankful for the continued support of the public and the rest of Congress.

Chairman REED. Thank you very much, Administrator. Madam Secretary, in my opening statement, I mentioned, and indeed you have all referenced as the difficulty in accelerating or even keeping on schedule with construction projects because of the increase in costs due to shortage of skilled laborers, specialty materials, especially for these nuclear projects.

How serious is this problem across the entire Department of Energy, and what are you doing about it?

Secretary GRANHOLM. Thank you, Mr. Chairman. It is a serious problem. I mean, as Administrator Hruby just acknowledged, those three issues, workforce, inflation, and supply chain have impacted not just the NNSA projects, but projects all across our enterprise, at our labs, for example. It is impacting construction across the country as we are seeing.

There is no doubt that it is a challenge, and so, the question is how can we, particularly on the workforce side, how can we recruit and train a new cadre of employees for these very important missions? Especially as we are competing with the private sector, and full-on increases in manufacturing projects all across the country.

You know, in large measure, a lot of these are newer projects, thanks to what Congress has given through the Inflation Reduction Act. That competition will be real. Fortunately, the NNSA has done a lot of work on reaching out to—across the country, trying to incentivize a new workforce, trying to do a better job, a big job of recruiting.

They have been fortunate that their attrition rate has dropped to about 3 percent, which is much better than it had been. But there is no doubt that we are looking at all measures to be able to do that.

Chairman REED. Thank you. Administrator Hruby, you mentioned, and I also mentioned, the Ranking Member, of the challenge of synchronizing all of these different projects, particularly at Los Alamos and in Savannah with respect to the 80-pit production objective, which is the law of the land.

One of the aspects of this is coming up with an integrated master schedule for reduction, and you have not done so yet. Can you give us an idea of when this integrated master schedule will be ready?

Administrator HRUBY. Yes. Thanks, Senator Reed. We have, in fact developed and integrated master schedule. We rolled it out in October 2021. The issue that has been cited by the GAO [Government Accountability Office] about our integrated master schedule is it isn't in enough detail to help to be as useful as possible, and we agree with that.

But the reason it isn't detailed is because we are still in the design phases for both of these projects. We have activities going on, and the activities that are going on are completely in the schedule.

But until we finish design phases, it is hard to have the integrated master schedule at the level of detail that the GAO would like to see to make that tool as effective as possible, and we will continue to populate the integrated master schedule with more detail as the designs mature.

Chairman REED. Thank you very much. Madam Secretary, I have got about a minute plus. Can you highlight some of the efforts that you have been engaged with helping Ukraine? Because one of the critical issues they have is keeping the lights on, literally.

Secretary GRANHOLM. Yes, very briefly. We, at the Department of Energy, both at the NNSA and in the non-defense side, have one, made sure that we have been in touch with all of the utilities across the country to ask them for donations to help send equipment to shore up the energy grid in Ukraine.

We are now about to send our ninth plane of equipment that the utilities have been either donated or that we have purchased from them. Number two, with the NNSA, we have made sure that we have installed sensors in Ukraine to detect radiological activity.

We have been training people in Ukraine in the event—in how to respond to a radiological action. We have been focused on as well, the next step.

What does the grid look like? How should we design a grid in partnership with Ukraine that is war proofed as we buildup? In the postwar environment, hopefully that happens soon, what should the next grid look like? Consistent with what President Zelensky has said, which is that he would like to see a distributed grid that would make it safer.

Chairman REED. Well, thank you very much. When I was there in January and spoke with President Zelensky, he specifically asked for what you are doing, and I commend you for doing it, which is to get our private utilities to donate equipment that they had available. I think that is a remarkable contribution. Thank you. Senator Wicker, please.

Senator WICKER. Thank you for pointing that out, Mr. Chairman. I share the commendation of that move by our American Government. Let's talk, Administrator Hruby, about China. Before we considered them a major nuclear power, the United States entered into agreements with Russia with regard to orbital nukes.

As I mentioned earlier in my statement, China is not bound by that, and I think it comes as a shock to many of us that China is pursuing this never before path that is very risky. Would you tell us and the American public about this orbital idea that China has, how far along are they, and how it affects us?

Administrator HRUBY. Well, thanks, Senator Wicker. This fractional orbital bombardment concept has existed for decades, and as a result with Russia and others, we have discouraged its development.

China and Russia are modernizing their delivery systems, and this is just one of many things that they are considering. We have got to figure out a way to get back into dialogs to talk about these types of systems and the instability that results if they are deployed.

I don't want to say a lot about the assessment of how far along this is in an open session, but clearly, it is concerning and it is something that we are keeping a close eye on.

Senator WICKER. Well, is it fair to say that there were developments last year that became public that were more troubling than before?

Administrator HRUBY. Yes.

Senator WICKER. Okay. Last year, Madam Secretary and Madam Administrator, you asked for unfunded request. This year you didn't. Why on earth did we not hear an unfunded request this year?

Secretary GRANHOLM. Senator, the unfunded request last year was associated with the Savannah River pit production facility, and we greatly appreciate having received the request and is being put to great use there to accelerate activities.

This year, the Department, as verified by the Nuclear Weapons Council, has submitted a budget request that fully funds the activities that we think we need to conduct—to meet all the requirements and to conduct our mission.

Senator WICKER. So, all of the requirements that you need were approved by OMB [Office of Management and Budget], and you don't need to go beyond that for modernization programs to be delivered on time, that is your point of view?

Secretary GRANHOLM. Yes.

Senator WICKER. Okay. Well, if somebody else may want to talk about sea launched cruise missile programs, SLCM. But does the Administration persist in telling this Committee and this Congress that we do not need to pursue a sea launch cruise missile program?

Secretary GRANHOLM. The Administration is following the NPR [Nuclear Posture Review], and they have not recommended it. However, we know that Congress has also provided funding for some studies through NNSA and the Department of Defense, and those are being undertaken.

Senator WICKER. Okay. Well, is it the Administration's position that we should press ahead on sea-launched cruise missile pro-

grams as an important priority, or is the Administration simply going along with what they feel they need to do without violating the statute?

Secretary GRANHOLM. I think the Administration respects the decision of the NPR and will follow that recommendation.

Senator WICKER. Would you rather we not fund the SLCM–N?

Secretary GRANHOLM. It would—it is the Department of Energy, obviously would fund the nuclear capability. But we are following the direction of the Department of Defense.

Senator WICKER. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker. Senator Shaheen, please.

Senator SHAHEEN. Good morning. Thank you, Secretary Granholm and Administrator Hruby, for being here this morning and for your testimony. Secretary Granholm, you mentioned AUKUS in your opening remarks, and the Department of Energy's Naval Reactors Program is the lead entity for the development and operational support for the use of naval nuclear propulsion systems.

Obviously, the AUKUS agreement is a very important opportunity for us to work with Australia and the United Kingdom on ensuring that we all have the technology that we need as we face the threat from China.

But can you tell us what the status of AUKUS discussions are that are associated with the transfer of naval reactor technology? Are there timelines that have been established, and are there obstacles in transferring that technology that we need to in order to cooperate?

Secretary GRANHOLM. We have had very positive initial agreements with Australia. We want to make sure we meet the milestones that are in those agreements.

The Navy is very confident that it can do so and is very encouraged by the cooperation we have had so far, including on ensuring that the Australian Navy is capable of being trained and operating these facilities.

We are in—right now, training some of the Australian members of the navy to be able to understand what it is like to operate a nuclear navy—naval ship. We want to make sure that we are continuing a pace and are very encouraged by how it is going.

Senator SHAHEEN. So, you are not concerned that there are obstacles that are preventing that transfer of technology that could delay the cooperation that we need as part of that agreement?

Secretary GRANHOLM. They are working through all of the pieces. I mean, some of the questions that have been raised on both sides, what happens at the end of life, et cetera, those are all being worked on, but it is not delaying or deterring the project from going forward.

Senator SHAHEEN. Thank you. You, in talking about what the Department of Energy is doing to help Ukraine, I understood you to say we are training people. Is that for the threat of an attack against the nuclear plants in Russia, or is it for the potential that Russia might use a tactical nuclear weapon?

Secretary GRANHOLM. It is both. Wherever there may be some sort of radiological activity, we want to make sure that people are

trained in both response and detection, and so, the training has been ongoing in that regard.

We have, as I mentioned, put sensors in and around Ukraine to ensure that we know what is going on as well. We are very lashed up with both the operators of nuclear plants, as well as folks on the ground to ensure that they are safe.

Senator SHAHEEN. Thank you. Well, that is encouraging. I am not going to ask you whether you think there is—we should be concerned about Putin's statements, since I will let DOD respond to that.

But, in the past year, Putin has decided to suspend Russia's participation in the New Srategic Arms Reduction (START) treaty. That means we are no longer going to have the ability to inspect Russia's nuclear arsenal, and it will limit what we know about what they are doing.

Can you talk, Administrator, about the impact that this has on nonproliferation and norms for mutual inspections, and whether you see any way for us to get back on track and whether there are any future opportunities with Russia and China?

Secretary GRANHOLM. Certainly, Senator. The—well, I would just say it is deeply disappointing that Russia has suspended their participation and New START for several reasons.

The most important is it is the only treaty we have that limits the number of nuclear weapons, and that is a stabilizing that, you know, it provides predictability, it provides—the treaty provides transparency through inspections and regular notifications.

We lose a lot by their suspension from this treaty in terms of stability, precautions. We would absolutely like them to come back into compliance with that treaty and, or begin the discussion of another treaty that limits the number of nuclear weapons for all those reasons.

Senator SHAHEEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shaheen. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. We all recognize that NNSA is balancing multiple life extension programs, along with facility and infrastructure modernization. It is a workload NNSA hasn't seen since the cold war.

However, during the cold war, we were able to prioritize the production of nuclear weapons and delivery systems because we recognized the existential threat and the role that nuclear deterrence plays in addressing that threat.

I believe we have to return to that mindset. As Senator Wicker said, complacency is unacceptable. Administrator, NNSA's core mission is delivering nuclear weapons to the warfighter. Can you discuss ongoing efforts to accelerate delivery of projects and programs, please?

Administrator HRUBY. Thank you, Senator Fischer. I could not agree more, complacency is not acceptable. We are working hard to return the NNSA complex to what I am calling the era of responsiveness.

So, with respect to our programs, as you know and as I commented, the programs are on schedule and synchronized with the Department of Defense.

We feel we know—having said that, we know there are some high-risk activities in those programs, and we are putting lots of effort buy, to lower that risk in terms of a few components that are pacing the schedule. But we feel confident about those programs and the synchronization with the DOD.

Senator FISCHER. Can you give us just a couple examples of what you are looking at to accelerate those programs? This Committee has had deep concerns about the tightness of the schedule and being able to have all the components we need in order to meet the demands that we are facing out there. So, can you give me just, short, couple of examples?

Administrator HRUBY. I will. On the W80–4, there are a few components in that system that by historical standards, we would not have on schedule.

So, we have placed a priority on those components. We have increased the number of people, we have increased the way we track those programs to make sure that we don't realize any risk. The W87–1 is a program worth all newly manufactured parts. That is a program where we have to make sure that we have the production capabilities on time to build the parts on time.

Very challenging. It is pacing everything we do in construction. Getting Los Alamos up and making pits is our top priority for that, accelerating that activity.

Senator FISCHER. Last week when you testified before the Strategic Forces Subcommittee, you said the most challenging programs that you have are those large nuclear construction projects. You also added that this is really the first enterprise rebuild since the Manhattan Project.

Can you talk about how you have changed your approach there? You also were saying that NNSA is breaking projects into chunks. Can you give me some examples there, how you are addressing those large, very large projects?

Administrator HRUBY. Yes, thank you. On the construction projects, because of supply chain challenges, we are explicitly designing equipment, but as pacing the facility design, so that we can get the equipment purchased.

A good—so we don't have a facility without equipment. The best example of this is glove boxes, which we have talked about before. There is a limited number of glove box suppliers in the United States, and we are buying a lot of glove boxes for all of our nuclear facilities.

So, we are designing—these are very specialized. It sounds like they are a box, but in fact, they are very specialized designs. We are working with U.S. industry to purchase those glove boxes and to make sure that they understand the demand that is coming so they will be able to meet it. That is an example of a chunk.

Senator FISCHER. Is that going to help with pit production——

Administrator HRUBY. Absolutely.

Senator FISCHER.—on Savannah River?

Administrator HRUBY. Both Los Alamos and Savannah River. We are working that as a collective. We have a working group that includes all of our projects that are going to need glove box and U.S. industry, so that we can send a clear signal of what we need and

we can prioritize the equipment to be ready when the facility is ready.

Senator FISCHER. Great. Thank you.

Chairman REED. Thank you, Senator Fischer. Senator Manchin, please.

Senator MANCHIN. Thank you, Mr. Chairman, and thank you, Secretary Granholm and Administrator Ruby for being here. I appreciate it. I recently went to Ukraine, saw firsthand the impact of the war on their energy infrastructure. Russia is targeting with missiles and drones on a daily basis, making it almost impossible, and also, Ukraine's energy grid leading to outages not only for the compromises their Zaporizhzhia nuclear power plant, but it is also compromising the three other electric producing nuclear power plants in Ukraine.

They all require external power to operate their reactor cooling systems, and they were very much concerned about that and essential nuclear safety and security functions that go with it.

I understand that DOE [Department of Energy] and NNSA has supported rebuilding Ukraine's grid and integrating it with Europe as well, so helping monitor and reduce the nuclear risks that go with that. So, can, Madam Secretary, you could start with how do you describe DOE's involvement in this and their support for Ukraine? Then, Administrator Hruby, you can tell me from NNSA, where are you all.

Secretary GRANHOLM. Thank you so much, Senator Manchin. Number one, it is really important that Ukraine remain synchronized with the European grid. The DOE has worked with their grid operators to ensure that synchronization can occur.

It has been, and it has been very important to achieving a level of stability of the grid. Number two is making sure that they have the grid components necessary to rebuild. Since you were there, you are probably aware that they have a particular problem with transformers.

The transformers on their system are a Soviet era type. Our grid operators don't have that type of transformer. However, they have provided us with pages of lists of grid components that they need, whether maybe switch boxes, circuit breakers, et cetera, and this is where we have gathered——

Senator MANCHIN. Are you concerned—I am sorry to interrupt you. Are you concerned that maybe—I mean, if they are not able to have the additional power to keep cooler their nuclear system, we could have a real catastrophe over there.

Are you concerned about that? That is the reason we are working, trying to backfill. How about our European NATO [North Atlantic Treaty Organization] allies that have those same European—are you able to connect that?

Secretary GRANHOLM. Yes. In fact, our allies have been tremendously helpful and some of them actually do have access to the kind of transformers that they need.

I will say, and I know Administrator Hruby will say this too, we have also included sending generators to ensure that the power that is feeding Zaporizhzhia and the other plants that are operating are not going completely cold.

Administrator HRUBY. Yes. Just to add on to that, the nuclear power plants in Ukraine, all and on around the world, have diesel generators as backup power. Those diesel generators are also Soviet era, at Zaporizhzhia, and they have been—they are not designed to be—go off and on as often as they have had to because of problems with the electric grid.

So, we have been concerned about them and what we have done in NNSA, in partnership with the Department of Energy and the other things they have done for the grid, is we have supplied truck mounted diesel generators that could be used at the power plant. We have also supplied additional diesel fuel.

Senator MANCHIN. Let me ask you another question then. Saudi Arabia has the desire to go into the civil nuclear arena, and they have reached out, as I understand. We have not been receptive. I believe it is imperative that we have that relationship with Saudi. I rather them working with us than any other country in building their civil nuclear programs. Where do you stand on that and are you all involved?

Administrator HRUBY. Well, both the Secretary and I have talked to people, the leaders in Saudi Arabia, about their civil nuclear program. We would very much like to be involved in the supply of, you know, the plant——

Senator MANCHIN. I understand they have reached out and not only asked you to help, but also oversee the program, and have not got a positive or got any answer from you all.

Administrator HRUBY. Well, I don't think that is an accurate statement.

Senator MANCHIN. Okay. I can report back, and you give me the accurate statement and I will make sure it is carried back.

Administrator HRUBY. Yes, we are asking the Saudis to be consistent with nonproliferation standards that we have for every other country that we work with on civil nuclear power. They have been avoiding making those commitments, so it makes it very hard for us to continue.

Senator MANCHIN. I promise in a more classified setting, we can go into detail. I am happy to be. I just think it is imperative that we repair our relationship. It is imperative for all of us, and it is really the safety of the world.

Administrator HRUBY. I agree, and we met with the new United States Ambassador to KSA [Kingdom of Saudi Arabia] last week before his departure there and had discussions on these topics with him, so.

Senator MANCHIN. Maybe you and I can followup.

Administrator HRUBY. Okay. Thank you.

[The information referred to follows:]

Administrator HRUBY. The United States and Kingdom of Saudi Arabia (KSA) have been in discussions about a 123 agreement since 2012. The United States has emphasized the need for the highest international safeguards and security standards in a potential agreement, including prohibitions on enrichment and reprocessing, and the conclusion of an Additional Protocol with the International Atomic Energy Agency. KSA has not yet agreed to such requirements in a 123 agreement. Such an agreement would allow U.S. nuclear industry participation in the development of the Saudi nuclear energy sector and continue to further U.S. nonproliferation objectives in the region. The Atomic Energy Act of 1954, as amended (AEA), notes that the U.S. Department of State is the lead negotiator of 123 agreements for the United States. Furthermore, the law notes that the U.S. Department of En-

ergy (DOE) provides technical support to 123 agreement negotiations. Once a 123 is brought into force, the Department of Energy National Nuclear Security Administration leads technical implementation of such agreements.

Under Section 57 b. (2) of the AEA, DOE has statutory responsibility for authorizing the transfer of unclassified nuclear technology and assistance to foreign atomic energy activities, both within the United States and abroad. Part 810 of Title 10, Code of Federal Regulations implements this requirement. As of May 23, 2023, there are two outstanding requests pending with DOE from U.S. companies seeking specific authorization from the Secretary of Energy under Part 810 to transfer technology to KSA. Both requests require KSA to provide government-to-government peaceful use assurances to the United States to proceed. To date, KSA has not provided the required assurances after repeated requests.

Senator MANCHIN. Thank you. Thank you, Secretary.

Chairman REED. Thank you, Senator Manchin. Senator Ernst, please.

Senator ERNST. Thank you, Mr. Chair, and Secretary Granholm, I would like to start this morning by asking about the Biden administration's energy policies and their impact on our national security.

The President has been cheerleading for green tech, and I feel that this has harmed the DOD's operational energy approach. It is enriching our adversaries and boosting harmful players on the forced labor supply chain.

Last year, the President proposed to mandate the Department of Defense's non-tactical vehicle fleet in exchange for an all-electric vehicle fleet by 2030. The Senate intervened last year on a bipartisan basis to prevent the directive from becoming law because, number one, we recognize that China controls mining and production for electric vehicle components.

Number two, this Administration has hamstrung a number of aggressive permitting reforms for mining and processing of renewables right here in the United States, domestic mining and energy.

Secretary Granholm, you have been one of the Biden administration's leading advocates for green energy, and you have even praised China's work on climate change. Do you believe China is a reliable partner in achieving and stabilizing United States energy independence and security?

Secretary GRANHOLM. First, I was comparing China's investment in renewable energy to the rest of the globe, and they have invested four times as much as the United States has. Even as, they are not a reliable partner with respect to their human rights abuses.

Number two, though, I just want to respond to the electric vehicle issue. China does control a big amount of the critical minerals, but that is exactly what the President's Invest in America agenda is slated to overturn. We want to see responsible extraction here. We want to see processing here.

We want to see the critical minerals integrated into battery packs here and put into vehicles. In fact, since the Inflation Reduction Act was passed, 150 battery companies have announced they are coming or expanding battery supply chain, including extraction—have announced they are coming to the United States.

Senator ERNST. That is great, and I can't wait to see that happen. I hope it happens before 2030, because that is a very aggressive mandate. I know that the permitting process for a number of

these operations will take years and years and years. So, if we don't streamline that, it is not going to happen.

Secretary GRANHOLM. I think we would—I don't know anyone who wouldn't disagree with you on that.

Senator ERNST. Okay. So, we will watch for that in the next year or so. I hope that this really takes on a much faster approach than what we have seen in the past. I know your department also has ongoing consideration of a $200 million grant to a China based lithium battery company.

I don't want to see American dollars going toward Chinese investment. I think that is really irresponsible. Let's invest in domestic energy production and mining. The Administration's failure to greenlight year-round, low cost, low carbon fuel like E15, is another concern that I have, and I think that all of these things combined are negatively affecting the DOD.

I believe the proposed swapping of the military's non-tactical vehicles for an all-electric fleet, again, by 2030 really is putting the climate crusade ahead of our department's lethality. We need to focus on that first. Do you support the military adopting that EV fleet by 2030?

Secretary GRANHOLM. I do, and I think we can get there as well. I do think that reducing our reliance on the volatility of globally traded fossil fuels, where we know that global events such as the war in Ukraine can jack up prices for people back home, it does not contribute to energy security.

I think energy security is achieved when we have homegrown clean energy that is abundant like you see in Iowa. We think that we can be a leader globally in how we have become energy independent.

Senator ERNST. Well, and when it comes to the EV [electric vehicle] fleet, I don't support it. I think we have got a $10 billion price tag here on a very expensive, unreliable product. We need reliability, and I am going to make a plug again for our homegrown energy.

We have a fleet right now that can use ethanol products, that can use biodiesel, right now. We don't have to invest that $10 billion. Any one of our non-tactical vehicles can pull up to a pump, fill up with biodiesel, and we are good to go, right now, at no additional cost to the DOD. At a time when we are constrained by dollars, we need to take what we have right now and utilize it.

I appreciate your optimism when it comes to developing mining opportunities here in the United States. We will see if that actually materializes under this Administration. Thank you very much, Mr. Chair.

Chairman REED. Thank you, Senator Ernst. Senator Kaine, please.

Senator KAINE. Thank you, Mr. Chair, and Administrator Hruby, Governor Granholm, we met when we were Governors together. You were Governor at a very challenging time, the fiscal collapse of 2008, 2009. All of us, all 50 of us really, really had our hands full. Nobody had their hands full more than you.

I grew to admire your leadership greatly at that moment and since. I want to ask you about two items. First, I know Senator Shaheen has already had a discussion with you about AUKUS, and

I was at another committee hearing, but I wanted to dig into it a little bit.

The subs that are made in the United States are made in Virginia and Connecticut, and all the reactors that go into those subs are made in Virginia at Lynchburg. What in—in the AUKUS discussions with Australia and the UK [United Kingdom], what have been the discussions thus far about production of the reactors that will go into the subs?

Secretary GRANHOLM. Well, obviously we will be producing those reactors and the subs themselves, and our—a lot of the discussions have been around milestones that Australia has to achieve, as well as milestones on workforce and on how to operate safely these subs and the respect for the nuclear reactor that is within. I am happy to ask Administrator Hruby, who has been in these discussions, if she had anything further to add——

Senator KAINE. That would be helpful, and just sort of as a preface, I had a meeting with the UK defense minister last week and he sort of said the same thing. But I know there has been some press suggesting that Rolls-Royce might build the reactors and build them in the UK.

I know that we are sort of at the front end of working this all out, but it is very relevant to workforce issues in Virginia. Administrator Hruby, if you have anything to add on that, that would be great.

Administrator HRUBY. Yes. One thing we know for sure is that the materials that we use for fuels in these reactors is a U.S. designed material specifically for the life of the boat, right? Which is a very big advantage that we have.

I think as part of AUKUS, we opened the door to potential, over the long run, not over the short run, over the long run for other allied supplies of reactors, but not reactor materials.

I would just say that what we do for reactors—the other one very important part of the AUKUS Agreement is that the Australians have agreed to keep the spent fuel and that will be an important element, but they need to step up as well.

Senator KAINE. Well, just to paint the picture about the magnitude of the challenge, we are trying to get *Virginia*-class subs back to two a year.

We are doing *Columbia*-class subs, we are doing carriers, and now it is likely for the foreseeable future that the reactors in AUKUS subs will be—the material be in the United States, other weapon systems will as well, all with workforce challenges.

While the President's Budget increases the NNSA budget overall by 7.6 percent, there is actually a decrease of 5.6 percent in the nuclear reactor space, so that may be something we need to talk about.

Second issue I just wanted to raise with you, Secretary Granholm, and this isn't really in this Committee's bailiwick, but it is in yours, and I don't have another committee where I can ask you this. I am so excited about what DOE is doing around the Administration of the clean energy tax credits and the Inflation Reduction Act.

I know it is sort of a new job for the DOE. The tax credit and other programs have come out of Commerce. They have come out

of other agencies. But the additional 10 percent tax credit, for example, for manufacturing our clean energy production in energy communities, the set aside of $4 billion of the $10 billion tax credit for energy communities.

I have been in two such communities in Virginia the last 2 weeks. I was in Appalachia 2 weeks ago. They are so excited about the prospect of attracting manufacturing businesses that might qualify for the 30 percent tax credit, but then have the 10 percent boost on top of it.

I was in Danville, which recently—which has a wonderful megasite recently, and they recently lost a prospect before the IRA passed. But because their site is in a census tract adjacent to where a coal plant was converted to gas, they are now an energy community.

That additional 10 percent tax credit is inspiring interest that is really exciting to the community leaders. I know it is a lot to take on because it wasn't as if the DOE was sort of in the Administration of tax credits business in a huge way.

But now with these tools, I can tell you that in my two regions of Virginia, that fit squarely in the kind of energy community space, there is a level of excitement about economic development prospects that I haven't seen since I got into politics in 1994. So, I just encourage you to keep the pedal to the metal on that.

Secretary GRANHOLM. Super excited to do so. As you know, the stackable nature of these credits make the United States the irresistible nation to invest in, and that is what the Invest in America agenda is all about.

Chairman REED. Thank you, Senator Kaine. I think you understand that every submarine in the United States begins construction in Rhode Island.

Senator KAINE. I am going to be in the doghouse with the Chair for a while.

Chairman REED. Senator Tuberville, please.

Senator TUBERVILLE. Thank you, Mr. Chairman. Thanks for being here today, both of you. Secretary, good to see you. You know, since you and I have been in our roles, I have been asking you about thorium and uranium 233. School year late, but I was happy to read your department report on thorium. Have you read it?

Secretary GRANHOLM. I am aware of it.

Senator TUBERVILLE. Okay, thank you. It is fairly long. Very thick here. Took me a while to get through it. Not being a rocket scientist, it took me a while to read all the words. In your opinion, after looking at, what is the two biggest hurdles to nuclear power in the minds of most Americans right now?

Secretary GRANHOLM. In the minds of most Americans, I think it is waste and the fear—the issue of safety.

Senator TUBERVILLE. Yes. Thank you. Let's talk about nuclear waste for a second. The thorium report the DOE just submitted says that traditional light water reactors the kinds in operation across the U.S. aren't so efficient. A plant that burns 250 tons of uranium ends up with 35 tons of spent fuel. Is that correct?

Secretary GRANHOLM. Yes.

Senator TUBERVILLE. Yes. But a thorium powered nuclear plant can produce the same amount of energy with one ton of thorium and end up with a fraction of that in waste that is harmless for 300 years or less. Is that correct?

Secretary GRANHOLM. I think—I believe so.

Senator TUBERVILLE. Thank you, and now let's talk about the larger worry, as you said, which is safety to the American people.

I am going to quote from the DOE report here, "liquid fluoride, MSR [molten salt reactor] thorium reactors may be designed to be meltdown resistant by using a plug at the bottom of the reactor that melts in the event of a power failure, or if temperatures exceed a set limit, draining the thorium fuel salt coolant mixture into an underground tank for safe, non-critical geometry storage."

Basically, that means thorium power plant, it can't melt down like a normal uranium plant, and there are a whole host of other benefits. Right now, the United States is reliant on Russia for uranium. That is where we get it from. Moving to a thorium cycle would free us of that dependency. Correct?

Secretary GRANHOLM. Yes.

Senator TUBERVILLE. Creating a thorium cycle could help the United States catch up to China when it comes to rare earths because thorium is a waste byproduct of mining rare earths, correct?

That was an excellent part of the report. With so many advantages to thorium, Madam Secretary, my question to you is this, doesn't it make sense to preserve the Nation's stockpile of physical material, uranium 233, so that if the DOE can pursue a thorium strategy, we have that option? What do you think?

Secretary GRANHOLM. Well, the current stockpile that you are referring to at each canyon is very expensive. The facility that it is housed—of course, it is a proliferation concern, uranium 233 or uranium 229, that comes from. It is a proliferation concern.

We spend $50 million a year, I think, in just housing that, and then the process for extracting is very, very expensive. So——

Senator TUBERVILLE. How much are we spending in destroying the uranium?

Secretary GRANHOLM. We are——

Senator TUBERVILLE. It is pretty expensive also.

Secretary GRANHOLM. Yes, it is expensive, but the thought is that the Nation's nuclear reactors now have a different fuel cycle, right?

There is hope that this Committee, as well as the entire Congress, will help with a uranium strategy that gives us a supply that is not reliant upon Russia. Meaning that we should have enrichment and conversion processing of uranium here in the United States so that we can do that.

The thorium, we have some investments in thorium and doing some research on it. We just don't have any right now reactors that are up and running. We do have a molten—salt reactor, but it is a uranium reactor, a small one in Idaho, Idaho lab, which we can learn a lot from.

We don't want to shut down any possibility. But I will say from a rapid movement point of view, because we feel like there is a sense of urgency, especially since so many of our allies are really interested in nuclear power as well, that we have a reliable process

that has been up and running for over 50 years, and we want the advanced reactors obviously coming online.

We are doing some research in it, but given the current infrastructure that we have, we think it is best use to be able to get a fuel cycle that is consonant with the existing fleet.

Senator TUBERVILLE. It looks like to me it would be a small investment of $50 million when we are talking more times, in billions and trillions, $50 million to save our uranium—or thorium, over the years.

Secretary GRANHOLM. Well, I will say that the rough order of magnitude cost for the uranium recovery and production of HALEU [high-assay low-enriched uranium] from that is about 680 million to 1.3 billion for one metric ton. That is a lot.

Senator TUBERVILLE. Over how many years though?

Secretary GRANHOLM. That is for one metric ton.

Senator TUBERVILLE. For one ton, yes. We already have the thorium though. Now, the thing that I am concerned about is China is building thorium reactors, and they are building them not just in China, but also in the Belt and Road Initiative.

They are doing something right. It is cleaner, it is safer, and it gives us an opportunity for us to at least look into it. Because if we are going to do away with coal and fossil fuels, there is no doubt that the answer to the problem we have right now is nuclear.

If we are going to do nuclear safety and the option of being able to store the waste, a lot less waste over the many, many years would be much better for what we are doing other than uranium reactors as we speak. Hopefully we will continue to talk about that over the years and make some progress. Thank you, Mr. Chairman.

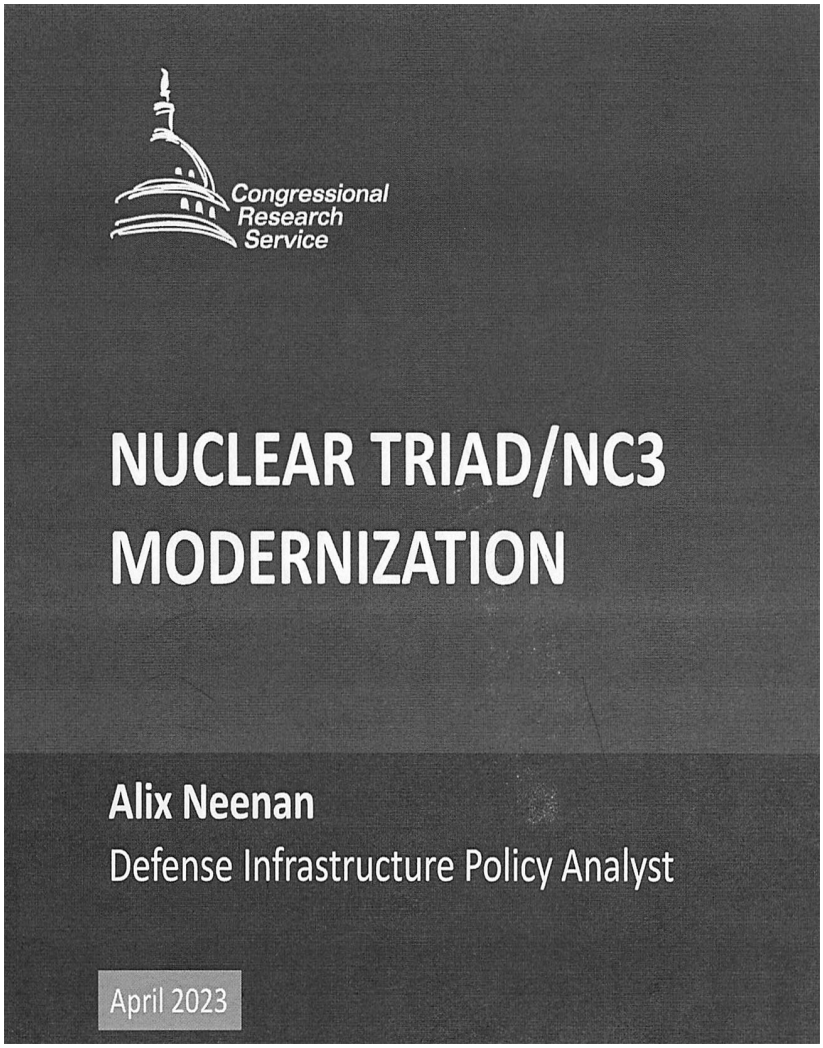
Chairman REED. Thank you, Senator Tuberville. Senator King, please.

Senator KING. Thank you, Mr. Chairman. First, I would like to ask unanimous consent that a congressional Research Service report called the Nuclear Triad NC3 [nuclear command control and communications] Modernization by Alex Neenan be included in the record.

I want to recognize Ms. Neenan and her team for conducting a cross-cut analysis of the funding and contracts associated with a major nuclear delivery systems, including NC3. This has been a hugely helpful report to myself and Senator Fischer on the Strategic Forces Subcommittee.

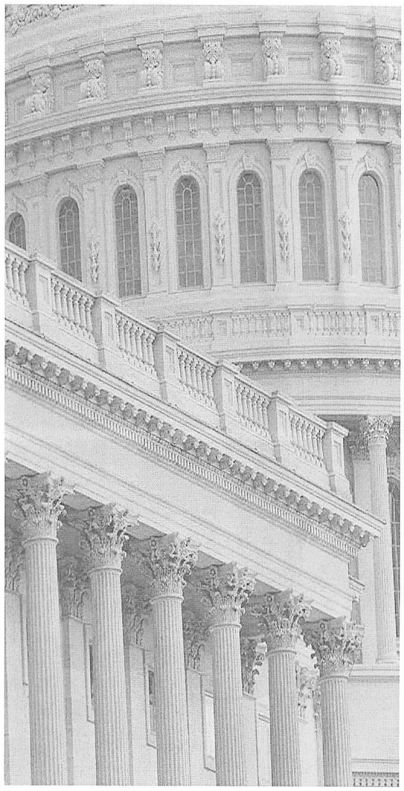
Chairman REED. Without objection, so ordered.

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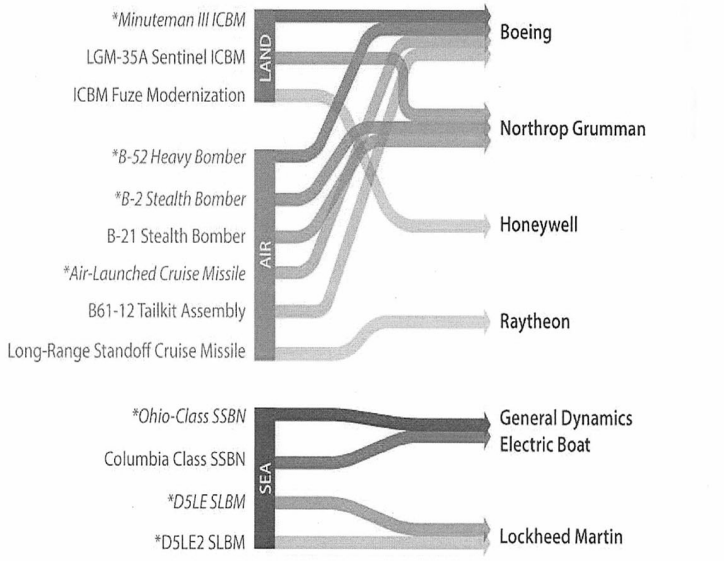

Congressional
Research
Service
NUCLEAR TRIAD/NC3
MODERNIZATION
Alix Neenan
Defense Infrastructure Policy Analyst
April 2023

Agenda

- Major Nuclear Delivery Systems and Major Prime Contractors
- Major Nuclear Delivery Systems, Primes, and Other Contractors
- Major NC3 Systems and Prime Contractors
- Major Nuclear Modernization Programs Contracts, FY20-Present
- Nuclear Triad Funding Types, FY22-24



Major Nuclear Delivery Systems and Major Prime Contractors

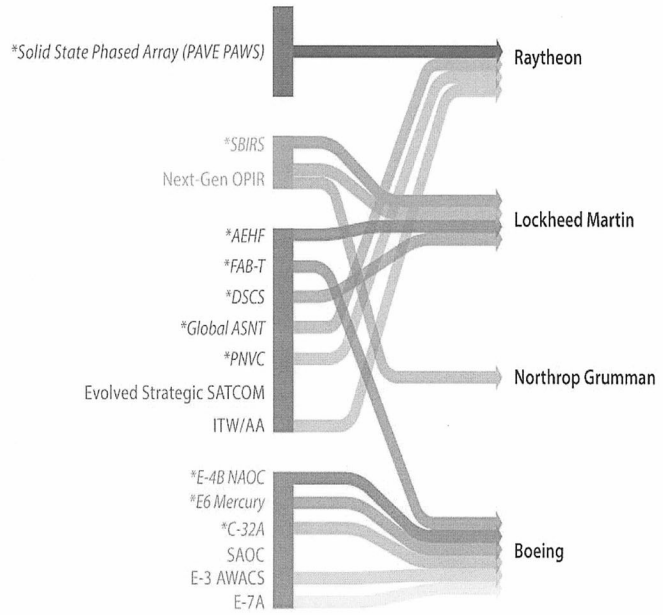


*Legacy systems

Major Nuclear Delivery Systems, Primes, and Other Contractors

Delivery System	Prime Contractor	Subcontractor(s)	Other Contractors Awarded >$5m in FY22-23
Minuteman III ICBM	Boeing		BAE
LGM-35A Sentinel ICBM	Northrup Grumman		Blue Ivy Partners
Mk21A Reentry Vehicle	Lockheed Martin		
B-52 Heavy Bomber	Boeing		
B-2 Stealth Bomber	Northrup Grumman		
B-21 Stealth Bomber	Northrup Grumman	Pratt & Whitney; Janicki Industries; Collins Aerospace; GKN Aerospace; BAE Systems; Spirit Aerosystems	
Air-Launched Cruise Missile	Boeing		
B-61-12 Tailkit Assembly	Boeing		
Long-Range Standoff Cruise Missile	Raytheon		
Ohio-Class SSBN	GDEB		
Columbia-Class SSBN	GDEB		Areté Associates; Sauer Construction
D5LE SLBM	Lockheed Martin		Peraton/Arcfield; Charles Stark Draper Laboratory; RQ Construction, Inc.
D5LE2 SLBM	Lockheed Martin		

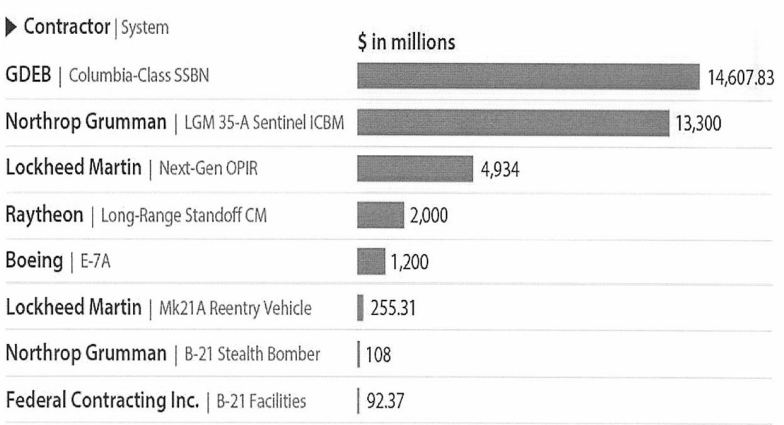
Major NC3 Systems and Prime Contractors



*Legacy systems

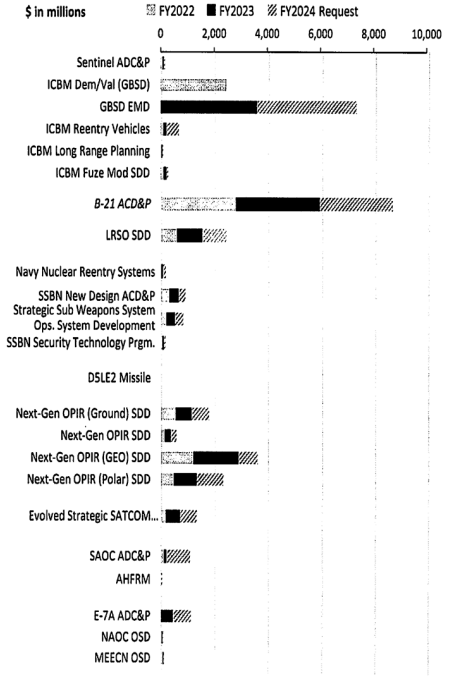
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Publicly Available Major Nuclear Modernization Programs Contract Awards, FY20-Present



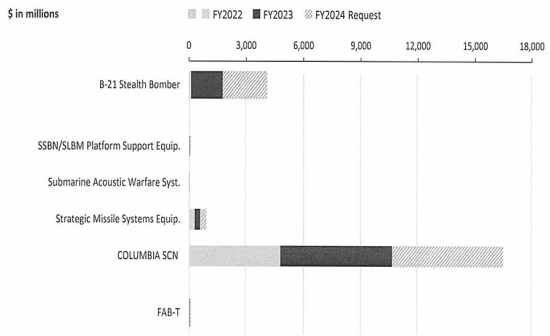
Nuclear Triad Funding Types, FY22-24 1 of 2

Research and Development Funding Category



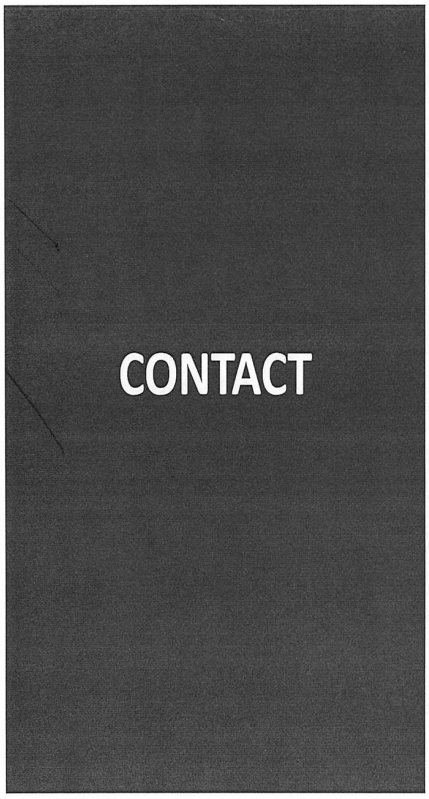
Nuclear Triad Funding Types, FY22-24 2 of 2

Procurement Funding Category



All Acronyms

ADC&P – Advanced Component Development and Prototypes
AEHF – Advanced Extremely High Frequency
AHFRM - Airborne High Frequency Radio Modernization
ASNT – Aircrew Strategic Network Terminal
AWACS – Airborne Warning and Control System
CM – Cruise Missile
D5LE – D5 Life Extension
D5LE2 – D5 Life Extension 2
Dem/Val – Demonstration and Validation
DSCS – Defense Satellite Communication System
FAB-T – Family of Beyond Line-of-Sight Terminals
FY – Fiscal Year
GBSD – Ground-Based Strategic Deterrent
ICBM – Intercontinental Ballistic Missile
ITW/AA – Integrated Tactical Warning/Attack Assessment
MEECN – Minimum Essential Emergency Communications Network
NAOC – National Airborne Operations Center
OPIR – Overhead Persisted Infrared Radar
OSD – Operational Systems Development
PNVC – Presidential and National Voice Conferencing Integrator
SAOC – Survivable Airborne Operations Center
SATCOM – satellite communications
SBIRS – Space-Based Infrared System
SCN – Shipbuilding and Conversion
SDD – System Development and Demonstration
SSBN – nuclear-powered ballistic missile submarine
SLBM – Sea-Launched Ballistic Missile
TKA – Tail Kit Assembly



Alix Neenan
Defense Infrastructure
Policy Analyst
aneenan@crs.loc.gov
202-707-1566

Senator KING. Thank you. First, Mr. Chairman, I think it is important to talk about a little bit of the context of what is going on here.

We are trying to do a very difficult and expensive thing at once, which is to entirely modernize the nuclear triad and NC3—and by the way, I consider it a quad because I think NC3 is an essential part of the triad, and rebuild the infrastructure of the entire nuclear enterprise, all at once.

I call it the pig in the python of the budget. It is a major expenditure that probably should have been done over the past 40 years in increments, but we are doing it all at once. I think that is a problem that we need to understand here in the context of the budget. Ms. Granholm, did I articulate it accurately—Administrator?

Secretary GRANHOLM. You do.

Senator KING. Well, I think that is something that we really need to think about. I want to talk a minute about the cloud, and by the way, the first person to download data from the cloud onto a tablet was Moses.

[Laughter.]

Senator KING. Sorry, I couldn't resist. Everybody is moving to the cloud. Private enterprise and Government entities, intelligence agencies, Defense Department, everybody is moving to the cloud.

The advantage, obviously, is a large repository which we can adequately protect. The disadvantage is there is so much data there that if somebody can get in it, they have really hit the jackpot.

Madam Secretary, I hope that as we are working in this direction, that due consideration is given to the cyber risks of cloud storage of data.

Secretary GRANHOLM. Absolutely. It is one of the top priorities of our office of cyber, CESER [Office of Cybersecurity, Energy Security and Emergency Response].

Senator KING. CESER——

Secretary GRANHOLM. Yes. To be able to make sure the cloud, as well as the hard infrastructure associated with our energy grid, et cetera, are protected.

Senator KING. Well, I am not sure who actually has the specific responsibility, but I hope that you will have CESER pay special attention to this because it—I see it as a—as I say, the cloud is definitely more secure, only if it is adequately protected, and if it isn't, then it could be a catastrophe.

Secretary GRANHOLM. Agree 100 percent.

Senator KING. Workforce. Senator Shaheen asked you about workforce. I understand in the budget that there is—there are raises for the nuclear enterprise workforce. Administrator Hruby, is that important?

I mean, if—all jobs are important, but the work that you are doing is critical to national security and we have just got to have the right people.

Administrator HRUBY. Yes. Thank you, Senator King. It is extremely important in the nuclear security enterprise to have the best workforce, and we have to compete with the tech industry and the private sector.

Senator KING. Are you doing it? Are you getting people?

Administrator HRUBY. We are. We had a couple of tough years but at the moment we have turned the—we seem to have turned the corner on that.

We took some aggressive actions. We actually authorized the mid-year salary adjustment at our labs, plants, and sites that was targeted toward the places where we were seeing the highest attrition.

Senator KING. Well, cutting attrition is as good as recruiting. Every person that doesn't——

Administrator HRUBY. Absolutely——

Senator KING.—you don't have to fill, and you, I gather you have significantly cut your attrition rate.

Administrator HRUBY. We have. At this point, and we are going to watch it closely, but at this point, our attrition has returned to close to normal levels at our labs, plants, and sites, which is around 3 percent.

I will say that we are still experiencing a high attrition in our Federal workforce. Actually, the highest attrition in over a decade is around 12 percent. We now need to really focus on what we can do about that. The mission, our mission helps a lot. So, we will pay what the private sector pays and sort of the full package, but this mission is important and people recognize it.]

Senator KING. Well, I think the mission is important, and for that reason, you can hold people to some extent, but you also have to be sure that we fill those critical positions.

I understand that Senator Fischer talked about budget and pit production, so I am not going to replough all that ground. But I think clearly this Committee is very concerned about meeting that 80 pits per year schedule.

You have to come to us and tell us how we can help, how we can—whether it is Defense Production Act or what are the elements that are needed in order to meet that critical need.

Because as the Chairman indicated at the beginning of the hearing, we are facing an entirely new strategic situation with two highly nuclear-armed potential rivals. So let us know how we can help you to meet those—that schedule.

Administrator HRUBY. Thank you. We really appreciate your full support on this, and the things that you have done to date have been very useful, including funding our pipeline programs. A lot of this is about people, and we have to increase the number of people who can do these jobs in the United States.

We can't do that overnight, but the funding of our trade and crafts programs, our university programs, along with pay, transportation, and housing incentives for craft workers, all of those things are helping us and pre-buying equipment, so we appreciate your support and we will continue to look for ways that we can accelerate.

Senator KING. Thank you. Thanks to both of you. Thanks for your service.

Chairman REED. Thank you, Senator King. Senator Scott, please.

Senator SCOTT. Thank you, Chairman. First, thanks, both of you for being here. Secretary Granholm, last year in this Committee, you made a commitment that the Biden administration would not

import oil from the horrible regimes in Iran and Venezuela. Can you make that same commitment today?

Secretary GRANHOLM. Yes. We don't take in oil from sanctioned countries.

Senator SCOTT. Good. I have been disappointed with the way the Biden administration has deployed appeasement tactics with some of these dangerous regimes.

Some of us have been concerned, and I have been very concerned about—but that is going to go beyond these appeasement tactics with what they have tried to with Iran and Cuba and Venezuela and Nicaragua, places like that, and I am glad that you made the commitment.

Nuclear power is a two-sided coin. There is a lot of potential for good, but it can be in the wrong hands. It can be catastrophic, as we all know. We have got enemies like Russia and China that have already seen the potential in nuclear recycling.

Last year, Russia fueled a reactor with a 100 percent recycled plutonium, and China is about to start a reactor with similar capabilities. Americans seem like we are absent from the cutting edge on these technologies, which will seriously hamper our ability to have a seat at the table to negotiate.

It looks like our enemies are ahead of the game on this. What are we doing right now to deal with and what are you doing to deal with recycling?

Secretary GRANHOLM. Yes, thank you for asking this. It is obviously, historically, this has been a proliferation, nonproliferation question. But I think there is an awakening sense that if not just the countries that you identified, but France can do recycling of spent nuclear fuel, then the United States should be doing that as well—at least looking at it, which is what is happening now at the Idaho National Lab.

They have a program now and several experiments that they are working on to be able to prove its efficacy, and one of the big challenges has been that it has been very expensive to recycle nuclear fuel. However, it is obviously very expensive to store nuclear waste as well. So, I agree that we should be pursuing this as an efficiency strategy as well.

Senator SCOTT. Do we have the same capabilities as Russia and China?

Secretary GRANHOLM. Not right now. We do not.

Senator SCOTT. Okay, and what are you doing with the private sector? Historically in this country the private sector has come up with the innovation rather than Government. What are you doing with the private sector, and are there companies that you are working with out there that you could help accelerate, you know, to hopefully where we got an advantage?

Secretary GRANHOLM. Yes, I mean, as I mentioned that at Idaho, which is of course where we have a great expertise in nuclear and advanced nuclear reactors, they are working with a couple of companies that are doing this and that are taking it to the next level. So excited to see the results from that, but I feel that is a promising point of acceleration too.

Senator SCOTT. Do you need more private sector companies to show up? Is there something you would expect, you would ask in the private sector to do now that would help accelerate this?

Secretary GRANHOLM. Well, we would like to see this done in the confines of a space that can handle nuclear and fissile material. Many of our labs, our user facilities, and in this case, Idaho National Lab is as well. We encourage folks to seek out that opportunity and to be able to make use of the facility as well.

Senator SCOTT. What is the Department of Energy doing with the Department of Defense to make sure we have military capabilities in this area? Is it the same thing—is it the same area?

Secretary GRANHOLM. Well, I mean, obviously, Idaho works with the Department of Defense as well. You are talking about from weapons?

Senator SCOTT. Right.

Secretary GRANHOLM. Right, so most in the defense side, and Administrative Hruby can speak to this as well, most of the storage—it is being stored and not recycled. We were just having this conversation with Senator Tuberville for different—obviously for thorium reactor.

It is expensive to store it there as well. But we are trying to treat the material and ensure—and there is some nascent research that is happening on repurposing. I don't know if you want to add anything to that.

Administrator HRUBY. Let me just say, on the nuclear weapons side, these materials last a long time and we don't use them, right? I mean, so we can recycle our nuclear materials and we do. We reuse our plutonium, our uranium, and most of our nuclear materials.

When we talk about making pits, we are purifying and reusing the plutonium that we have used in previous weapons.

Senator SCOTT. Thank you. Thank you, Chairman.

Senator KING. On behalf of the Chairman, Senator Warren.

Senator WARREN. Thank you, Mr. Chairman. It is good to see you, Secretary Granholm. Now, as you know, Bitcoin mining involves companies using powerful computers to verify transactions to win a Bitcoin reward.

You may remember that at the same hearing a year ago, I asked you about the immense energy consumption of Bitcoin mining. Since then, the issue has aroused more public concern. A recent New York Times investigation found that just 34 Bitcoin mines in the U.S. are using as much electricity as 3 million households.

That is the equivalent of the entire State of Arizona or the entire State of Tennessee. That is a lot of energy and most of it is dirty. Fully 85 percent of this power comes from coal or natural gas plants. That causes as much carbon pollution as 3.5 million gasoline powered cars.

For every one new electric vehicles sold in the U.S. last year, these Bitcoin miners did the climate equivalent of putting four additional gasoline powered cars right back on the road. Now, I should note that my own investigation shows there are more mines than just the 34 that The New York Times analyzed.

The problem is even worse than reported. Secretary Granholm, when you came before this Committee last year, I asked you if the

Federal Government knew how many crypto miners were operating in the United States and how much energy they are consuming, and you said that wasn't being tracked and that more data would be needed. So here we are a year later. Is the Department of Energy formally tracking crypto miners yet?

Secretary GRANHOLM. Great. First of all, thank you so much for your leadership in this, because I do think that you have unearthed a massive problem. We don't know how many miners there are. We don't know where they are. We—all of them. I mean, some of them you do, but some of them—many of them you don't.

A lot of them are just underground. Some of them are small operators. As you and I have discussed, we have charged our Energy Information Administration with figuring out how to mandate a reporting of these entities.

Now, that is complicated, as you know, because they are—many of them are underground, and even the utilities may not know right where the draw is coming from.

Senator WARREN. So, let's talk about that. Given that crypto mining undermines all of our other climate work, we can't afford to delay on this. There is a lot of urgency around this. I want to talk for just a second about the authority you have to gather information on this.

Let me ask, Secretary Granholm, do you have the authority to mandate that crypto miners disclose information about their energy consumption?

Secretary GRANHOLM. We have the mandate authority.

Senator WARREN. Good. In your response to a letter, I sent you in February, you indicated that the Energy Information Administration will first need to develop a new survey program to begin collecting information from crypto miners.

By when do you expect to field this survey and use it to gather data from crypto miners on a mandatory basis?

Secretary GRANHOLM. Yes, we are—we, first of all, are looking at creating the survey from a regular report that is an electricity gathering report that we have now asked to include crypto as part of it. That report from NREL [National Renewable Energy Laboratory] will be completed by the end of this year on which the Energy Information Administration can base its survey.

It is going to take some time for them to be able to craft the survey from the information that they receive from the NREL report, but know that that is happening and we are pushing to accelerate the timeline——

Senator WARREN. Okay, so by the end of this year, you will have a report on mandatory reporting?

Secretary GRANHOLM. We will have——

Senator WARREN. I want to make sure I know what we are getting.

Secretary GRANHOLM. Yes, no, no, we will have a report that will have gathered not fully but enough information to be able to craft the framework for the survey. We won't be able to get the survey out, the mandatory survey by the end of this year, but we will have the report done and the survey will be constructed from that.

Senator WARREN. Okay, and we are certain we are going to get that mandatory survey out then sometime in 2024?

Secretary GRANHOLM. I hope so, but I don't want to——
Senator WARREN. It is tick tock——
Secretary GRANHOLM. I know.
Senator WARREN. Okay. I mean, look, we are running out of time here. Crypto mining's energy use truly undermines our efforts to fight climate change and we are out of time. We need to understand the full scope of the problem, and that starts with the authorities you have.

I hope that the next time we come back, you will tell me that you now have that survey in place and we are getting mandatory reporting from the crypto mining companies.

Secretary GRANHOLM. I hope so too.
Senator WARREN. Going to hold you to it. Thank you.
Senator KING. On behalf of the Chairman, Senator Budd.
Senator BUDD. Thank you, Chairman, and again, thank the witnesses both for being here today. The NNSA's work is a no fail mission and that is why it is vital to secure supply chains and eliminate single points of failure throughout the nuclear security enterprise.

Secretary Granholm and Administrator Hruby, I would like to ask you about the importance of lithium in the nuclear modernization process. Over the last 3 decades, the United States lost its capacity to produce lithium, where it accounted for over one-third of global production as recently as 1995.

Now, the United States represents less than 1 percent of production, and China and Russia are dominating the race to secure supplies of lithium worldwide. I understand that the NNSA is currently obtaining the lithium it needs for nuclear weapons modernization by recycling material from dismantled warheads. I see you are nodding your head.

But that is insufficient long term. So, what is the Department and the NNSA doing to guarantee assured access to lithium for all of our needs? Secretary Hruby, we will start with you—Administrator Hruby.

Administrator HRUBY. Yes, thank you. At the—our analysis, does not indicate that we are going to run out of lithium in the timeframes that we have looked at. I will go back and I will take this question back to see if there is a date that we are concerned about.

But the recycling program, given that we recycle our lithium for our weapons, and our newer weapons are not using more lithium, I think we are in good shape on this, but I promise to confirm that.

Senator BUDD. Thank you. If you would, please. Secretary.

Secretary GRANHOLM. Yes. We were concerned about supply of lithium for a variety of reasons, but obviously, defense being one of them. More urgent is making sure that we have enough lithium for batteries for electrification purposes, and therefore, the efforts that the loan programs office is making. For example, to provide conditional commitments for mining of lithium is one of the strategies, the commitments that are being made around the country for the full supply chain of batteries, including extraction and processing of lithium.

Very exciting to see how many companies are raising their hands, saying that they are interested in this, and then we have also given a conditional commitment to companies that are recy-

cling batteries, not just from vehicles, but from phones, et cetera, to be able to reprocess more, even a purified lithium. So, on all of these vectors, we want to increase our domestic supply.

Senator BUDD. Thank you, Madam Secretary. What are some of the impediments if you want to do more extraction, and I appreciate your efforts there, what are some of the impediments to sourcing it from U.S. suppliers?

Secretary GRANHOLM. Yes, clearly permitting has been a challenge and we are all hopeful that there will be some bipartisan movement on that. We believe strongly that you can sustainably mine for critical minerals in the United States and permitting reform might be required.

Senator BUDD. Thank you. So, what other critical materials or parts do we need assured access to that we don't currently have? Either one of you.

Administrator HRUBY. On the top of our list in NNSA is to begin uranium enrichment in the United States again, and in particular unencumber all U.S. technology and uranium enrichment. This is a need that we will have for defense purposes.

To make tritium, we need LEU [low enriched uranium], and for naval reactors, we need new highly enriched uranium, and so, we have been planning that program in concert with the needs in the civil nuclear sector and the U.S. for enriched uranium.

That is—at the moment, that is our highest priority.

Senator BUDD. Thank you. One area Congress and the Department have made critical investments in is the workforce, especially authorities and resources to ramp up recruiting. But we are still at risk of losing nuclear know how with the aging and retirement of some of our best and brightest, talented scientists.

Administrator Hruby, what is the NNSA doing on knowledge management to ensure that we don't lose that know-how? I would also ask, when I am talking to younger people in North Carolina, what careers or associate a career should I encourage them to go into?

Secretary GRANHOLM. Great questions, thank you. We do have a knowledge management program that includes oral interviews, that also includes mentorships. We have made sure that we have programs that allow our retirees to come back and mentor new workforce in the complex, and that is happening around the complex every day.

We hope that we have—we do need knowledge management. We have a very new workforce. The average age in our—the average experience time in our workforce is about 9 years, and for those businesses, that is still quite new.

I think, in terms of encouraging people. Frankly, any STEM field is great, including craft workers. But we really need more electrical engineers in the United States, and but like I said, in any STEM field, our doors are open.

Senator BUDD. Thank you both. I yield back.

Chairman REED. Thank you, Senator Budd. Senator Rosen, please.

Senator ROSEN. Well, thank you, Chairman Reed, for holding this really important hearing. I would like to thank both of you for testifying today, for your service to the country. Thank you, Sec-

retary, for meeting with me the other day. It was a really productive conversation.

Before I ask my questions, I do want to start off again by offering my condolences to the families of the U1a miners that were just recently killed in an accident at the Nevada National Security site, and to our entire NNSS community. It is really tough. I want to build on what Senator Budd was talking about, education, education and workforce. It is really important.

We understand that in Nevada, because last month, my Nevada delegation colleagues and I, we wrote to you to support the College of Southern Nevada's application for the National Nuclear Security Administration's minority serving institution partnership, specifically for the community and junior college trade occupational programs.

We need miners down there, too. That is—you know, they are going way underground, lots of really great jobs. We are enthusiastic about the proposed Nevada National Security Site Fast Start Program and its potential for recruiting, educating, training those entry level workers, mentoring them, like you said.

We want them to begin careers in the nuclear security enterprise, and specifically in all the great jobs we have in Nevada. I know the Fast Start program will support the NNSS as it identifies its ongoing need to recruit those highly skilled employees who we were just speaking about, from diverse backgrounds, who have really good technical skills, and we need them to work on our national security programs, our construction, our maintenance, our business operations, science, engineering, technology, all of it.

I guess that Secretary Granholm, I will ask you the first question, and followup with you, Administrator Hruby, is, the Department has done for other states hosting a DOE facility to ensure local students receive the necessary education and training to find a job supporting the nuclear security enterprise.

Can you commit to working with me and the Nevada delegation to establish these pathways to invest in our local talent because we know they stay?

Secretary GRANHOLM. Yes, Senator, I think it is really important to develop place-based strategies for our workforce as—especially as all of these projects are coming on board and there isn't a ready workforce to take them on, to be able to have the pipeline is so important. So, yes.

Senator ROSEN. Yes, this is where their support systems are. So, you train them there, where they grow up, where their families are, they stay. So, Administrator Hruby, can I get the same commitment from you?

Administrator HRUBY. Absolutely, and I just also—yes, thanks for your keen interest in the workforce all the time. We really appreciate it. I just also want to say explicitly this tragic accident is very hard for our enterprise, and so I appreciate your acknowledgment of that.

We, in the 2024 budget request, the NNSA has a new line-item request for community programs. In addition to our regular education programs, MSIPP [minority serving institution partnership program] and others that you have mentioned, we are increasing

our attention to the local communities that host our labs, plants, and sites.

Senator ROSEN. Well, that is great because that really answered my next question. Would you consider expanding the MSI program all around our State so we can get talent from everywhere? So, I have a minute left.

Since you have already answered that, I am going to talk a little bit about our wonderful remote sensing lab that we have in Nevada, because we need to prevent a nuclear disaster in Ukraine. The remote sensing lab is at Nellis Air Force Base and Joint Base Andrews here provides that radiological emergency response teams that are ready to deploy anywhere in the world.

These personnel and those of the Nevada National Security Site, they are our Nation's experts in dirty bombs, loose nukes, sources of radiation, and determining the origin. I have had a lot of interesting discussions, as well as my team, about the radiological sensors at the remote sensing lab, things they have provided to Ukraine as Russia seized control of several, we know, several Ukrainian nuclear power plants as part of its unprovoked invasion.

They are going to continue to threaten us, and of course, we know a nuclear disaster can threaten so many. Administrator Hruby, can you talk about the interagency multinational effort that is going to prevent any nuclear, I guess, disaster, event, however you want to call it, from happening in Ukraine, that will spread, of course, around to everyone?

Administrator HRUBY. Yes, thank you. I hope we can prevent. We can certainly discourage. But what we are really aimed at is making sure we understand and respond to events so that the Ukrainians, along with all the support that we and our allies will supply, can limit the damage due to any event, and understand it, and we can attribute it.

You are absolutely right, the people in Nevada, in fact, last time I was there at that laboratory, they were packaging sensors at that moment to send to Ukraine. Those sensors have been sent.

They are installed. They continue to help us train the Ukrainians and supply additional materials to make sure that we are in the best position possible in the unfortunate event that anything nuclear happens in Ukraine.

Senator ROSEN. Well, thank you. I am going to give them a great plug because they are everywhere in the community promoting STEM education, going to schools, going to high schools. They are a great asset. The workers at the—we still call it the test site—at the remote sensing lab, they are everywhere. We are very proud of them. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rosen. Senator Mullin, please.

Senator MULLIN. Thank you, Mr. Chairman. Madam Secretary, in 2018, one of your predecessors implemented a policy to restrict China's access to United States civil nuclear technologies based on several cases of China illegally diverting these technologies for military purposes. Can you tell me that this policy is still in place?

Secretary GRANHOLM. I believe it is.

Senator MULLIN. Is there a way to know for sure that policy is——

Secretary GRANHOLM. I will get back to you——
Senator MULLIN. Would you do that?
Secretary GRANHOLM.—can follow the thread, yes.
[The information referred to follows:]

Secretary GRANHOLM. United States civil nuclear technology exports (aka "transfers") to China are governed by the United States Department of Energy's export control regulations at 10 CFR Part 810 (Part 810), Assistance to Foreign Atomic Energy Activities. All such transfers require the Secretary of Energy's explicit (aka "specific") authorization to proceed. The Secretary's authority is rooted in Section 57 b.(2) of the Atomic Energy Act of 1954, as amended, and implemented by Part 810.

Such transfers are further restricted by the 2018 whole-of-U.S. Government export licensing policy, "U.S. Policy Framework on Civil Nuclear Cooperation with China" (aka "the Framework"). This policy framework restricts exports of nuclear technology to China based on the nature of the technology and the end-user. Specifically, the Framework outlines presumptions of denial and approval for such transfers. Approvals are, in part, contingent on non-derogatory end-user checks performed by the U.S. Intelligence Community.

Additionally, the U.S. Department of State (DOS) seeks government-to-government peaceful use assurances from the People's Republic of China as a condition of DOS' legally required concurrence on Part 810 transfers. Any known or suspected diversions of such technology to non-peaceful end-uses would not be authorized by the Secretary of Energy, regardless of destination.

Senator MULLIN. Thank you. Is the United States still involved in civil nuclear cooperation with China? If so, what is the nature of that involvement?

Administrator HRUBY. Let me address this question. We have definitely been involved with China in design—helping them design systems to secure their civil nuclear power—safeguard and secure their civil nuclear power plants. That involvement is either very small or nonexistent right now. But this is a pause, I mean——

Senator MULLIN. I guess—sorry—I guess I am kind of concerned here because we should know for sure if we are still helping them. Obviously, China is a huge threat. They are—I would consider them an adversary at this point.

We are talking about a nuclear program that they have stolen technology, they have taken intellectual property. They are transferring stuff that was supposed to be used for civil and use it for military.

I just want to know, are we still involved in this? It is no slight to anybody, ma'am. It is no slight to either one of you. I am just—we are—this is important for us to know. I am a little bit concerned that we don't know this for a fact, if we are still assisting or not.

Administrator HRUBY. The effort that we had involved with the establishment of the China Center of Excellence is complete. What I don't know is if there is any small ongoing support for that effort. But let me just say this.

What we have done with China is associated with making sure that they understand the technology available that needs to be put in nuclear power plants for safeguarding material and for securing the plant.

This is not associated with helping them develop the power plant technology, but it is in the best interest, the global interest to have those power plants be well safeguarded and secure, that is technology that we are willing to share and help them with.

Senator MULLIN. I just take a different approach. I mean, if they were friendly nation to us and not threatening our friends and al-

lies, if they were a country to which we could trust, that hasn't been known to steal intellectual property from businesses, I would say yes.

I would agree with that. But they are not and they haven't behaved in such a manner, and for us to be spending one single taxpayer dollars to assist them in this in any way. I am sure, Madam Secretary, I am sure you are aware about Russia selling China seven times more highly enriched uranium in the last 4 months of 2022 than the United States and the International Atomic Energy Agency has eliminated worldwide in the past 30 years. I am sure you are aware of that, right.

Administrator HRUBY. Yes.

Senator MULLIN. Do you know what additional steps we can take to stem the flow of this material?

Administrator HRUBY. Well, clearly, we are very concerned about the purposes for that purchase.

Senator MULLIN. I think we know what the purpose—or the purpose of the purchases are the materials for.

Secretary GRANHOLM. Clearly, China is developing its—and continuing to ramp up its own nuclear arsenal on the defense side. The issues really are relative to how you stop that. You have to get in—you have to get into agreements with countries that are developing nuclear weapons so that when Russia exits the New START agreement, for example, it is dangerous for the whole world.

We need to pressure countries to report, to allow inspections, so that we know where the lay of the land is, and we don't have that with China. We don't have that with Russia anymore, and that is very dangerous. It is a dangerous situation.

Senator MULLIN. I agree. But that goes back to my original question is, why are we still assisting them in any fashion?

Secretary GRANHOLM. But the assistance is for making sure there is nonproliferation and that it is safe. I mean, if I don't—you know, as she says, she doesn't know if that is still happening now. We want to make sure that it is—that they have—we want this technology to be safe, to be universally available. We want countries to adopt it.

Senator MULLIN. I agree. But we do that with friendly nations, not adversaries——

Secretary GRANHOLM. Well—I think it is more important to do it with adversaries.

Senator MULLIN. If it is an adversary we can trust.

Secretary GRANHOLM. Well, I think that any country that doesn't want its own citizens to be jeopardized by exposure to radiological material, we want to be able to share that no matter where they are. Because it is not proprietary technology that we are afraid of being stolen and somehow monetized. We want that technology to be used everywhere.

Senator MULLIN. Right. I yield back. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Mullin. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. Madam Secretary, I have a few questions. Earlier this year at a music festival in Austin, you noted that climate change is an existential threat. Is that correct?

Secretary GRANHOLM. Yes.

Senator SCHMITT. Okay, and by existential threat, you mean it threatens the very existence of humanity right now. Is that your belief?

Secretary GRANHOLM. Well, right now, I would say no. We know that we have a goal to get to net zero carbon emissions by 2050. But we also know that every single year we see escalating weather events that are existential threats to communities around the globe, including in the United States.

Senator SCHMITT. What is the timeline?

Secretary GRANHOLM. Well, we want to reduce. We want to make sure that we do not see more than one and a half degrees of increase because the rising sea levels, the impacts on the ecosystems around the world.

Senator SCHMITT. Okay. So even if you accept the premise that human beings can sort of control the weather here long term, right, that there aren't larger forces, that the earth is either cooling or it is warming, and that has happened since the existence of our planet, that has happened.

You have this net zero goal by 2050, you would agree, though, that if China and India are not on board, it is a fool's errand, correct?

Secretary GRANHOLM. We want China and India——

Senator SCHMITT. No, but they are not.

Secretary GRANHOLM. Well, they are moving in that direction. I mean, China——

Senator SCHMITT. Well, actually, and this is leads to the second question, you have said that there is a lot to learn from what China is doing. China accounts for a full 25 percent of the world's emissions, correct?

Secretary GRANHOLM. Correct, and we want them to stop that.

Senator SCHMITT. Okay. But they are not—they are not stopping that. India is not stopping that.

I think the concern that I have and the folks back home have is that the United States of America, which has all the natural resources it will ever need, okay, is tying one arm behind our back for reliable energy, while China, the world's biggest polluter, you give a free pass to and you praise to at the same music festival saying we have got a lot to learn from China.

When the reality is, if China is not on board with your plan, even if you agreed with that being the goal. It is not going to make a difference at all.

So, all we are left with is higher costs here at home, and we are less secure at home because we are relying on other countries for energy, like Venezuela, like Saudi Arabia. I want to ask you, since Biden, Joe Biden has taken office, he has drawn down 40 percent of that Strategic Petroleum Reserve, correct?

Secretary GRANHOLM. It is. It has been drawn down by about 180 million barrels.

Senator SCHMITT. I think that is 40 percent. But we haven't had sort of an emergency that would cause it, other than I think he wanted to probably try to get gas prices lower.

Secretary GRANHOLM. The war on Ukraine is the emergency that caused it.

Senator SCHMITT. That is why we shipped those petroleum reserves to China, because of the war in Ukraine? I am sorry——

Secretary GRANHOLM. No. We released 1 million barrels per day for 6 months to stabilize the global production——

Senator SCHMITT. But we shipped those to China.

Secretary GRANHOLM. No, we——

Senator SCHMITT. China was the highest bidder and those—the strategic petroleum went to China.

Secretary GRANHOLM. The Strategic Petroleum Reserves are released on a global market——

Senator SCHMITT. So, Ukraine, Ukraine is the reason then why we drew down by 40 percent our strategic petroleum reserves and sent them to China.

Secretary GRANHOLM. Russia's invasion of Ukraine pulled barrels, millions of barrels of oil off the market, causing a constriction in supply——

Senator SCHMITT. Madam Secretary, I am sorry. I would argue that this President and this Administration's war on American energy started well before Ukraine. It started well before a year ago and you are right in the middle of that, telling people that they have to live with less——

Secretary GRANHOLM. We are not telling people that they——

Senator SCHMITT. Absolutely you are.

Secretary GRANHOLM. No, we want energy to be abundant. We want it to be made in the United States. We want——

Senator SCHMITT. If you really believed in an all of the above approach, if you—I would believe you, but you don't. That has certainly not been the direction of this Administration and your agency. It just hasn't.

I do want to ask you, so we talked about China. I want to ask you about Microvast, which is a lithium battery company that operates primarily out of the People's Republic of China. Your agency granted $200 million worth of grant to this company. You are aware of this, correct?

Secretary GRANHOLM. There were awards that were—there were selections that were named, and all of those country—companies are going through vetting process to ensure that there are not—there is no money flowing to countries of concern, and so that—those vetting process are going on. Not a dollar has gone out the door yet.

Senator SCHMITT. Okay. I think you have gotten—you got a letter from a Member of the Senate asking what those security protocols are and what the tests—you could see how concerning it would be that Chinese owned businesses or companies——

Secretary GRANHOLM. We don't want to see the dollars going to any countries of concern. We want them to be——

Senator SCHMITT. So, is it your commitment that no dollars will go to any company, any energy company taking advantage of either tax credits or grants that are owned by China, by a Chinese company?

Secretary GRANHOLM. No state-owned enterprise will get funding from the bipartisan infra——

Senator SCHMITT. What about companies that have material operations in China, which we know, of course, that intellectual property——

Secretary GRANHOLM. That is why we are using this CFIUS [Committee on Foreign Investment in the United States] vetting program to be able to identify exactly where the control is of a particular technology and country. We want to make sure——

Senator SCHMITT. Okay. Well, I look forward to working with you.

Secretary GRANHOLM.—that we are the beneficiaries of those acts and not others.

Senator SCHMITT. Thank you.

Chairman REED. Thank you very much, Senator Schmitt. Senator Cotton, please.

Senator COTTON. Thank you. Thank you both for your appearance. Secretary Granholm, Norway is one of our oldest and best partners. They have a very strong military and defense industry.

A company known as Nammo, a Norwegian ammunition company, is vital for the security of Europe. They produce a lot of munitions, for instance, that are being used in Ukraine. They currently face constraints that prevent them from expanding. Are you aware of this situation?

Secretary GRANHOLM. I am not.

Senator COTTON. This is not an urban legend. It is not some myth on social media. This comes directly from their CEO [Chief Executive Officer]. In central Norway, Nammo cannot expand its production to meet the demands in Ukraine because there is not enough electricity on Norway's grid.

The reason there is not enough electricity on that portion of Norway's grid is it is all being used by nearby data servers for TikTok. As he said, we are not able to supply troops in Ukraine because of cat videos. I am even more concerned that, and the CEO of Nammo suggested this is a concern of his as well, that TikTok may have intentionally sited their data servers near critical defense factories in Norway.

This raises concern for me about whether this is happening in the United States. My staff recently inquired with your office for some information about the potential for this risk. They were told that our inquiries needed to be on official letterhead and signed by me.

Is it the policy of your office that you only respond to Senators and Congressmen when the request run official letterhead and signed by the Senator?

Secretary GRANHOLM. No, no.

Senator COTTON. Okay, thank you. I hope now and, in the future, whenever our staff sends what are not hostile questions simply by an email, we can get more prompt responses. Now, are you aware of any risk in the United States through our defense industry because of the siting of large data servers, whether owned by TikTok or other companies, near defense industrial factories?

Secretary GRANHOLM. I am concerned about making sure that we have enough electricity to be able to fund not just defense entities, but regular households as well.

Whether it is this, which I am eager to look into, or Bitcoin mining, which also is a huge energy suck, I want to know what can be—first of all, how we can add additional energy to the grid, but also how do we provide incentives for efficiency of those enterprises as well.

I am concerned about the overuse of energy for players in America when we don't have the infrastructure necessary to be able to withstand——

Senator COTTON. I am very worried about that as well. I am going to come to you in a moment, but can I get your commitment that your department will look at this specific issue——

Secretary GRANHOLM.

Senator COTTON.—about——

Secretary GRANHOLM. Absolutely.

Senator COTTON.—and it may be done in cooperation with the Department of Defense——

Secretary GRANHOLM. Sure.

[The information referred to follows:]

Secretary GRANHOLM. The Department of Energy's Office of Cybersecurity, Energy Security, and Emergency Response (CESER) works with energy industry owners and operators to identify and assess potential risks to the reliable operation of domestic energy infrastructure assets and systems.

The growth of electricity demand from data centers is an issue that the Department continues to track, but at the current time, the growth in data center loads has been identified and addressed by electric industry planners and system operators through short-term operational guidance and long-term planning forecasts. The Federal Energy Regulatory Commission oversees compliance with electric reliability standards issued by the Electric Reliability Organization that govern operational and planning requirements for entities at operating under Federal jurisdiction. For systems not subject to Federal electric reliability oversight, the Department works closely with State regulatory bodies to provide information and technical assistance to assess potential impacts to systems.

Additionally, the Department, through CESER, maintains, regular and frequent engagement with colleagues across the Department of Defense (DOD) to provide technical assistance or subject matter expertise on issues that could occur from cyber, physical, or climate risk to energy infrastructure assets and systems.

Senator COTTON.—that we are not constrained in our defense industrial base at a time it needs to expand because of the location of large data servers, especially large data servers owned by foreign companies like TikTok.

Now to the broader point, it would be an issue at least as big an issue if there was sufficient electricity on the grid to meet all of our needs, not just now, but as our Nation grows in the future.

I am very worried that at a time when the Administration is taking action after action to take off reliable baseload power from coal and natural gas and nuclear power, it is also vastly expanding the demand for electricity, trying to replace the vast majority of cars, for instance, with so-called electric vehicles, which really should be called coal powered vehicles, because the electricity has to come from somewhere. Considering things like banning use of gas appliances.

This at a time when your department has stated today, it has for some time now, that you can't meet, for example, the congressionally mandated requirement of 80 new plutonium pits a year just to sustain our nuclear force. Is it really the best use of the Department's time to be continuing to push electric—so-called electric ve-

hicles that our grid can't support when we can't even maintain our nuclear deterrent?

Secretary GRANHOLM. We want to get to 100 percent clean electricity by 2035, and the auto industry itself has said that by 2030, half of all electric vehicles, they intend to sell because this is where the market, they see going will be electric.

Senator COTTON. That is so, I mean, that s fine as a goal. I disagree with the goal. I don't think it is practical. But I would also like to still be in a free and independent safe nation by 2035 as well.

Secretary GRANHOLM. We will be.

Senator COTTON. Our nuclear arsenal has underpinned our safety and our independence for 80 years now, and China is producing plutonium and uranium at much greater rates right now than we are.

Again, this is a question about the plutonium pits. It is not about expanding our nuclear forces, which is what we need to do given the threat we face from Russia and China's combined overmatch, but just maintaining it.

Like, I would think that this would be the most urgent question that your department faces, because it is about our survival as a Nation, not our simple mix of what kind of cars we use 12 years from now.

Secretary GRANHOLM. Well, clearly, making sure that we have a safe, secure, and effective nuclear deterrent is a top priority of the Department and of NNSA.

Senator COTTON. Okay. My time has expired but thank you for your commitment to get back to me on that question about electricity strains, especially from foreign companies on our defense industry.

Chairman REED. Thank you, Senator Cotton, very much. Thank you, Madam Secretary and Madam Administrator. There has been some discussion throughout about energy production. I would say it is my understanding that oil and natural gas production are both higher now than at any time in the past 6 years, and that we are on track to set new records on crude oil and natural gas production this year. Is that correct?

Secretary GRANHOLM. That is correct.

Chairman REED. We are doing a lot more in terms of extracting oil and natural gas than the preceding Administration.

Secretary GRANHOLM. That is correct.

Chairman REED. But that still does not alleviate, at least in my view, the need to move to a cleaner technology. That is the direction the President's headed for. So, it seems sometimes in Congress, the criticisms of the Administration for not being attentive to the fossil fuels when we are producing more fossil fuels than we have in 6 years——

Secretary GRANHOLM. Right. We will be—I want to correct—we will be at record production for oil this year, 12.4 million barrels is what is projected, which is a record, and the same thing with LNG [liquefied natural gas]. We are at record exports of liquefied natural gas and we also want to be at record production of solar, and wind, and geothermal, and nuclear.

Chairman REED. Understanding that the fossil fuels are a bridge to, but a necessary bridge to alternative fuels that would be more compatible with the environment.

Secretary GRANHOLM. Right. We want to get to 100 percent clean by 2035.

Chairman REED. Thank you very much, and I know, too, that your comments about the automobile industry. I think they have concerns about the environment, but I think they also have more concerns about products that they can sell and efficiently service and will be in demand by the American public. If I was on the board, I think I would be looking at those issues.

Secretary GRANHOLM. Because it is so much cheaper to actually operate and own an electric vehicle, and the prices of the new models coming out are much less than the models that you may currently see.

Chairman REED. All right, thank you. Well, this will conclude the open session and we will reconvene at 11:45 a.m. in SVC–217 for the closed session, and thank you very much. With that, I will declare the open session closed.

Secretary GRANHOLM. Thank you.

[Whereupon, at 11:22 a.m., the hearing was adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR ANGUS KING

ENERGY STORAGE

1. Senator KING. Secretary Granholm and Administrator Hruby, energy storage is the key to our Nation's clean energy future and is fundamental for improved resilience and readiness on our military installations. Leadership by the Department of Defense (DOD) can have significant spillover benefits for our broader society. The Energy Policy Act of 2020 established the Joint Long-Duration Energy Storage Demonstration Program between DOD and Department of Energy (DOE) for precisely these reasons. As the legislation stated, the program aims "(i) to demonstrate promising long-duration energy storage technologies at different scales; and (ii) to help new, innovative long-duration energy storage technologies become commercially viable." The Bipartisan Infrastructure Law appropriated $150,000,000 for this program and a related program at DOE. What is the current status of this Joint Demonstration Program?

Secretary GRANHOLM and Administrator HRUBY. As part of the overall "Joint Long-Duration Energy Storage Demonstrations Program," DOE released a $30 million Lab Call to demonstrate the resiliency advantages of LDES technologies at the U.S. DOE National Laboratories on October 12, 2022. This Lab Call was released, with acknowledgement from the Department of Defense (DOD). DOE selected six projects across two topic areas: Greater than 100kW and can discharge for 10+ hours and Greater than 500kW and can discharge for 24+ hours. These projects will help accelerate the commercial viability of innovative, state-of-the-art technologies and effectively demonstrate their benefits to facilitate wider commercial adoption for stakeholders that have similar energy goals for their facilities or campuses.

Additionally, on May 17, 2023, DOE and DOD signed a Memorandum of Understanding (MOU) in which DOE and DOD will coordinate with one another on selecting one or more military installation and technology provider to demonstrate energy resiliency at a U.S. military installation. DOE and DOD are currently developing requirements and scope for potential projects.

2. Senator KING. Secretary Granholm, what projects have been funded or are in the pipeline to be funded?

Secretary GRANHOLM. DOE selected six projects from the Lab Call across two topic areas. Topic area one was for technologies greater than 100kW and can discharge for 10+ hours and Topic Area two covered technologies greater than 500kW and can discharge for 24+ hours. Under Topic Area one projects at Argonne National Lab and Idaho National Lab, Sandia National Lab, and the National Renew-

able Energy Lab were selected for Award Negotiation. Under Topic Area two projects at Sandia National Lab, Pacific Northwest National Lab, and the National Renewable Energy Lab were selected for Award Negotiations. Those negotiations are ongoing. For more information on the selections please see *https://www.energy.gov/oced/long-duration-energy-storage-demonstrations-selections-lab-call.*

3. Secretary Granholm and Administrator Hruby, what benefits can energy storage programs across the DOD confer to our military's warfighting capabilities?

Secretary GRANHOLM and Administrator HRUBY. This question should be addressed to DOD.

TUNGSTEN

4. Senator KING. Secretary Granholm, in 2018 the Department of Defense formally restricted the sourcing of tungsten from China, Russia, North Korea, and Iran for products, programs, and systems funded or used by the DOD. In addition to reducing national security and industrial base risks, this has helped spur investment at the last 100 percent U.S.-owned and fully integrated tungsten producer (based in Maine). Has the DOE considered formally restricting where it sources critical materials such as Tungsten in a similar way?

Secretary GRANHOLM. Yes, DOE has considered formally restricting where it sources critical minerals, but at this time we do not believe it is in U.S. interests to do so. Nevertheless, DOE takes sourcing of its critical materials very seriously. Programs that DOE administers, such as the Section 48C Advanced Energy Project Credit, will prioritize projects that build and secure domestic supply chains, including obtaining critical materials from domestic sources and friendly nations.

5. Senator KING. Administrator Hruby, Given tungsten's unique shielding capabilities, the National Nuclear Security Administration (NNSA) and DOE require large amounts of specialty-engineered tungsten materials. The last U.S.-owned and fully integrated producer of tungsten-heavy alloy is in Maine and has found it exceedingly difficult to find staff at the NNSA or DOE that are interested in considering alternatives to the current foreign-owned sources (even on programs that require U.S. clearances). With most of this tungsten produced by foreign-owned and non-North Atlantic Treaty Organization (NATO) country-headquartered companies, would the NNSA consider looking into creating more competition and ensuring that the U.S. does not find itself reliant on domestic-owned suppliers?

Administrator HRUBY. Today, NNSA is procuring tungsten alloys through domestically produced sources who use both recycled scrap and imported ore to produce these alloys. There are other U.S. based organizations that use either recycled scrap or imported ore to make the tungsten powder used in tungsten alloys. Depending on the process used to make the alloy, it can be very difficult to meet the strict NNSA technical requirements needed for these procured alloys, such as non-magnetic requirements. NNSA continues to monitor, assess, and mitigate risks where warranted for continuity of supply and increased supply chain flexibility. As various threats and opportunities present themselves in this evolving global market, NNSA will continue to look for ways to reduce risk within its supply chain using a systematic and cost-effective strategy to its supply chain design.

QUESTIONS SUBMITTED BY SENATOR MIKE ROUNDS

SANFORD UNDERGROUND RESEARCH FACILITY (SURF)

6. Senator ROUNDS. Secretary Granholm, the SURF in Lead, South Dakota has been an important partner for the Department of Energy in conducting critical research in the fields of particle physics and dark matter. Can you please discuss the importance of continued funding for this facility and how it fits into the Department's broader scientific research goals?

Secretary GRANHOLM. The Sanford Underground Research Facility (SURF) located in Lead, South Dakota, is supported by a cooperative agreement with the DOE Office of High Energy Physics (HEP) with the goal of supporting underground science, especially high energy physics experiments that need to be shielded from cosmic rays. In fiscal year 2023, HEP will provide $35 million for the operation of the facility and refurbishment of critical infrastructure. The LUX-ZEPLIN (LZ) experiment at SURF is currently searching for dark matter and has set the most stringent limits in the world. The LBNF/DUNE project is currently under construction at SURF.

When completed, it will be the foremost neutrino experiment in the world. As the largest initiative in the HEP strategic plan, LBNF/DUNE is crucial for attracting the world's best physicists to the U.S. and is critical to maintaining a U.S. leadership role in particle physics. HEP is also an early adopter and science driver for many key advanced technologies that support the Department's broader scientific research goals, not only in particle accelerators and instrumentation, but also Artificial Intelligence, Quantum Science and Microelectronics. Scientists in other fields like geology and biology are also Working at SURF, supported by the Department or other agencies.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

DEPARTMENT OF ENERGY GRANTS

7. Senator ERNST. Secretary Granholm, what is the status of the Department of Energy's (DOE's) consideration of a $200 million grant to Microvast, a China-based lithium battery company?

Secretary GRANHOLM. Microvast is a majority U.S.-owned company, traded on NASDAQ (MVST) and headquartered in Stafford, Texas, with additional locations in Tennessee, Florida, and Colorado. Microvast proposed to build a polyaramid separator material production plant in Hopkinsville, Kentucky, with funding from the Infrastructure Investment and Jobs Act (IIJA) and the company's matching financial investment. The new battery separator material was developed in China and is currently manufactured in China. In the funding opportunity announcement and selection letters provided to the applicants, DOE reserved the right to terminate award negotiations at any time for any reason. In this case, DOE conducted and reviewed multiple risk assessments conducted before and after the selection and determined the potential risks could not be sufficiently mitigated for this project and it was not in the government's interest to proceed to an award. Microvast was notified of DOE's decision to not move forward with negotiations on May 22, 2023. The IIJA funds allocated to this selection will be applied to future competitively awarded funding opportunities.

DEPARTMENT OF DEFENSE (DOD) NON-TACTICAL VEHICLE FLEET

8. Senator ERNST. Secretary Granholm, what operational energy risks would DOD adoption of an electric vehicle (EV) non-tactical vehicle fleet create?

Secretary GRANHOLM. Electric vehicles are quieter, more powerful, can accelerate faster, and have a lower heat signature compared to existing combustion non-tactical vehicles. Electric vehicle technology is advancing rapidly and is being quickly adopted by all commercial manufacturers around the world. Like fossil fuels, electrical power is ubiquitous throughout the world, and has been used for propulsion for over a century. Determining overall impact (positive or negative) to operational energy risk would require analysis of a combination of variables tied to each individual mission.

FUEL SUPPLY CHAIN IMPACTS

9. Senator ERNST. Secretary Granholm, on Monday, May 1, without action from this Administration on an emergency waiver, we will see summer sales of E15 go away in 90 percent of gas stations that sell E15 and every single station in my State will lose this ability to sell E15. Do you agree that the ongoing war in Ukraine is creating global pressures on energy markets and disrupting the fuel supply chain?

Secretary GRANHOLM. Russia's full-scale invasion of Ukraine in February 2022 exacerbated challenges in global energy markets, particularly as energy demand recovered from the economic impacts of the COVID–19 pandemic. Disruptions to global fuel supply chains were particularly challenging. However, Russia's full-scale invasion and the energy market challenges connected to it also motivated a major shift in thinking, propelling the international community to accelerate the energy transition, both for climate and for geopolitical reasons.

In the months following Russia's full-scale invasion, alternative suppliers stepped in to meet energy demand in regions that historically relied on Russian oil imports. In early 2022, oil prices rose in anticipation of supply disruptions and the world saw significant shifts in oil trade flows. However, prices began to moderate toward the latter half of 2022, and crude oil prices are now lower than they were at the start of the full-scale invasion. Crude prices have moderated because Russia has maintained output, strategic inventories have been released with efforts led by the United States, alternative suppliers have increased production, and markets are

bearish about oil demand growth. Though prices have moderated, Russia's full-scale invasion has led to longer trading routes, which strain oil tanker availability and influence commodity prices during periods of supply disruption or strong demand.

In response to Russia's full-scale invasion of Ukraine and broader weaponization of the energy exports to Europe, Europe sought to significantly reduce its consumption of natural gas and to find non-Russian suppliers to meet its natural gas demand. Europe increased its imports of natural gas from Norway, Algeria, the United States, and others.

Natural gas prices surged in Europe as Russia curtailed its exports in the months that followed its full-scale invasion of Ukraine. As a result, Europe's industrial demand for natural gas shrank by 26 percent from 2021 to 2022. The pace of industrial demand destruction in 2022 and its insensitivity to more recent short-term lower prices indicate that the natural gas price surges and overall supply disruptions have likely led to structural changes in European industrial gas consumption. These structural changes include improved efficiency, consumer behavior adjustments, and the loss of manufacturing output in certain gas-intensive industries like base metals, chemicals, and non-metallic minerals production. S&P Global estimates more than one-quarter of this demand destruction will be permanent due to improved efficiency, factory closures, and relocation of production to locations like the U.S. with cheaper energy costs.

As Europe faced piped gas supply disruptions from Russia, the United States became a critical supplier of gas to Europe via LNG deliveries. In 2022, 64 percent of U.S. LNG exports sailed to Europe. France, the U.K., Spain, and the Netherlands accounted for 74 percent of European imports of U.S. LNG.

To support European partners in their efforts to enhance their energy security and reduce their reliance on Russian energy imports, the U.S. Department of Energy has focused on two goals: diversification of Europe's energy supplies away from Russia and the decarbonization of Europe's energy systems. The United States and its partners seek to advance collaborative measures and policies to strengthen Europe's energy systems to relieve pressures in global energy markets.

10. Senator ERNST. Secretary Granholm, do you agree that the U.S. has a domestically produced, readily available, lower cost, lower carbon fuel in the form of E15?

Secretary GRANHOLM. The United States is the world's largest producer and consumer of biofuels. The domestic ethanol industry has over 200 operating ethanol plants with production capacity of more than 17 billion gallons per year of ethanol. These ethanol production facilities support nearly 70,000 jobs, many in rural areas, and produce low-carbon fuel that is used widely across the United States. In fact, 98 percent of all gasoline sold in the United States is actually a 10 percent ethanol blend, or E10. The Environmental Protection Agency (EPA) has approved blending ethanol into gasoline at 15 percent ethanol by volume (E15) for use in vehicles of Model Year (MY) 2001 and more recent. However, E15 is not widely available due to the need for separate fueling infrastructure to avoid concerns over "misfuelling" or using E15 in older vehicles that are not approved to use E15.

The most recent comprehensive DOE study,[1] published by Argonne National Laboratory in 2021, found that U.S. corn ethanol has 44 percent–52 percent lower GHG emissions than gasoline. This analysis found that carbon emissions from U.S. corn ethanol fell 20 percent between 2005 and 2019 due to increased corn yields per acre, decreased fertilizer use, and improved ethanol production processes. Existing technologies and agricultural practices have the potential to make further, significant improvements in the reduction of lifecycle GHG emissions of ethanol from approximately 40 percent today to over 70 percent as compared to a petroleum baseline.

NUCLEAR INFRASTRUCTURE

11. Senator ERNST. Administrator Hruby, has the Nuclear Weapons Council comprehensively reviewed its nuclear infrastructure to account to two nuclear peers?

Administrator HRUBY. The Nuclear Weapons Council (NWC) has reviewed capabilities needed to deter two nuclear peers simultaneously and recognizes a continuous re-evaluation process is necessary due to the current global dynamics. One of the most challenging aspects of deterring two nuclear peers is the nuclear infrastructure capability and capacity constraints in NNSA. NNSA is re-establishing, modernizing, and expanding the capacity of its infrastructure needed for the current Program of Record. If the infrastructure plan receives the funding requested and NNSA can find qualified personnel to conduct the work, the most critical infrastructure investments will be complete in the late 2030's. Our priority in infrastructure

[1] https://www.anl.gov/article/corn-ethanol-reduces-carbon-footprint-greenhouse-gases

planning is to build a flexible and resilient enterprise. If the Program of Record changes, additional infrastructure changes may be necessary and there are other infrastructure needs to accomplish the Program of Record in the longer term. We have learned that infrastructure investments need to be more continuous going forward than they have been in the past.

12. Senator ERNST. Administrator Hruby, are you aware of any complications that would delay or disable the United States from doing so?

Administrator HRUBY. Ongoing NNSA efforts to modernize the nuclear security enterprise's infrastructure are challenged by ongoing supply chain issues, equipment delivery delays, contractor performance, inflation, and shortages of qualified labor. However, NNSA remains committed to modernizing capabilities across the enterprise to enable us to continue to meet Department of Defense requirements, and we are prioritizing investments across multiple laboratories, plants, and sites. As Secretary Granholm and I testified, funding interruptions or inconsistencies would significantly delay major infrastructure projects and increase the difficulty of delivering projects and meeting requirements within previously established baselines.

13. Senator ERNST. Administrator Hruby, what are the requirements of developing a flexible nuclear infrastructure that can reset the hedge after uploading extant non-deployed nuclear weapons?

Administrator HRUBY. NNSA is responsible for modernizing the facilities, infrastructure, technologies, and manufacturing methods to meet stockpile program of record capacities defined by the Nuclear Weapons Council. Multiple strategic material streams and component production capabilities are necessary to sustain the Nation's nuclear deterrent. As the 2022 Nuclear Posture Review (NPR) describes, the plan for a resilient and adaptive nuclear security enterprise has three pillars: (1) a Nuclear Deterrent Risk Management Strategy, (2) a Production-based Resilience Program, and (3) a Science and Technology Innovation Initiative. NNSA is responsible for the second and third pillars and is coordinating with DOD on the first. NNSA's Production-based Resilience program includes development of a nuclear infrastructure with the flexibility to respond to changes in requirements, including potential changes in hedge requirements should they come to pass. Detailed requirements for this infrastructure, such as flexibility, are developed as future production facilities and equipment that form the future production infrastructure are designed. As an example, for pit production capabilities, NNSA is doing two things to provide flexibility: (1) minimally building out some unused space in the building if requirements increase so more equipment could be installed, and (2) designing so that the capacity could be obtained in one shift so that additional shifts could be added if production demands increase. Any increased production through additional shifts likely would come at a cost of decreased preventative maintenance.

14. Senator ERNST. Administrator Hruby, do you agree that a review of infrastructure plans should account for the need to reset the hedge?

Administrator HRUBY. I believe the NWC should continue to review the capabilities and capacity of the nuclear security enterprise while planning active and inactive stockpile composition to ensure Presidential Guidance can be achieved. The NWC, including NNSA, considers current and future risks to the nuclear stockpile and plans accordingly. Any updates to Presidential Guidance would be accompanied by an assessment of the abilities and capacities of the nuclear security enterprise to meet such guidance. NNSA must prepare to deliver and sustain safe, secure, reliable warheads under a variety of possible future scenarios, including possible changes in hedge requirements, and is working accordingly to develop a flexible production infrastructure.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

AUSTRALIA-UNITED KINGDOM-UNITED STATES (AUK) NUCLEAR WASTE STORAGE

15. Senator SULLIVAN. Administrator Hruby, in your joint testimony you stated "NNSA provided technical advice to our AUKUS partners on the full suite of requirements that underpin nuclear stewardship to implement the strongest possible safeguards and verification measures while achieving the overall objectives of AUKUS." The AUKUS agreement requires Australia to store fuel from decommissioned reactors. Can you update the Committee on your work with Australian partners to identify possible storage options?

Administrator HRUBY. As part of its commitment to nuclear stewardship, Australia has committed to managing all radioactive waste generated through its nuclear-powered submarine program, including spent nuclear fuel, in Australia. The United Kingdom and the United States will assist Australia in developing this capability, leveraging Australia's decades of safely and securely managing radioactive waste domestically. Australia will manage these materials in accordance with its nuclear nonproliferation and other international obligations and commitments. We have had some preliminary discussions with Australian counterparts on these issues. Australian delegations have visited the Naval Reactors Facility at Idaho National Laboratory to better understand how our naval nuclear spent fuel is safely and securely stored. Australian officials also visited Savannah River National Laboratory where issues related to community engagement on spent nuclear fuel issues were discussed. We will continue to engage with Australian counterparts on this issue going forward.

MAINTAINING OUR NUCLEAR CAPABILITY WHILE WORKING TOWARD BUILDING AUSTRALIA'S

16. Senator SULLIVAN. Secretary Granholm and Administrator Hruby, I strongly support AUKUS and believe it will strengthen Australia's military deterrence in the Indo-Pacific. The recently announced details on the Australian submarine acquisition plan have raised some questions about whether the U.S. and Australia have the industrial base capacity to build the number of submarines both countries require. We also shouldn't forget the significant learning curve for Australia to become a nuclear Navy, an undertaking that requires the Australian Navy to rapidly train a cadre of personnel in nuclear submarines operations. How are we ensuring that our Australian partners develop the nuclear expertise to safely maintain and operate nuclear submarines?

Secretary GRANHOLM and Administrator HRUBY. Since the inception of the AUKUS initiative, DOE/NNSA has had a leading role in intensively examining the full suite of requirements that underpin nuclear stewardship, with a specific focus on safety, design, construction, operation, maintenance, disposal, regulation, training, environmental protection, installations and infrastructure, industrial base capacity, workforce, and force structure.

DOE/NNSA has done so by emphasizing the concept of "stewardship", which includes the development of the entire ecosystem to oversee, sustain, and safely operate nuclear technology. It also includes governance and regulatory structures, growing operational proficiency, and developing the engineering and technical depth and experience to safely own, operate, support, and dispose of nuclear-powered submarines. A focus on stewardship will be foundation as the U.S., UK, and Australia work to deliver the optimal pathway under AUKUS.

AUKUS NUCLEAR REACTORS

17. Senator SULLIVAN. Secretary Granholm and Administrator Hruby, in your joint testimony you stated "sustained funding is vital for the support of these efforts and will allow Naval Reactors to meet current and future force needs; this foundational support of Naval Reactors is critical to our ability to deliver on AUKUS." Do you have any concerns about the availability of Naval Reactors to meet the demands of AUKUS?

Secretary GRANHOLM and Administrator HRUBY. No, we do not have concerns about the availability of Naval Reactors to meet the demands of AUKUS. Naval Reactors has been an active participant since the inception of AUKUS owing to its expertise in all matters pertaining to naval nuclear propulsion including what it takes to provide proper stewardship for nuclear propulsion technology from "cradle to grave." Additionally, Naval Reactors has been assisting the United Kingdom with developing and sustaining their nuclear propulsion program since 1958. AUKUS will now require similar assistance to Australia which will add a significant, enduring workload to the Naval Reactors program. We anticipate that Australia and the UK will provide funding for the support that Naval Reactors provides, pending the conclusion of appropriate legal arrangements. DOE/NNSA is fully committed to working with the Department of Defense and Congress to ensure Naval Reactors is appropriately postured to fully support U.S. national security requirements as well as AUKUS, building on the nearly 75 years of expertise and talent the Naval Reactors program has cultivated to meet the generational challenge of coordinating and sustaining the naval nuclear propulsion programs of all three nations.

QUESTIONS SUBMITTED BY SENATOR ERIC SCHMITT

KANSAS CITY NON-NUCLEAR EXPANSION TRANSFORMATION (KCNEXT) EXPANSION TRANSFORMATION PLAN

18. Senator SCHMITT. Administrator Hruby, I understand that the KCNExT plan calls for a nonstandard approach to procure land and facilities for the expansion. Can you provide information on the lease-purchase agreement plan, and what benefits to the government you expect to achieve through this approach?

Administrator HRUBY. NNSA is pursuing the non-traditional development and acquisition of the land adjacent to the Kansas City National Security Campus (KCNSC) Botts Road Main Campus to support the growing nuclear modernization demands. Specifically, NNSA is in the process of negotiating a series of lease-purchase agreements with the current landowner. Should negotiations continue to progress well, we could see execution of an initial agreement in fiscal year 2024. This involves the landowner development of the property, including the construction of office space. Once completed, NNSA would lease the property for a period to ensure it meets agency needs and Federal acquisition requirements before purchasing the property. This multi-year, multi-phase acquisition could provide up to an additional 1.12 million square feet of manufacturing space and 675,000 square feet of office space to accommodate KCNSC's expected long-term growth. NNSA expects that this approach will meet the site's demonstrated space needs more quickly and efficiently than Federal construction on federally owned land. The phased approach also provides agility in the event we need to adjust scope or change strategies throughout the expansion process.

MITIGATING CHALLENGES AND STAYING ON-TIME

19. Senator SCHMITT. Administrator Hruby, I appreciate yours and National Nuclear Security Administration's (NNSA's) novel approach to solving capacity needs at the Kansas City National Security Campus. What do you perceive as the challenges associated with this approach and how are you preparing to mitigating risks to stay on timeline?

Administrator HRUBY. Pursuing innovative approaches inherently carries risk as our teams are combining their expertise in new ways to overcome challenges that could not be solved with our traditional mindsets. The decision to negotiate a multi-phased deal with the landowner was designed to mitigate the schedule risk we know would exist if we pursued a government land purchase followed by government construction. This new approach is being designed in a phased manner to give us the opportunity to learn and adjust throughout the project to mitigate risk. We believe this agile approach will allow NNSA to deliver the infrastructure needed on time while integrating stakeholder feedback, maintaining oversight over construction timelines, and collaborating with the developer as they progress through each phase.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, APRIL 27, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

UNITED STATES EUROPEAN COMMAND AND UNITED STATES TRANSPORTATION COMMAND

The Committee met, pursuant to notice, at 8:04 a.m., in room G50, 112. Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, Kaine, King, Manchin, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Cramer, Scott, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Senator Wicker is on his way, but indicated we should begin. Good morning. The Committee meets today to receive testimony from General Christopher Cavoli, Commander of United States European Command and NATO's [North Atlantic Treaty Organization's] Supreme Allied Commander Europe, and General Jacqueline Van Ovost, Commander of United States Transportation Command.

Thank you for your service to the Nation, and I thank the men and women serving under your commands at this critical time. The security challenges of European Command or EUCOM have never been clearer. For more than a year, Russia has waged a brutal, unprovoked war on Ukraine, inflicting terrible suffering on the people of Ukraine and threatening European stability.

Ukrainians have fought with incredible courage and skill to repel Russia's vicious assault, defending the same values and freedoms that we cherish. Ukraine has achieved some very notable successes, but there is hard fighting ahead and more to be done. Throughout this conflict, the NATO alliance has shown remarkable unity and resolve.

A formidable coalition of our allies has joined together to provide military and humanitarian support to Ukraine and impose severe cost on Russia's economy. If Putin thought his war would drive a

wedge between NATO and members, and within the international community, he was badly mistaken.

NATO unity has never been stronger, and many European nations are taking steps to invest greater proportions of their budgets and institutional energies to improve their military capabilities. Indeed, in a triumphant moment for NATO, Finland recently joined the alliance. This was an utter rejection of Russia's strategic goals, and I know the Finns will contribute significantly to the alliance.

I hope we will soon welcome Sweden as well. President Biden deserves great credit for marshaling these efforts. His Administration continues to provide critical military equipment and training to Ukraine, including combat vehicles like Abrams tanks, Strykers, and Bradleys, as well as weapons like HIMARS [High Mobility Artillery Rocket System], Howitzers, Patriot air defense systems, and various types of ammunition.

This equipment, in concert with contributions and training from across the alliance, has provided an important mix of capabilities to bolster Ukrainian effectiveness on the battlefield. Let there be no doubt the United States will continue to help Ukraine succeed on the battlefield. America's assistance to Ukraine is also an investment our own national security interest. Beyond repelling Putin, we know China is watching closely and we must succeed.

General Cavoli, the NATO alliance has made important progress in its ability to generate and maintain the collective force posture, operations, and investments necessary to deter Russian aggression against its members, and the United States has played a key role in those efforts. At the same time, the security environment in Europe has experienced a tectonic shift.

I would like to know your views on plans for United States military activities and investment in the EUCOM [European Command] area of responsibility in light of these changes. General Van Ovost, TRANSCOM [United States Transportation Command] is also playing a crucial role in our support to Ukraine.

American troops continue to operate forward logistics centers to receive, identify, and transport the majority of security aid intended for Ukraine and across, and from the international community.

This has been an enormous task, executed with impressive skill on little notice. I would appreciate an update on these efforts and any lessons learned that you may have to share. Keeping an eye to the future and the pacing threat of China, an important reality we are learning is that any potential adversary is going to attack our logistic support system.

This idea of contested logistics will include obvious threats to our forward basis, as well as the aircraft and ship that resupply those bases. But it could also include cyber-attacks against information technology systems that support our deployments, both government and commercial, and possible kinetic attacks against ports and airfields supporting our deployments.

I am concerned that our thinking about logistics during conflict has too often defaulted to our uncontested military dominance since World War II. We have always owned the sea and air lines of communication, and have only had to worry about logistics efficiency, not effectiveness. General Van Ovost, I would like to know what

steps TRANSCOM is taking to prepare for such threats to our logistics, and how the military services can alter their acquisition programs to take these concerns into account.

Thank you again to our witnesses and I look forward to your testimoneys. As a reminder for my colleagues, at the conclusion of the open session of this hearing, we will recess for the joint session of Congress.

We will then reconvene for the closed session at 12:30 p.m. in room SVC–217. We are committed to allowing all of our colleagues to ask questions, so if the assembly time arrives, we will continue in the open session until everyone has an opportunity to do so. In lieu of Senator Wicker's arrival shortly, I will ask General Cavoli to begin.

PREPARED STATEMENT BY SENATOR ROGER WICKER

Good morning. I thank our witnesses for being here and for their flexibility on scheduling this hearing.

Today's witnesses highlight the importance of properly resourcing the National Defense Strategy to deter regional aggression and to prevent that aggression from becoming a global conflict. European Command's area of responsibility covers 50 countries and territories, but Ukraine is the command's primary focus today. Transportation Command is the linchpin for equipment distribution in Ukraine's fight against Russia and is crucial in supporting the Indo-Pacific Command against the Chinese Communist Party.

These are two different commands with two very different mission requirements, but they support one single goal: to deter Russia and China.

Over 1 year has passed since Russia's unprovoked, illegal, and brutal invasion of Ukraine.? The courage and ingenuity shown by Ukrainian troops, many of whom were civilians before the war, continues to be nothing short of heroic. EUCOM leads United States military assistance efforts, in coordination with allies and partners, to support Ukraine.

The war has entered a new phase as Ukraine prepares to go on the offense after beating back months of relentless Russian attacks. I welcome General Cavoli's thoughts on the current conditions of the war and its possible trajectory and the role Congress can play in helping Ukraine win. I would also appreciate General Cavoli's best military judgment on what more could be done to sharpen the military capabilities of the Ukrainian Armed Forces.

Congress has already stepped up by providing significant funding to assist Ukraine, and more may be needed in the future. Accountability is essential to maintaining bipartisan support for Ukraine and the trust of the American people. The current accountability requirements seem to be working, but we would be interested in General Cavoli's views.

In addition, I hope General Cavoli will describe the significant role allies and partners play in supporting Ukraine—I am especially interested in learning about the contributions of our European friends and the impact they are making. This war matters greatly to the United States, but it is being fought in Europe's backyard.

Ukraine is EUCOM's primary focus but not its only one. I welcome General Cavoli's thoughts on how EUCOM and INDOPACOM are sharing lessons learned from the war. We also need an update on EUCOM efforts to counter Chinese moves in Europe.

TRANSCOM has a unique mission set in that it supports U.S. Forces around the world. In its work helping with the Afghanistan evacuation, delivering crucial weapons to Ukraine, or planning for contested logistics in the Pacific, TRANSCOM has shown it is key to the implementation of the National Defense Strategy.

Late last year, General Van Ovost gave an interview on logistics in which she said, "I don't like to be a miracle worker, I like a very stable plan that we can actually execute." I am also in favor of an executable plan. Unfortunately, I do not believe that plan exists as of now. The Department of Defense has struggled to develop a coherent strategy when it comes to joint contested logistics. We must be proactive and thoughtful on this issue, not reactive and shortsighted.

EUCOM has seen firsthand how difficult it is to supply a major modern war. Contested logistics in the Western Pacific should not just be a combat-credible capability, it must be seen by our adversaries as a force deterrent.

We are moving too slowly at almost every point of our logistics infrastructure—including fuel supply and sealift and airlifts fleets. I would appreciate an update today on what resources or authorities TRANSCOM needs to support contested logistics.

I thank our witnesses and look forward to their testimony.

STATEMENT OF GENERAL CHRISTOPHER CAVOLI, USA COMMANDER, UNITED STATES EUROPEAN COMMAND/ NORTH ATLANTIC TREATY ORGANIZATION SUPREME ALLIED COMMANDER EUROPE

General CAVOLI. Thank you, Mr. Chairman. Chairman Reed, to Ranking Member Wicker, of course, as well, distinguished Members of the Committee, it is a privilege to testify before you today, and in many cases to see you again. On behalf of the men, women, and the families of USEUCOM first of all, I thank you for your steadfast support to their mission, to their safety, and to their well-being.

I would also like to recognize and thank my Command Senior Enlisted Leader, CSM Rob Abernathy, sitting behind me here, who accompanied me here today. He is representing our noncommissioned officers, our enlisted soldiers, and our families who remain America's asymmetric advantage against any adversary.

Thank you, Rob, for being here. I am very pleased to appear today beside my good friend and colleague, Jackie Van Ovost, whose U.S. Transportation Command is unlike anything else on the globe and who works miracles every day. Thank you, Jackie, to your whole command.

This is, as the Chairman noted, an unprecedented time in Europe-Atlantic area. Fourteen months ago, Russia's illegal, unprovoked invasion of Ukraine dramatically shifted perceptions of European stability and our broader global security. It galvanized European governments' resolve. Last year's NATO summit in Madrid was a turning point for the alliance.

Nations committed to a new strategic concept that put collective territorial defense at the top of the alliance task list for the first time in 35 years, and for the first time since the cold war, set into motion a series of efforts that will profoundly change the military structure and activities of NATO. We have been creating new plans.

That is, allied command operations has been creating new plans for the General defense of the alliance, and these will drive higher levels of readiness and more targeted national defense investments, especially on the part of our allies.

Nations agreed to accelerate defense spending increases, to establish enhanced force posture on the Eastern flank of NATO, to turn unprecedented numbers of troops and weapons over to NATO command and control, and critically, to bring two new members into the alliance. Happy to note, as the Chairman did, that Finland has already joined and we hope soon to see of Sweden as a member as well.

Over time, these efforts inside the alliance will lead to significantly increased European military capabilities and will continue to deter aggression against the alliance. That deterrent posture has allowed us to work intensively in the past year or so to assist Ukraine. In the past year, thanks to your support, United States

donations of arms, ammunition, equipment, vehicles, and supplies have enabled Ukraine to halt Russia's invasion.

We have not been alone in this effort. The DOD {Department of Defense] and USEUCOM [United States European Command] lead an international effort represented by the 50 plus member UDCG, Ukraine Donors Contact Group. We have an effort together to identify transport and deliver equipment and ammunition to Ukraine, along with the training to use that equipment in combat.

This material support and the training provided by international donors has been huge and fundamental to the Ukrainian military's success so far. Over the winter, our coalition has enabled the Ukrainian military to generate the military capabilities necessary to defend and regain parts of their sovereign territory, and we are confident our Ukrainian partners are good stewards of donated aid.

Our embassy team in Kyiv, led by Brigadier General Garrick Harmon and the security assistance group in Ukraine, located in Germany, worked diligently to monitor and keep a close eye on all lethal aid to ensure it is getting to and staying in the right hands. Although we remain optimistic for Ukraine's future and sovereignty, this war is far from over.

Russia will remain an acute threat to Euro-Atlantic security, and the National Defense Strategy rightly calls our attention to that. Russia is not the only problem in Europe. The People's Republic of China (PRC) continues to increase its access and influence in our theater, and its activities pose risks to United States allied and partner interests.

The PRC uses foreign direct investment, government backed business ventures, and loans to gain access to technology and to gain control over vital European infrastructure and transportation routes.

Finally, Europe continues to face transnational challenges as well. Such as violent extremist organizations, uncontrolled immigration, organized crime, and even climate change. EUCOM trains and cooperates with allies and partners to help counter those challenges as well. Our strategic approach fortifies our allies and our partners.

It strengthens alliance interoperability and enhances our collective combat capability, which deters our adversaries, and as always, should deterrence fail, USEUCOM, alongside our allies and partners, is ready to fight and win.

Your continued support for our efforts, the authorities and the funding you give us, are critical to our ability to do this. Ladies and gentlemen, thank you for having me here today. I look forward to your questions.

[The prepared statement of General Christopher G. Cavoli follows:]

PREPARED STATEMENT BY GENERAL CHRISTOPHER G. CAVOLI

Chairman Reed, Ranking Member Wicker, and distinguished Members of the Senate Armed Services Committee, on behalf of the dedicated men, women, and their families preserving stability in the European theater, it is a privilege to testify before you as the Commander, United States European Command (USEUCOM). It is my distinct honor to serve alongside our Allies and partners, soldiers, sailors, airmen, marines, guardians, coast guardsmen, civilians, and defense contractors as we work to deliver peace and secure U.S. interests.

This is an unprecedented time for Euro-Atlantic security. Russia's illegal, unprovoked, brutal invasion of Ukraine upended many aspects of European security. It has forced us to recognize the imperative of collective territorial defense, which has altered North Atlantic Treaty Organization (NATO) force posture requirements. In this dynamic and uncertain environment, U.S. leadership remains indispensable; our actions must signal strong and unwavering resolve. We must maintain and buildupon our existing commitment to NATO and ensure the Alliance remains the foundation of European security and deterrence.

Russia is not the only challenge in the USEUCOM AOR, however. The People's Republic of China is working to weaken democratic processes and undermine the rules-based international order. Violent extremist organizations also foster instability, while transboundary challenges, such as climate change, affect the operational environment. To address these challenges, we campaign in all domains—air, sea, land, space, and cyber—to deter aggression and build enduring strategic advantage.

The National Security Strategy states that a free and prosperous Europe, defended by NATO, remains fundamental to United States national security. Further, the National Defense Strategy (NDS) describes mutually beneficial alliances and partnerships as the United States' greatest strategic advantage. The NATO Alliance is more unified now than it has been in its 74 years of existence. The combined response to Russia's invasion of Ukraine has demonstrated this. USEUCOM's strategic approach strengthens Alliance interoperability, fortifies Alliances and partnerships, and thereby enhances all-domain combat credibility. Should deterrence fail, USEUCOM, alongside our Allies and partners, is ready to fight and win.

Congress has provided authorities and funding for security assistance to Ukraine on an unprecedented scale. Presidential Drawdown (PD) Authority and the Ukraine Security Assistance Initiative (USAI) have proven key to Ukraine's success. Coupled with the bravery and ingenuity of the Ukrainian people—and robust support from our NATO Allies and other partners—security assistance has changed the course of the conflict. We remain committed to supporting Ukraine's urgent needs and increasing their combat capabilities over the long-term. Specifically, USEUCOM supports Department of Defense (DOD) efforts to transition Ukraine toward a western-style military with advanced and interoperable equipment. We appreciate the supplemental funding from Congress that has enabled our progress toward this goal. Ensuring accountability of United States security assistance remains a top priority and we continue to work with Ukrainian authorities to ensure appropriate end-use monitoring.

Congress has also provided critical support to the full range of investments in our posture and activities in Europe. We will continue to build on successes funded by the European Deterrence Initiative (EDI) as associated operations, activities, and investments are rolled from the former Overseas Contingency Operations budget to the base budget. These operations, activities, and investments allow us to deter Russia, assure our Allies, and strengthen NATO interoperability. Congressional appropriations support rotational forces, infrastructure, and prepositioned stocks, all of which increase operational efficiency and speed. These investments improve United States and NATO readiness by enabling exercises, training, and building partner capacity across all domains in the Euro-Atlantic area. We appreciate continued congressional support for our posture and activities in Europe; this funding is critical to the deterrence and defense of United States interests in Europe.

RISKS AND CHALLENGES IN THE USEUCOM AREA OF RESPONSIBILITY (AOR)

The USEUCOM AOR encompasses 50 countries, each with varying strategic aims. The theater contains vast maritime and air domains, including a large part of the Arctic region; the north and central Atlantic Ocean; the Mediterranean, Black, and Baltic Seas; and multiple strategic chokepoints. The European Union (EU) is the world's largest trading bloc and accounts for over 16 percent of global imports and exports. We continue to address security challenges across the AOR through force presence, pre-positioned stocks, and engagement and exercises with Allies and partners.

Russian Federation

Russia remains Europe's core security challenge. Russia continues to wage its brutal war on Ukraine, target critical infrastructure, and threaten escalation. The Kremlin seeks to outlast the West by manipulating energy markets and influencing states to curb support to Kyiv. Due to the resilience and heroism of the Ukrainian people, with assistance from like-minded nations, Russian ground forces have suffered significant losses in Ukraine. Despite these setbacks, and their diminished stockpiles of equipment and munitions, Russian ground forces still have substantial

capability and capacity, and continue to possess the ability to regenerate their losses.

Russia remains a formidable and unpredictable threat that will challenge United States and European interests for the foreseeable future. Russian air, maritime, space, cyber, and strategic forces have not suffered significant degradation in the current war. Moreover, Russia will likely rebuild its future Army into a sizable and more capable land force, all while suspending its implementation of the Treaty on Conventional Armed Forces in Europe, as it has done since 2007. Russia retains a vast stockpile of deployed and non-deployed nuclear weapons, which present an existential threat to the United States Homeland, our Allies, and partners, and is failing to comply with several of its legal obligations under the New START Treaty. President Putin's dangerous nuclear rhetoric introduces strategic uncertainty. All of these factors indicate that Russia remains an immediate and persistent threat to American interests in Europe and around the world.

Russia pursues a military modernization program that prioritizes a range of advanced conventional, hybrid, and nuclear capabilities to coerce the West. Its primary focus is on development of six specific systems: a nuclear-powered cruise missile; a nuclear-armed hypersonic boost glide vehicle; a more capable heavy Intercontinental Ballistic Missile (Sarmat); a nuclear-armed, nuclear powered underwater drone (Poseidon); hypersonic cruise missiles; and lasers. These weapons provide Russia asymmetric threats to NATO and present new challenges to Western response options.

Russia employs a range of tools to advance its foreign policy objectives to coerce neighboring states, divide the Alliance, and expand its global influence. Beyond its war of aggression in Ukraine, Russia also retains a military presence in 20 percent of Georgia's sovereign territory, and in Moldova against the will of those states. Russia also uses disinformation, cyber operations, and energy supply manipulation to coerce our Allies and partners. Russian private military contractors operate in Syria, Ukraine, and multiple African nations, working to advance Russian State interests.

People's Republic of China (PRC)

The PRC seeks to increase its access, presence, and influence in Europe to refashion the international system to suit its interests and authoritarian preferences. The PRC threatens enduring United States, Allied, and partner interests in Europe through its foreign direct investment, government-backed business ventures, and infrastructure deals. Of particular concern are the PRC's investments in European ports, transportation nodes, and other critical infrastructure, which provide potential dual-use functions for the PRC. The PRC pursues bilateral engagement in these ventures through PRC-led forums such as the 14+1 Cooperation Framework with Central and Eastern European nations. These and other PRC activities have created dependencies and sources of leverage to influence our Allies and partners.

PRC leaders remain focused on using both licit and illicit means to seize a dominant position in critical and emerging dual-use technology sectors—artificial intelligence, advanced robotics, quantum technologies, directed energy, and hypersonic systems—and using that dominant position to advance their authoritarian agenda. To increase adoption of PRC developed technology, the PRC is pursuing acceptance of its national technology standards across the globe. The PRC's efforts to expand Huawei 5G networks throughout Europe via PRC state-sponsored firms pose security risks to our Allies and partners. These activities allow the PRC to access and exploit intellectual property, sensitive information, technology, and private personnel information. Beyond economic impacts, these technology-related activities provide the PRC a military capacity that put United States national interests in the USEUCOM AOR at risk. We must remain vigilant, and work with our Allies and partners, to combat the PRC's activities related to critical and emerging technologies.

We are also concerned about the destabilizing effects of deeper alignment between the PRC and Russia. Beijing's continued diplomatic support for Russia's illegal war against Ukraine is detrimental to European peace and stability. The PRC's amplification of Russian disinformation on the war in Ukraine undermines trust in Europe's democratic institutions. There are indications that Beijing is considering materially supporting Russia's war effort, while at the same time, Beijing and Moscow are deepening their defense engagements and interoperability, including joint maritime and air patrols. This increased cooperation has implications for European security as both Beijing and Moscow seek to change the existing rules-based structure in their favor.

USEUCOM coordinates with our European defense counterparts to establish a common understanding of PRC actions and the associated risks. We support the U.S. whole-of-government effort to highlight the Trans-Atlantic shared values, inter-

ests, and transparent business practices of the current rules-based international order. NATO's Strategic Concept recognizes that the PRC's ambitions and coercive policies challenge NATO's interests, security, and values. Several European countries have removed Huawei from their networks, imposed investment screening mechanisms, reversed investment authorizations, and avoided investments by PRC-based companies due to the threats to European security. Together, the United States and Europe must continue to call out and work to counter the PRC's predatory and unfair practices.

Eastern Flank

NATO's Eastern Flank—which USEUCOM defines as Estonia, Latvia, Lithuania, Poland, Slovakia, and Hungary—remains a strategic focal point. The closer cooperation of the "Bucharest Nine"—Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, and Slovakia—has been a welcome outcome of the current crisis. Many have provided both lethal and non-lethal assistance to Ukraine, opened their borders to refugees, closed airspace to Russia, and supported economic sanctions against Russia. We remain encouraged by the positive actions of our Allies along the Eastern Flank, but these countries remain at risk for Russian coercion and aggression.

The Baltic States continue to face a chronic threat from Russia. Russian ground forces from the Western Military District retain a size advantage over regional military and NATO forces on the eastern flank. Furthermore, Russia has substantial air and maritime capabilities in the region. The Baltic States lack the geographic depth of Ukraine—meaning these states cannot trade space for time in the event of a Russian attack. These factors underline the importance of maintaining the capability to get timely indications and warnings, and of posturing combat-credible forces, joint capabilities, and stocks to support the Eastern Flank.

The NATO Alliance is renewing its focus on collective territorial defense. Following Russia's invasion of Ukraine, NATO bolstered its posture on the Eastern Flank by establishing four new Battle Groups in Romania, Bulgaria, Hungary, and Slovakia. NATO also expanded air policing operations and air defense exercises. NATO continues to assess the distribution of forces along the Eastern Flank to identify the appropriate posture for collective defense.

Poland is a critical Ally in deterring and responding to Russian aggression. Poland has annually increased its defense budget and is undertaking a significant modernization program. This Ally is buying Abrams tanks, Patriot air defenses, and F–35s. Poland contributes critical infrastructure and logistics support to the joint force through an Enhanced Defense Cooperation Agreement. Additionally, Poland hosts the United States Army's Fifth Corps forward headquarters. This first-ever permanent basing of United States forces in Poland provides command and control for United States and multi-national tactical units in Europe. Our continued close collaboration with Poland strengthens NATO activities along the entire Eastern Flank.

EUCOM has also built United States capacity in the AOR to support deterrence of Russian aggression. The United States deployed fourth and fifth generation aircraft, a carrier strike group, a Corps and Division headquarters, and two additional Brigade Combat Teams (BCT) to assist in NATO's defense at the outset of this conflict. In addition, we deployed our USEUCOM organic forces to the Eastern Flank, including the 2d Cavalry Regiment, 173d Airborne Infantry BCT, Patriot forces and 12th Combat Aviation Brigade. Collectively, these forces bolstered the Alliance and demonstrated the United States' commitment to collective defense.

Black Sea Region

The countries of the Black Sea Region—which USEUCOM defines as Bulgaria, Moldova, Romania, and Ukraine—have long pushed back against Russian aggression. NATO Allies Romania and Bulgaria invited NATO Battle Groups to their territories, increased defense spending, and invested in military and logistics infrastructure. USEUCOM continues to work with Bulgaria and Romania to increase regional security, including the improvement of maritime domain awareness. Important work remains to strengthen regional security, increase economic prosperity, and reduce vulnerabilities to Russian manipulation. Moldovan President Sandu called for the withdrawal of the 1,500 Russian so-called "peacekeepers" in the Transnistria region who have been present on Moldovan land without consent or a United Nations mandate since 1990. We support peaceful resolution to the Transnistria conflict without Russian interference.

Türkiye

Türkiye's military capability and unique geographic location make it a key member of the NATO Alliance and vital to United States responses to regional events.

We applaud Türkiye's strong support to Ukraine during Russia's invasion and will continue to increase our cooperation with Türkiye bilaterally and within the Alliance. We recognize Türkiye's critical leadership role in hosting United States servicemembers who conduct a wide array of NATO, bilateral, and unilateral missions including missile defense. Türkiye contributes forces to NATO missions in Iraq, Kosovo, Baltic Air Policing, and Standing NATO Maritime Group Two in the Mediterranean Sea. Additionally, Türkiye supports United States Bomber Task Force missions in the Black Sea and Eastern Mediterranean regions with tanker and fighter assets. Our longstanding relationship enabled USEUCOM to respond to Türkiye's devastating earthquakes this year with humanitarian assistance and disaster relief forces. USEUCOM continues to execute valuable security cooperation activities with Turkiye such as Professional Military Education, exercises, and F–16 Fleet Modernization and F–16 Viper acquisition via Foreign Military Sales. These actions will strengthen NATO interoperability and enable U.S. Force projection.

South Caucasus Region

In the South Caucasus Region—which USEUCOM defines as Armenia, Azerbaijan, and Georgia—Putin's military and political failures in Ukraine have spurred states to reassess their relationships with Russia. Moscow has long employed economic levers, pervasive information activities, and "frozen" military conflicts to exert influence over South Caucasus countries. However, we have observed a marked shift in the relationships of Armenia and Azerbaijan with Russia. Both Yerevan and Baku appear to be making progress—albeit uneven—toward a peace settlement in the decades-old Nagorno-Karabakh conflict . Armenia has criticized Moscow's and the Collective Security Treaty Organization's failure to come to their aid against Azerbaijani attacks in September. In Georgia, however, we are concerned about the pace of Euro-Atlantic integration. Moscow continues to use domestic political division between the population at large and powerful oligarchs to its advantage. However, we continue to see the benefit of strong military-to-military relations in Georgia and support the Embassy's efforts to showcase the benefits of transparent governance. As these states take action to pursue independent goals, we will continue to foster positive momentum in this region.

Western Balkans

In the Western Balkans we continue to see Russian malign activities and observe emerging PRC influence among our Allies—Albania, Croatia, Montenegro, North Macedonia, and Slovenia. Our regional partners—Bosnia and Herzegovina, Kosovo, and Serbia—remain most at risk. Russia continues to fan existing ethnic tensions to impede Euro-Atlantic alignment and integration. The PRC has emerged as an alternative for economic and defense cooperation. PRC loans and investment in the Western Balkans focus on large-scale transportation, energy, and information infrastructure, which contribute further to disruption in the region. Despite these vulnerabilities, Balkan nations have joined Western efforts to provide support and assistance to Ukraine. The Western Balkans will require our continued commitment to address these vulnerabilities to Russian and PRC malign influence.

The security environment in Bosnia and Herzegovina remains unstable. Russian influence fuels political and ethnic instability. Ethno-nationalist politics prevent Bosnia and Herzegovina from adopting much-needed political, rule of law, and economic reforms that would advance its Euro-Atlantic integration. Bosnia and Herzegovina's Serb-majority entity, Republika Srpska, seeks to weaken State authorities and prevent further alignment with the EU and NATO while maintaining close ties to Russia. We will continue to work with Bosnia and Herzegovina to counter Russia's malign activities. The United States maintains robust ties with the Armed Forces of Bosnia and Herzegovina, as the country progresses toward NATO-standard capability targets.

In Kosovo, Russia promotes uncertainty and seeks to block Kosovo's path to joining international organizations. Since 2008, Russia, the PRC, and other regional states have not recognized Kosovo's independence. We support the EU-facilitated dialog between Kosovo and Serbia to work toward the normalization of relations and enable enduring peace and stability. NATO's Kosovo Force (KFOR), a peacekeeping effort since 1999 under a United Nations Security Council mandate, retains a small but significant United States contribution that bolsters deterrence on the Southern Flank. KFOR enhances security, which helps set the conditions for a political solution and normalized Serbia-Kosovo relations. USEUCOM continues security cooperation activities that assist the Kosovo Security Force's transition to a limited territorial defense force, which will allow Kosovo to assume responsibility for its own territorial security.

Serbia maintains its strategic goal of joining the EU and trending toward stronger Euro-Atlantic relations. Serbia joined 140 other nations of the United Nations General Assembly in condemning Russia's aggression in Ukraine. Serbia historically seeks to balance between East (Russia and the PRC) and West, so its willingness to condemn Russia's invasion of Ukraine is a positive step. However, Russia continues to foster malign activity and leverage tensions between ethnic Serbs and other groups in Montenegro and Bosnia and Herzegovina. The PRC is expanding its influence into the defense and security sectors through arms sales and exercises. Economic challenges in the region render nations vulnerable to the PRC's predatory lending practices, which put at risk critical strategic infrastructure security for EU and NATO member states. The United States and our Allies have improved bilateral defense ties with Serbia in recent years, and increased cooperation in military exercises, training, and international peacekeeping to combat Russia's influence. Serbia's movement away from Russia toward our European Allies and partners is promising.

The Arctic Region / High North

In the Arctic Region—which USEUCOM defines as the Kingdom of Denmark, Finland, Iceland, Norway, Sweden, Canada and Russia—we use operations, activities, and investments to support the United States National Strategy for the Arctic Region. Collaboration with adjacent combatant commands and our Arctic Allies and partners is critical to Homeland defense and NATO collective defense. USEUCOM coordinates with United States Northern Command on Homeland Defense threats originating in or transiting through the Arctic region. USEUCOM co-chairs the Arctic Security Forces Roundtable with Norway, a forum where the Arctic nations plus the United Kingdom, France, the Netherlands, and Germany discuss Arctic challenges. These meetings enable shared understanding, and demonstrate Arctic nations' resolve to commit capable and credible forces to deter aggression. We also train alongside our Allies in this region to enhance NATO's ability to operate in cold environments. For example, United States marines train in the Arctic and High North with our NATO Allies, and the Army's 11th Airborne Division deployed forces from Alaska over the North Pole to Finland. The accession of Finland and potentially Sweden to NATO would bring added capabilities and experience to the Alliance.

Climate Change

Climate change presents a growing challenge to United States national security interests and defense objectives in the AOR. Climate change affects states with already strained governments, which increases the probability for internal instability and conflict. It exacerbates security risks due to additional stress on populations and infrastructure. Climate hazards can displace people and increase the number of refugees seeking asylum in Europe. We are observing the effects of the warming Arctic, from thawing permafrost to fish migration further north. Europe is already affected by climate change—increased wildfires, reduced agricultural production, and flooding—which could worsen over time. Widespread droughts in Europe last summer elevated cross-border wildfire risks, depleted fresh water supplies, and limited inland river mobility. The changing climate may impact access to training areas vital to readiness due to flooding or erosion. Along with our Allies and partners, we continue to monitor these changes to assess the impacts in the security environment.

USEUCOM collaborates with our interagency partners to enhance Ally and partner resilience to climate change, reduce the requirement for military assets during humanitarian emergencies, and ensure access to critical training areas. In Southwestern Europe, USEUCOM partnered with the U.S. Forest Service to address regional firefighting vulnerabilities, improve regional emergency response, and deliver first responder training. In partnership with the U.S. Army Corps of Engineers Army Geospatial Center, USEUCOM analyzes the climate impacts and resiliency of key routes needed for troop and material mobilization. To ensure long-term access to training areas in Poland, Romania, Albania, Slovenia, and Croatia, USEUCOM is partnering with United States Army Corps of Engineers Construction Engineering Research laboratory (CERL) to analyze climate impacts and environmental management options. These efforts will pay long-term dividends to regional stability and Ally and partner ability to generate credible combat readiness.

Violent Extremist Organizations (VEO)

NATO Heads of State codified terror groups as a threat to the Alliance in the newest NATO Strategic Concept. With decentralized command and control and facilitation networks, VEOs spread from conflict zones into Europe. Isolated refugee and migrant communities increase the possibility for VEO recruitment. VEOs capa-

ble of external operations threaten to attack the United States from Europe. The actions of lone actors inspired by VEO ideology present the primary terrorist threat in Europe. Successful VEO-inspired or organized attacks in Europe complicate NATO integration efforts; these attacks force our Allies and partners to focus on internal security, driving resource competition for domestic security forces instead of NATO collective security force commitments. USEUCOM supports U.S. interagency counter-VEO initiatives and those of our NATO Allies and partners. Through security cooperation events such as key leader engagement and foreign military sales and financing, we help our Allies and partners balance domestic security requirements and meet NATO capability targets.

USEUCOM STRATEGY

USEUCOM deters aggression in the AOR and—should deterrence fail—we remain ready to respond alongside our Allies and partners to prevail in conflict across all domains. Our strategy strengthens the Alliance's interoperability, fortifies Alliances and partnerships, and enhances all-domain combat credibility. We advance NDS priorities by implementing integrated deterrence, campaigning, and building enduring advantages in Europe. As the coordinating authority for the Russia Problem Set, the Commander of USEUCOM advises the Secretary of Defense on force structure, resources, and synchronization of DOD activities to deter Russia and counter its global malign activities. Through collaborative planning, we contribute to NATO's ability to respond in crisis and conflict. Ultimately, USEUCOM's strategy supports national strategic guidance and advances U.S. policy goals.

Enhance All-Domain Combat Credibility

USEUCOM's combat credibility in all domains is the foundation of our deterrence of Russia. In the land domain, improvements in key capabilities, posture, and partnerships improve our ability to deter future Russian aggression. USEUCOM ground forces are serving in NATO Battle Groups on the Eastern Flank, and rotational Brigades have led Operation ATLANTIC RESOLVE since 2014. USEUCOM posture additions include a forward Corps headquarters (HQ), an air defense artillery brigade HQ, an engineer brigade HQ, and a combat sustainment support HQ. These forward headquarters provide command and control of assigned and rotational forces in the USEUCOM AOR, and also serve to integrate Allies' contributions to large scale operations. Additional enablers such as a short-range air defense battalion, United States Army Garrison Poland, and the 405th Army Field Support Battalion Poland provide key defense, force protection, and sustainment capacity. Continued investment in Army Prepositioned Stocks equipment and facilities enables rapid integration of rotational combat units into USEUCOM and NATO operations.

USEUCOM exercises ground forces to demonstrate combat credibility. During Exercise DEFENDER-Europe 21, United States Army Europe and 26 participating nations demonstrated the ability to conduct large-scale operations at the battalion and brigade levels. In Exercise DEFENDER-Europe 24, we will assemble a division-level formation on NATO's eastern flank for the first time since the end of the cold war. USEUCOM's enhanced posture with combat credible forces are essential for theater deterrence and our readiness to respond to crises alongside our Allies and partners.

In the maritime domain, we execute integrated, all-domain naval operations and theater security cooperation alongside our Allies and partners. In response to Russia's invasion of Ukraine, USEUCOM conducted the unprecedented Transfer of Authority of two carrier strike groups from the United States to NATO in support of NATO enhanced Vigilance Activities. In addition to our Forward Deployed Naval Forces, we continue to leverage Carrier Strike Group and Amphibious Ready Group/Marine Expeditionary Units to contribute to the maritime force. The U.S. Sixth Fleet provides maritime command and control capability while the U.S. Second Fleet complements and contributes to reinforce NATO's western flank. With exercises Formidable Shield, Northern Challenge, and BALTOPS, we enhance partner capabilities and further deter Russian aggression. Additionally, we are committed to a robust prepositioning program in coordination with our Allies to build agility and resilience for the combined and joint force. Our operational maritime forces provide an essential capability in strategic competition.

In the air domain, we continue to improve our sensors, fighter aircraft, and ground-based air defense systems. These advanced systems enhance Integrated Air and Missile Defense, support Allies' collective air defense, and increase long-range strike capability. The Aegis Ashore program highlights a key U.S. contribution to NATO's missile defense. With a site in Romania and one under development in Poland, this capability protects the continent from Iranian ballistic missile attack. United States Air Force bombers launched from bases in the United States and Europe integrate with Ally and partner forces in Bomber Task Force missions.

USEUCOM continues to build the first U.S. multi-role 5th Generation F–35 capability in-theater at RAF Lakenheath. Our air component is implementing the U.S. Air Force's Agile Combat Employment concept which, supported by Combined Joint All Domain Command and Control, demonstrate a credible, networked combat force from potential airfields across the continent. Through this model, we enhance posture, complicate adversary decisionmaking, and impose costs. This expansion of European air operations and deployable air bases enhances our forces' survivability. These capability enhancements are critical to our deterrence posture.

In the space domain, maintaining assured access to space capabilities is vital to USEUCOM and NATO operations. USEUCOM coordinates with U.S. Space Command (USSPACECOM) to leverage space capabilities that ensure our ability to execute multi-domain operations and protect Allied space capabilities from malign actors. We host a USSPACECOM Joint Integrated Space Team and coordinate USSPACECOM posture initiatives at five locations in Europe. USEUCOM coordinates space-related activity with our Allies and partners to expand space partnerships within our AOR and integrate space capabilities into joint and combined operations. We reinforce the Secretary of Defense's Tenets of Responsible Behavior in Space and continue work with the U.S. Space Force, Joint Staff, and Office of the Secretary of Defense to establish a space service component to USEUCOM. A networked joint, combined space architecture is critical to all-domain combat credibility for the Alliance.

In the cyber domain, USEUCOM coordinates with Joint Forces Headquarters—Cyber and U.S. Cyber Command (USCYBERCOM) to counter malign cyber activity and enhance Allied and partner capabilities. Recognizing the worldwide cyberspace capabilities of Russia, the PRC, Iran, and North Korea, USEUCOM works to enhance global cyber defenses and impose costs on malicious adversary behavior. USEUCOM identifies cyber options for USCYBERCOM to complement operations, activities and investments, and support response operations. USEUCOM also invests in sharing information on foreign malign and cyber activities with the interagency, Allies, and partners to improve our collective cyber defense. Persistent USCYBERCOM engagement activities, synchronized with USEUCOM operations, enhance warning of adversary actions, enable defense, and build trust with Allies and partners.

Enhance All-Domain Combat Credibility: Functional Areas

As long as nuclear weapons exist, NATO will remain a nuclear Alliance. The nuclear capability of NATO-member Nuclear Weapons States deters aggression, prevents coercion, preserves peace, and instills confidence in the Trans-Atlantic bond. The U.S. continues to make available its strategic nuclear forces to defend NATO, serving as the Alliance's supreme guarantor of security. With key Allies, we maintain the capability to deploy strategic nuclear forces that support Alliance security. In addition to strategic forces, the United States forward deploys nuclear weapons to Europe. These weapons, combined with U.S. and Allied dual-capable aircraft and supporting infrastructure, demonstrate Alliance cohesion and resolve. NATO continues to adapt its nuclear posture to ensure these capabilities remain credible, resilient, and adaptable. USEUCOM supports modernization and recapitalization of our nuclear forces. Sustained congressional funding for these programs demonstrates commitment to our operations and NATO solidarity.

USEUCOM conducts activities in the information environment to promote both deterrence and assurance, contest Russian malign narratives, and build resilience among foreign audiences to counter disinformation. We coordinate with interagency and regional partners to execute targeted messaging activities in NDS-prioritized countries. USEUCOM leverages industry-leading assessment techniques to monitor and analyze malign foreign influence across the AOR, including tracking areas where Russian and PRC narratives converge. The Russia Influence Group, co-led by USEUCOM and the State Department, is a key enabler of our Information Operations and focuses on countering Russian malign influence. Through the Russia Influence Group, we synchronize United States Government efforts to challenge adversary malign narratives and disinformation. Congressional funding enables several efforts for unique cybersecurity and hybrid warfare programs (i.e., electromagnetic warfare, special operations, and operations in the information environment) through the State Department's Countering Russian Influence Fund—Foreign Military Financing. USEUCOM continues to work across Allies and partners to build capability and capacity to gain better understanding and deliver effects in the information environment.

Special Operations Command Europe (SOCEUR) provides a persistent special operations presence throughout Europe that works with European Allies and partners to build capacity; identify, attribute, and counter malign activity; and improve resil-

ience. SOCEUR leads and participates in bilateral and multilateral exercises to improve interoperability with Allies, build partner capacity and resilience, and strengthen deterrence messaging. AOR-wide exercises like TROJAN FOOTPRINT set conditions for better integration between SOF and conventional forces during combined, joint, and multi-domain warfare. Our Special Operations personnel also provide invaluable sensing capabilities in the operational environment, which enhances our ability to deter through indications and warnings. Our SOF delivers exquisite capabilities that provide unique options to counter malign activity and increase our Allies' and partners' resilience.

Our Joint Interagency Counter Trafficking Center supports whole-of-government efforts to combat Russian malign activities by assisting Federal law enforcement activities. USEUCOM leverages a range of interagency-driven efforts—criminal investigations, convictions, seizures, sanctions, and designations through these programs. These actions help vulnerable Allies and partners resist Russia's malign activity, reinforce the rule of law, and strengthen self-governance without Russian influence. We appreciate Congress and the Department for the continued support of the counter-narcotics funding that supports this activity.

Strengthen Alliance Interoperability

NATO's approved strategic framework for Deterrence and Defense of the Euro-Atlantic Area, abbreviated as "DDA", has sparked the largest transformation of the Alliance's military in the post-cold war period. DDA resets the Alliance for Collective Defense after two decades of out-of-area deployments by our Allies. Domain-specific plans are being developed to better organize Alliance forces for multi-domain collective defense against Russia and terror groups. DDA also calls for geographic-specific regional plans to describe how and where the Alliance will defend. These plans together will drive force structure and readiness requirements—the first time in over 30 years that the Alliance will have an objective, plans-based guide for national defense investments.

The Alliance continues to invest in critical military capabilities contributing to collective defense and support. For the past 7 years, Allies have increased their total defense spending, and future projections remain positive. Although munitions stocks have decreased with donations to Ukraine, Allies and partners are increasing interoperable combat power through major acquisitions. These acquisitions include cyber capabilities; M1 Abrams and Patriot missiles in Poland; fourth and fifth-generation aircraft in Belgium, Bulgaria, Germany, Finland, Italy, the Netherlands, Norway, Poland, Slovakia, and Switzerland; Patriot air defense batteries in Switzerland and Sweden; and High Mobility Artillery Rocket System (HIMARS) capability in Romania, Poland, Estonia, Latvia, and Lithuania. Ultimately, these capabilities are the key to combat credibility. Going forward, national governments will face competing priorities, but the importance of the capabilities required for collective defense cannot be overstated.

Military exercises with Allies develop NATO's interoperability and remain essential elements of deterrence. USEUCOM deployed assigned Army forces to the Eastern Flank during exercises Saber Strike, Swift Response, and Defender beginning in February 2022. United States marines trained alongside 26 militaries during Cold Response in Norway to enhance NATO's ability to operate in cold environments in March 2022. USEUCOM deployed naval forces to the Baltics Sea to train on maritime security operations during exercise BALTOPS in June 2022. Additionally, enhancements to multinational information sharing systems enable our coordination with our Allies and partners. These exercises provide a key deterrent effect in our dynamic security environment and demonstrate Alliance combined and joint interoperability.

The proposed increase in funding for the Joint Training, Exercise, and Evaluation Program (JTEEP), both in the near-term and across the Future Years Defense Program (FYDP), are a key enabler of USEUCOM campaigning. USEUCOM's joint exercise program integrates advanced capabilities, demonstrates freedom of maneuver, and increases interoperability with our Allies and partners to showcase the Alliance's strength. Additional JTEEP resources allow USEUCOM more flexibility to campaign, enhance integrated deterrence, and demonstrate United States commitment to Euro-Atlantic security.

USEUCOM participation in NATO operations directed by the North Atlantic Council demonstrates U.S. commitment to the Alliance. The U.S. "dual hatted" the United States Army Europe-Africa Commander as Commander, NATO LANDCOM. This change allows for seamless Transfer of Authority of United States Forces in support of NATO operations. United States ground forces are serving in Battle Groups in Poland, Hungary, Slovakia, Romania, and Bulgaria. United States Air Forces in Europe support NATO Enhanced Air Policing and Icelandic Air Surveil-

lance missions to safeguard the sovereignty of Allied airspace against Russian incursions. A U.S. Navy Rear Admiral has commanded Standing NATO Maritime Group Two, with attached United States naval capabilities, to counter challenges in the Atlantic, Mediterranean, and the Baltic Sea since July 2022. Operation ATLANTIC SENTRY—conducted by U.S. Aegis destroyers based in Rota, Spain and the Aegis Ashore system in Romania—provides the foundation of NATO's ballistic missile defense (BMD) capability. Participating in NATO operations demonstrates USEUCOM leadership and commitment to the Alliance.

Additionally, rotational Army, Marine, and Special Operations Forces (SOF) further demonstrate United States commitment to NATO interoperability. These forces work alongside Allies and partners to deter aggression, counter malign activities, build host nation defense capabilities, and enhance interoperability. In Eastern Europe, three rotational Brigade Combat Teams and a Combat Aviation Brigade lead land force efforts to support Atlantic Resolve. Deliberate deployments of United States Marines to Norway reinforce the Alliance's northern periphery and provides exceptional training opportunities. Force commitments outside USEUCOM assigned forces enhance deterrence and hone the Alliance's warfighting skills.

Fortify Alliances and Partnerships

Europe and the United States remain the foundation for upholding a free and open international order. The shared ideals, values, and longstanding relationships we have in Europe strengthen integrated deterrence and enable worldwide operations in support of shared national interests. USEUCOM's unique geographic location enables global operations, including U.S. interagency and multinational operations. We work within a whole-of-government framework to maintain essential access, basing, and overflight permissions under bilateral agreements and resist Russian and PRC strategic investment. These agreements enable the United States to protect our vital national interests and meet treaty obligations.

Allies and partners bolster U.S. initiatives through national contributions and provide critical host nation support to U.S. Forces operating across the region. Allies and partners contribute forces to ongoing NATO and United States-led coalition missions in order to advance our common interests in Kosovo, Iraq, and Syria. Allies underwrite infrastructure investments and defray costs of United States military construction through the NATO Security Investment Program. The EU, in consultation with NATO, committed to invest 1.69 billion euros over the next 7 years for civilian and military dual-use transportation infrastructure improvements. This infrastructure investment will enhance military mobility, increase individual nations' crisis response, and improve Alliance combat capability. Our Allies and partners continue to be critical in supporting USEUCOM while we defend United States interests in Europe.

U.S. National Guard forces maintain vibrant relationships and unique access with Allies and partners through the State Partnership Program (SPP). USEUCOM now has 25 active programs with the addition of the Cyprus—New Jersey and Norway—Minnesota partnerships. The SPP conducts over 500 engagements a year in USEUCOM's AOR. These engagements cultivate regional expertise, strengthen personal relationships and improve readiness across the AOR. Programs such as the Black Sea Maritime Domain Awareness Initiative and enhancing Baltic Integrated Air and Missile Defense represent potent, regionally focused components of a resilient theater posture developed from SPP relationships.

The accession of Finland and potentially Sweden to NATO would represent the most significant expansion of the Alliance since the 1990's. The United States Senate backed the expansion by an overwhelming 95–1 vote and President Biden signed instruments of ratification endorsing Finland and Sweden's accession. Finland's accession to NATO brings added capabilities and experience to the Alliance, and so would Sweden's. The United States and Sweden have a long history together in training, bilateral and multilateral security cooperation, and operations. USEUCOM recognizes the significant capability this Nation would bring to NATO and we look forward to deeper planning and coordination in the future.

CONCLUSION

United States leadership in Europe remains indispensable, and our commitment to NATO ensures the Alliance continues to serve as the foundation of Transatlantic security. Russia remains a chronic threat to European security despite its losses in Ukraine. Nevertheless, the West is more united than it has been in years. We have demonstrated our commitment to European stability through our collective support to Ukraine in response to Russia's brutal war of aggression. Maintaining an all-domain combat credible United States presence in Europe is the foundation of our de-

terrence of Russia, strengthens Alliance interoperability, and supports NATO's collective defense.

The PRC also challenges Transatlantic security. The PRC aims to supplant the rules-based international order to suit its interests and authoritarian preferences. Such efforts threaten enduring United States, Allied, and partner interests, security, and values in Europe. PRC investment in critical infrastructure, and acquisitions in emerging technology sectors, allows access to our Allies and partners and provides the PRC a military capacity that places United States and Alliance interests in the AOR at risk. USEUCOM, alongside our Allies and partners, will continue to resist the PRC's malign influence and activity to preserve a secure, prosperous, and free Europe.

We appreciate Congress' active engagement and support to address these challenges through funding and authorities. European Deterrence Initiative-associated investments supported the United States response to Russia's invasion of Ukraine. The United States reinforced NATO members' security more quickly than any other Ally because of our forward presence, repositioning of theater forces, and prepositioned stocks. Your continued support for our posture investments in Europe, the Ukraine Security Assistance Initiative, Presidential Drawdown Authority, Foreign Military Sales and Financing, and International Security Cooperation Programs remains critical to USEUCOM's strategy. These authorities and funding enhance U.S. and NATO and strengthen our ability to respond in crisis or conflict. Together with the soldiers, sailors, airmen, marines, guardians, coast guardsmen, civilians, and defense contractors of USEUCOM, your support demonstrates our Nation's continued commitment to defend the Homeland and protect the peace for the one billion people living in the Euro-Atlantic region.

Chairman REED. Thank you very much, General Cavoli. General Van Ovost, your statement, please.

STATEMENT OF GENERAL JACQUELINE D. VAN OVOST, USAF COMMANDER, UNITED STATES TRANSPORTATION COMMAND

General VAN OVOST. Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee, good morning. It is my honor to join you today with my Senior Enlisted Leader, Fleet Master Chief Donald Myrick, to represent the m]en and women of United States Transportation Command as we defend the Nation, take care of our people, and succeed through teamwork.

I am extremely proud of our team of logistics professionals who lead the joint deployment and distribution enterprise, continually exceed expectations, and ensure hope, deterrence, and victory are assured as we contribute to our Nation's defense.

From competition to crisis, the entire enterprise proudly delivers for our Nation, our allies, and our partners. We know our success in the European theater and beyond would not be possible without the steadfast support of this Committee and the whole of Congress.

To maintain the unrivaled strategic advantage, to project and sustain the Joint Force over global distances through natural disasters, pandemics, conflicts, peace and war, while defending our Homeland, we must preserve our logistical dominance.

Our organic fleet, along with our commercial transportation partners, must continue to present credible deterrence and requires proactive efforts to recapitalize and modernize. My highest concerns lie in reductions in capacity and readiness in both sealift and air refueling. We are a generation late in recapitalizing already sealift fleet to meet our national objectives.

The average age of our 44 roll on, roll off ships we use to surge from the Continental United States is 44 years old. In fact, 17 of the 44 ships are 50 years or older. TRANSCOM supports the Navy's strategy to acquire used sealift vessels from the commercial market, and further request to provide Secretary of Defense discre-

tionary authority to purchase foreign built used ships under favorable market conditions without limitation on number.

I greatly appreciate your support for stabilized funding toward our sealift recapitalization effort, and I am heartened by the current progress on the first five ships. We have also taken steps to address the department's shortfall in meeting wartime fuel delivery demands and the vulnerable position of continued reliance on the use of foreign flagged, foreign crude tanker vessels.

We are working with MARAD [Maritime Administration] to implement the tanker security program, which will provide assured access to U.S. flag tankers and begin to reduce risk in sealift tanker capacity. In addition to the tanker security program, we fully support the Maritime Security Program, the Jones Act, and cargo preference that all work together to ensure we have the necessary U.S. flag capability and U.S. mariners during peacetime, and ready to move sensitive defense materials during a national emergency.

In every domain, American workers are critical to the Joint Force transportation and logistics. In particular, maritime stakeholders have been experiencing challenges with recruiting and retaining mariners. We support MARAD and industry efforts to identify strategies that address the Mariners shortage and ensure their readiness.

In the air, the air refueling fleet is the backbone of rapid global mobility and is our most stressed capability. TRANSCOM supports the Air Force's continued efforts toward focused modernization of the fleet, uninterrupted tanker recapitalization, and accelerated pursuit of the next generation air refueling system to ensure our capacity and readiness remains credible to cover simultaneous global requirements.

Future operations will also require high degrees of battlespace awareness and leveraging data to align scarce mobility resources with the greatest strategic needs. Integration into battle networks, resourcing cryptographic modernization, cybersecurity, and ensuring resilient positioning, navigation, and timing are among my top priorities.

Section 702 of the Foreign Intelligence Surveillance Act expires at the end of this year, which provides essential and irreplaceable insights on the activities of critical foreign targets. The loss of this authority, or renewal and diminished or unusable form would profoundly damage the department's ability to see and mitigate some of the most profound threats against the United States and our allies and partners.

Therefore, reauthorization is a matter of utmost priority. Just as we are engaged globally in our flagship transformational effort, the global household goods contract will bring accountability that does not exist in the current program of dispersed vendors. We owe it to our members and their families to ensure that they have the very best relocation experience that we can provide.

I am honored to join General Cavoli today, where we are in lockstep to provide critical aid to enable Ukraine's national defense that in turn delivers success for the United States, our allies, and our Nation. I would like to thank you once again for your leadership and for the support you provide our workforce, and I look forward to your questions.

[The prepared statement of General Jacqueline D. Van Ovost follows:]

PREPARED STATEMENT BY GENERAL JACQUELINE D. VAN OVOST

WHO WE ARE—OUR MISSION

U.S. Transportation Command's (USTRANSCOM) enduring purpose is to project and sustain combat power whenever and wherever our Nation chooses. Within the ever-changing strategic and operational landscape, our logistics and mobility enterprise continue to play an integral role in assuring our Nation's defense as well as provide our national leadership strategic advantage. We must ensure the Joint Force can defend the Nation, take care of our people, and succeed through teamwork. To deter and win, the 2022 National Defense Strategy (NDS) directs the Future Joint Force to be lethal, resilient, sustainable, survivable, agile, and responsive.

As one of eleven combatant commands, our warfighting team is a diverse force, comprised of our component commands, subordinate commands, interagency and commercial partners of the broader Joint Deployment and Distribution Enterprise (JDDE). The entire enterprise works together to move the right capabilities to the right place, at the right time. Our assigned Unified Command Plan responsibilities are executed through three component commands (U.S. Army's Military Surface Deployment and Distribution Command, U.S. Navy's Military Sealift Command, and U.S. Air Force's Air Mobility Command), and two major subordinate commands (Joint Enabling Capabilities Command [JECC], and the Joint Transportation Reserve Unit). Our key mobility mission areas include sealift, strategic seaports, air refueling, airlift, aeromedical evacuation, domestic rail, and motor and barge freight. The JDDE operates as a Total Force, harnessing the unique skills of Active Duty, Reserve, National Guard, Merchant Marine, and civilian teammates who are vital to our ability to bolster warfighting readiness.

The Department of Defense's (DOD) ability to project military forces is inextricably linked to commercial industry. Our industry partners provide critical transportation capacity and global networks to meet day-to-day and wartime requirements. Annually, USTRANSCOM spends approximately eight billion dollars in organic and commercial transportation services to execute DOD mission requirements. USTRANSCOM also partners with other U.S. Government Departments and Agencies, such as the U.S. Department of State, U.S. Department of Transportation (DOT), especially the Maritime Administration (MARAD) as they operate and maintain the government-owned sealift fleet. We also partner with the Federal Highway Administration within the DOT, the Defense Logistics Agency (DLA), the General Services Administration, and other key logistics partners who provide the funding for deployment and distribution operations. These partners also establish the policies which guide our efforts and are also customers of the Defense Transportation System.

USTRANSCOM has assumed the role as the DOD's single manager for Global Bulk Fuel Management and Delivery. This mission represents a different approach to managing bulk fuel within the JDDE, synchronizing a complex system-of-systems to achieve unity of effort. Partnering with DLA's capability and expertise, USTRANSCOM will synchronize posture, planning, execution, and provide advocacy for capabilities and resources to meet the energy needs of the Joint Force in competition and conflict. In accordance with Section 352 of the fiscal year 2022 National Defense Authorization Act (NDAA), USTRANSCOM achieved initial operating capability in February. We expect to achieve full operational capability by the end of fiscal year 2024.

WHERE WE ARE—STRATEGIC ENVIRONMENT

Strategic competition is a reality today, and the JDDE's competitors are maneuvering fluidly between conventional and gray-zone activities. Mobility obstacles are encountered at every step in the deployment and distribution process, from the Homeland to the destination. Over 85 percent of the Joint Force is in the Continental U.S., and our competitors are on a trajectory that will present persistent threats across multiple domains simultaneously. Since 2018, we have acknowledged that the Homeland is not a sanctuary. Our adversaries conduct espionage and malign influence campaigns, leverage public investment and state-owned enterprise activities, and utilize cyber and space-based capabilities to gain access to, obtain placement within, and to target U.S. national security interests—including the JDDE and associated dependencies. Adversarial diplomatic, information, commercial, and economic threats are now also complemented with their increased long-range ki-

netic-denial capabilities. If these threats are not mitigated, our power projection capabilities will be put at further risk and the mobility enterprise will be forced to "fight to get to the fight."

The President's National Security Strategy (NSS) makes clear that the People's Republic of China (PRC) and Russia are working aggressively to undermine democracy and export a model of governance marked by repression at home and coercion abroad. In their own ways, both seek to erode the legitimacy of established international norms and laws that have persisted for almost a century. Geopolitically, the PRC remains our most consequential pacing challenge; followed closely by Russia, an acute threat. Other persistent threats including North Korea, Iran, and violent extremist organizations are developing or acquiring new capabilities and pursuing strategies that could challenge our ability to deploy and sustain the Joint Force.

Furthermore, strategic competitors such as the PRC continue to leverage their economic position to diminish United States influence and present increased risk to access, basing, and overflight (ABO) across the globe. Regional instability in places such as Africa, the Middle East, and Latin America, as well as transborder issues like natural disasters and pandemics, will continue to challenge the Joint Force and drive requirements for USTRANSCOM support. The JDDE is accustomed to sustaining forward-deployed forces across largely uncontested environments.Logistics realities are changing and the JDDE cannot presume it will enjoy similar freedom of maneuver and execute operations with full access to our lines of communication on the ground, in the air, at sea, and in space. Our ability to project, maneuver, connect, and sustain are critical capabilities for the Joint Force. The supporting infrastructure must be protected and strengthened to achieve our National Security goals.

The JDDE must accelerate the momentum it has generated to meet these challenges. We cannot rest on past successes, nor cede an advantage to our competitors. Our Nation's strategic network of Allies and partners provides capacity, logistical capabilities, intelligence, and ABO agreements that empower the U.S. to successfully compete against global challenges. The command's ABO permissions are the lifeblood of global mobility and must be nurtured. Access, basing, and overflight is not guaranteed, can change anytime, and can even be denied for humanitarian assistance. Assured access to and through foreign nations is accomplished through sustained engagement and agreements with our Allies and partners.

This network of Allies and partners enables assured force projection and freedom of maneuver, reducing the challenges associated with maintaining operational reach over extended distances. The JDDE relies on the diverse and expansive capacity of global infrastructure, both government-owned and commercially owned and operated, to deliver an immediate force tonight and a decisive force when needed. We must also be cognizant of impacts that transnational issues, such as climate change, have on our readiness. We will make our supporting systems more resilient and agile in the face of transnational threats to preserve operational capability and protect key systems. The collective influence of our enterprise and Nation to shape the strategic environment can provide competitive advantage, senior leadership decision space, and complicate the decision matrix of any potential adversary.

WHERE WE ARE GOING

For decades, most transportation and logistics activities were conducted in uncontested environments; clearly the strategic environment has changed. We must grow our capabilities to ensure that logistics never becomes the weak link. We will set the conditions for a strategic environment where the JDDE can project and sustain the Joint Force, at a time and place of the Nation's choosing, under persistent, all domain attack. While our competitors are not invincible, the threats are real and the imperative to change is urgent. This decisive decade demonstrates the importance of the NDS's priorities of defending the U.S. Homeland; deterring strategic attacks against the U.S., Allies, and partners; deterring aggression and being prepared to prevail and building a resilient Joint Force and defense ecosystem. USTRANSCOM's capabilities will be the engine that propels the NDS by underwriting the lethality of the Joint Force ensuring the viability of deterrence operations and providing our national leadership with strategic flexibility. The command will enable our national priorities through the NDS's strategic ways of *Integrated Deterrence, Campaigning, and Building Enduring Advantages.*

By nesting our strategic priorities and campaign objectives within the NDS framework, USTRANSCOM is focused on ensuring the JDDE is ready and effectively postured to accomplish its mission when called upon. Integrated deterrence is predicated on making the adversary doubt they can achieve their objective. This relies

on USTRANSCOM's readiness to fight, deliver, and win through our global mobility posture. USTRANSCOM force posture will focus on the access and warfighting requirements that enable our Nation's efforts to deter potential PRC and Russian aggression. Strengthening relationships with Allies, partners, and commercial industry will expand ABO options, thus creating positional advantage across all domains. When used in concert, posture and capacity provide a true asymmetric and strategic advantage for the Nation.

Our *active campaigning* includes the Globally Integrated Exercise, Pacific Sentry, Air Mobility Command's Exercise Mobility Guardian 2023, and other joint exercises that put a premium on closing operational gaps to strengthen deterrence and develop new concepts to prevail. Our efforts to recapitalize mobility fleets, modernize systems, and employ new operational concepts will enhance enterprise capabilities that we can deploy rapidly in time and space. Large-scale exercises, fleet readiness activations, and focused wargames will enhance interoperability and trust across the Joint Force, with Allies, partners, and the commercial industry. For example, in preparation for standing up the Tanker Security Program (TSP), Military Sealift Command initiated a wargame series with MARAD, labor, and other industry stakeholders to better understand their capabilities and ability to expand and meet the bulk fuel demand at time of need.

Building enduring advantages begins by addressing critical vulnerabilities. Investing in and hardening a resilient defense ecosystem will strengthen our commercial and military transportation networks across multiple domains, especially space and cyber. We expect disruption in our operations and are focused on cyber mission assurance and digital modernization to ensure our ability to conduct globally integrated command and control and to generate decision advantage. With significant volumes of data and advanced analytics, we expect to posture efficiently, recover quickly, and accelerate the application of our capacity.

Finally, our people will make the difference between victory and defeat. We continue to develop our warfighting team with a competitive mindset and acknowledge the challenges present today. By embracing the imperative to be ready now and in the future, our people understand the mission and are continually adapting to maintain our Nation's competitive advantage in power projection.

HOW WE WILL GET THERE—WARFIGHTING FRAMEWORK

USTRANSCOM is focused on shaping and directing the capabilities and concepts necessary to operate in the future contested environment, which includes multimodal solutions for transloading cargo, fuel, and personnel, including patients, between commercial and military capacity and delivering the last 1,000 tactical miles in a contested environment. Our analysis goes beyond the mobility platforms and integrates key warfighting functions, current wartime demands, and future concepts entailing maneuver and distributed operations. We have advanced significantly in our analytic framework to better conduct globally integrated mobility operations and the synchronization of our Global Mobility Posture, Global Mobility Capacity, and Global Command, Control, and Integration. These critical elements create USTRANSCOM's warfighting framework through which we carry out our missions.

Global Mobility Posture

Global Mobility Posture is the foundation of our ability to project power. It starts here at home, with installations and infrastructure, such as ports, highways, railways, and pipelines to mobilize and deploy forces. The ability to leverage a global distributed and scalable logistics network is highly dependent on our deep bench of diplomatically aligned Allies and partners. Their support, garnered through diplomacy and combatant commander relationship building, secures the critical ABO that enable our freedom of maneuver. This requires a whole-of-government approach, including commercial industry efforts, to solidify and amplify our established nodes and routes. These dense layers of contacts and contracts—military and commercial—are critical to our ability to set the globe. They also enable regional agreements that expand the availability of critical resources in remote locations, especially fuel. The command has already initiated a campaign to close gaps in the Joint Petroleum Enterprise and implement storage and distribution improvements in priority theaters.

We must expand and strengthen our global transportation networks to facilitate our ability to aggregate force packages to fight during periods of domain superiority, and then disaggregate to survive. We will continue to expand access and protect our lines of communication through the collaborative pursuit of technologies to improve the agility and flexibility of the JDDE, while also advocating for key infrastructure investments. USTRANSCOM supports the Services' efforts to invest and improve the Nation's overseas airbase and seaport defense as well as protection measures

for our lines of communication. While we don't own protection forces, we advocate in conjunction with other Combatant Commands and Services to ensure our equities are not at unacceptable risk, thereby ensuring the success of our operations.

To successfully execute our deployment mission, USTRANSCOM also relies on a collection of both DOD and commercially owned U.S. Strategic Seaports. The primary mission of the Strategic Seaport Program is to ensure DOD has access to sufficient seaport infrastructure to meet the Nation's objectives. Military Ocean Terminal Concord (MOTCO), on the West Coast, is the sole strategic ammunition seaport that serves the Indo-Pacific area of operation. The Department has made appropriate and significant investments in MOTCO to replace failing infrastructure and is endeavoring to acquire and install two ship-to-shore cranes to preserve the ability to meet ammunition demands. At Military Ocean Terminal Sunny Point (MOTSU) on the East Coast, major enabling infrastructure components including the operational wharfs are ammunition throughput requirements. We continue to work with the Department of the Army to preserve and modernize both seaports by securing and applying resources to reduce risk and prevent capability gaps.

USTRANSCOM assesses that our Nation's infrastructure is currently capable of supporting military transportation requirements, but we must continue necessary investment to keep it that way. The recently passed Infrastructure Investment and Jobs Act presents opportunities to reinforce and modernize strategic components of our national transportation system and increase resiliency. Through the established Highways, Railroads and Ports for National Defense Programs, USTRANSCOM will continue to proactively engage both civil and private sector partners to address identified concerns and challenges.

Global Mobility Capacity

Global Mobility Capacity includes sealift, air refueling, airlift, aeromedical evacuation, rail, motor transport, bulk fuel, and the ability to fully mobilize the Total Force at the time and point of need. When necessary, we can rapidly increase capacity through our emergency preparedness programs, which include the Civil Reserve Air Fleet (CRAF), Voluntary Intermodal Sealift Agreement (VISA), and Voluntary Tanker Agreement (VTA). All our available capacity, including emergency preparedness programs, must continue to represent a credible option for delivering fuel, munitions, personnel, evacuating patients, and materiel—regardless of the environment. The JDDE relies on an integrated and balanced approach between government-owned and commercial capacity at a tempo necessary to achieve national end states, and in tight coordination with interagency partners, the Joint Staff, Services, other combatant commands, and our commercial partners.

Global Command, Control, and Integration

Our third warfighting element, Global Command, Control, and Integration is of high concern because the exercise of authority and direction to plan, coordinate, synchronize, and control operations at echelon is critical to our success. We need platforms that are securely connected and have an appropriate level of battlespace awareness to align scarce mobility resources with the highest strategic needs. Cyber mission assurance and digital modernization will enable our ability to conduct globally integrated command and control and generate decision advantage for leadership. To do so, we must begin by treating data as a strategic asset which is why we are committed to becoming a data-driven organization with the capabilities, tools, and culture to gather and analyze data to inform better business and operational decisions.

Our military and commercial platforms will require integration into the battle networks, resourced cryptographic modernization, and a resilient Positioning, Navigation, and Timing ecosystem. We must be linked into the distributed command and control constructs and resources to identify and mitigate any adversary's malicious cyber activity against our networks and systems. Last year, we completed implementation of Zero Trust capabilities on our classified network, a cyber security framework that embeds security throughout the architecture to prevent malicious actors from accessing our most critical assets. We reached baseline maturity level, and we will continue to advance this initiative—especially in the unclassified environment.

USTRANSCOM also partners with commercial transportation service providers to share threat information and best practices to ensure mission success. We work closely with the commercial transportation service providers to enforce cyber security standards in our contracts. Those cybersecurity standards are in place to safeguard defense information and call for annual assessments of their networks. We collaborate with interagency partners on information sharing and initiatives to en-

sure shared understanding of emerging threats and improve voluntary avenues to harden commercial networks.

USTRANSCOM has embraced the 3-year DOD Artificial Intelligence and Data Accelerator Initiative to help improve the command's data posture and set the foundation for future advanced analytic opportunities. Building on lessons from Afghanistan and Ukraine, USTRANSCOM established a community space within Advana, dubbed Pegasus, to provide a data repository and analytic tools to modernize our analysis capabilities. This is the first crucial step in our utilization of advanced visualization, analytics, and machine learning capabilities to create decision advantage.

YEAR IN REVIEW

In the last year, we once again demonstrated the positive impact a dedicated logistics combatant command can have on global operations. USTRANSCOM's logistical prowess remains on full display as we balance the rigors of our global mission, while ensuring Ukraine receives the aid necessary to defend their nation. In fiscal year 2022, USTRANSCOM delivered over 299,000 passengers and over 236,000 short tons (STONs) by airlift and over 11.6 million square feet of cargo by sealift.

USTRANSCOM began delivering security assistance cargo for Ukraine in January 2022 and continues to deliver hope and aid to the Ukrainian people on an expedited basis. Since then, the command has delivered more than 377 million pounds (a/o 17 Mar 23) of security assistance equipment to Ukraine that is enabling critical success on the battlefield against the Russian force that invaded on February 24th of last year. Even while USTRANSCOM moved troops and security assistance to Europe, it continued to support operations and exercises around the globe.

The command supported Operation FLY FORMULA and moved 76 STONs (47 pallet position equivalents) of specialty infant formula from Europe to the United States during a severe shortage in May 2022.

The command also supported USINDOPACOM's Exercises Iron Storm and Keen Sword by airlifting 1,052 servicemembers and 841 STONs of cargo. These large-scale events are a series of joint and bilateral field training exercises designed to increase combat readiness and interoperability between U.S. and Allied nations. USTRANSCOM also delivered 1,484 servicemembers and 93 STONs of cargo in support of Exercise Native Fury, a bilateral training exercise held with USCENTCOM and Saudi Armed Forces. The exercise enabled increased strategic access within the Trans-Arabian Transportation Network and refined our command-and-control processes.

To enable an agile and effective planning process, USTRANSCOM deployed 278 communicators and planners from the Joint Enabling Capabilities Command in support of each combatant command, NATO, the Joint Staff, and numerous military and government organizations. These personnel deployed in support of defense support of civil authorities five times including support to COVID–19 response and Hurricanes Ida and Ian. Additionally, they answered the call 25 times in support of crises around the globe, including support to our USEUCOM partners in response to Russia's full-scale invasion of Ukraine.

Throughout fiscal year 2022, USTRANSCOM conducted extensive global operations, delivering over 99.2 million gallons of fuel during air refueling missions, which resupplied over 56,000 receiver aircraft on over 26,000 missions (33,641 sorties). Furthermore, USTRANSCOM supported 40 bomber task force missions, reassuring our partners across all six theaters, and reminding adversaries how quickly we can project combat power. These missions in the Indo-Pacific displayed combat credibility and furthered multi-lateral integration, ABO efforts, and deterrence. USTRANSCOM also supported multiple fighter aircraft movements and intelligence, surveillance, reconnaissance support missions for USINDOPACOM, USEUCOM, and USCENTCOM solidifying our global campaign plan and signaling support to our Allies.

USTRANSCOM also created a fuel bridge and delivered 120,000 gallons of diesel fuel to sustain the United States Embassy and USAID operations in Haiti in response to the health and security crises on the island. Globally, USTRANSCOM safely conducted 5,381 patient movements.

RECAPITALIZATION AND MODERNIZATION EFFORTS

Proactive mobility recapitalization efforts are crucial for us to effectively operate in a future contested logistics environment. USTRANSCOM's assessment of mobility sufficiency under the NDS found our current mobility capacity sufficient, but at increased levels of risk due to our adversaries' focused and persistent efforts. Risk is further heightened by an erosion of readiness and capacity in key mobility areas.

Sealift

Sealift is vital to delivering the decisive force. In wartime, 90 percent of military cargo will be transported via sealift. The average age of the 44 Roll-on/Roll-off (RO/RO) ships we use to surge from the Continental U.S. is 44 years old. In fact, 17 of the 44 ships are 50 years or older. Therefore, USTRANSCOM supports the Navy's strategy to recapitalize the government-owned fleet by acquiring foreign-built used sealift ships from the commercial market and further requests to provide the Secretary of Defense discretionary authority to purchase foreign built ships to expeditiously replace the aging ships under more favorable market conditions. This includes removing the overall limit on the number of used sealift vessels DOD can procure, sealift fleet to meet our national objectives.

Working with MARAD, we have purchased two used RO/RO vessels and are in the process of purchasing three used roll-on/container ships with over one million useful square feet capacity. However, the process must be accelerated if we are to keep pace with the retirement schedule. To maintain sealift capacity and preserve sealift readiness, we are advocating to accelerate used vessel purchases and to reconsider the current retirement plan to retain a number of viable ships. Furthermore, we have taken steps to address the Department's shortfall in meeting wartime fuel delivery demands, and the vulnerable position of continued reliance on the use of foreign flag tankers. We are working jointly with MARAD to implement the Tanker Security Program (TSP). These efforts will provide assured access to U.S. flag tankers and begin to reduce risk in sealift tanker capacity. With the assured access provided by the 60-ship U.S. flag sealift vessel Maritime Security Program, and increased funding to preserve the operational readiness of the United States Government-owned ships in the Ready Reserve Force, we will bolster our ability to conduct operations at sea and meet DOD requirements with the most useful capacity while maintaining a U.S. flag presence in international trade. This capacity and global reach through integrated networks provided by our industry partners is critical when we consider a theater such as USINDOPACOM.

The health of Merchant Mariner Readiness requires continued assessment to ensure an adequately trained supply to crew our surge fleet while minimizing impacts to commercial industry. The supply of contract mariners is sufficient to meet the initial sealift surge when government Reserve ships are activated but will be challenged with the ability to sustain crewing requirements over an extended period. The post-COVID recovery has highlighted significant workforce concerns to maritime stakeholders to include recruiting and retention.

We are encouraged by MARAD's efforts to collaboratively identify issues, potential solutions, and support a whole-of-government approach to address this national security matter. We will employ Navy Reserve tactical advisors on commercial vessels and expand our consolidated cargo capability. This will include providing regular training opportunities to expand mariner proficiency in consolidated cargo operations and utilize multi-modal solutions to deliver across dispersed locations in compressed timelines.

Air Refueling

The air refueling fleet is the backbone of rapid global mobility and the foundational component enabling the Nation's asymmetric advantage in global force projection. USTRANSCOM supports Air Force efforts to continue air refueling recapitalization and funding over the long term to replace aging aircraft and sustain fleet capacity while pursuing modernization. The September 2022 declaration of worldwide employability for the KC–46 aircraft placed us a step closer to being fully mission capable. Building depth of trained operators and maintainers to sustain sufficient daily and wartime capacity as units undergo conversion is critical as recapitalization continues.

Credible air refueling capacity must simultaneously cover multiple high-priority global demands, which causes daily and wartime concerns within the air refueling fleet. USTRANSCOM's recent assessment of mobility sufficiency under the NDS indicates an inventory of 466 total aircraft as sufficient, but at elevated risk. When the last KC–46 on contract is accepted into the Air Force, the average age of the remaining KC–135s will be 67 years old, emphasizing the need for continued recapitalization and investment in the Next Generation Airdemand continues to emphasize the utility of comparably higher quantities of platforms to ensure sufficient quantities of booms and drogues are in the air at any given time to meet the significant number of simultaneous requirements. It is critical that the Air Force continues a full recapitalization program and invest in the NGAS to maintain credible capacity and provide the persistent connectivity, improved survivability, and increased agility necessary to operate in future contested environments.

Strategic Airlift

The strategic airlift fleet remains vital to rapid global mobility, which the Joint Force relies on extensively to meet both daily competition and wartime demands. The three most recent DOD-level mobility studies have each validated our current capacity achieves strategic airlift requirements (30.5 million-ton-miles per day). Our ongoing efforts using a mix of organic and commercial capabilities to airlift time-sensitive aid to Ukraine, in largely uncontested environments, and the USEUCOM effort in support of our NATO allies illustrates this capability. The requirements to move outsized and oversized cargo early in future high-end conflicts underscores the demands for a sizable and healthy organic strategic airlift fleet to fulfill the requirements that the CRAF cannot. The C–5M aircraft is essential to these efforts and requires increased resourcing to achieve required readiness levels. The Joint Force's continued high demands for strategic airlift requires capable and ready fleets to ensure the U.S. maintains its asymmetric advantage in this critical area.

Intra-Theater Airlift

C–130 aircraft provide airlift support necessary to operate within any theater to support a sizable, deployed force engaged in combat operations. This includes transload movement from commercial aircraft, and time-sensitive movement of forces, supplies, and battlefield aeromedical evacuation—all of which emphasize the need for tactical airlift capability. The USAF planned retirement of C–130H aircraft has reduced inventory from 300 total aircraft to 279 total aircraft in fiscal year 2022. The Fiscal Year 2023 NDAA allows for the divestment of eight C–130 aircraft in fiscal year 2023 to decrease the total aircraft inventory to 271 and then maintain a fleet of 271 total aircraft across the Future Years Defense Program, which USTRANSCOM supports at an elevated, but acceptable risk. Future Joint and Service operating concepts entail the maneuvering of forces across broad distances via airlift and sustaining of forces across broadly distributed operating locations, which elevates demands for theater lift.

Patient Movement

The importance of our Patient Movement enterprise cannot be overstated. The casualty evacuation requirements in current planning scenarios demonstrate the same number of patients evacuated in all of 2022 will likely require evacuation every week during a future near-peer conflict. USTRANSCOM will continue to align the Patient Movement enterprise within the command's warfighting framework to support command authorities, scale forces, develop innovative capabilities, and posture scarce aeromedical evacuation mobility resources globally to conduct patient movement in support of the highest strategic priorities. The future of patient movement depends on in-theater treatment capacity, expanding access to Allies' and partners' regional hospitals, improved surface and air options, innovative training to meet future casualty stream requirements, and development of effective and efficient multi-modal patient movement platforms.

Defense Personal Property Program (DP3)

Our Defense Personal Property Program (DP3) team is moving forward on transforming how DOD provides moving services to customers. Servicemembers, DOD civilians and their families are our most critical asset, and we continually seek to improve our DP3 processes through all venues possible. There are multiple initiatives in work to transform and improve the Department's relocation program with the Global Household Goods Contract (GHC) being our flagship DP3 reform effort. With the November 2022 Court of Federal Claims' (COFC) decision to uphold the contract award to HomeSafe Alliance, our work on the GHC transition has officially resumed in full force. GHC will bring the biggest reform to how we move our servicemembers and families in the history of the program.

Our coordination with HomeSafe Alliance, the Services, and the DOD professionals who provide counseling to our servicemembers and families is underway and we are gaining momentum. The GHC is expected to deliver quality, on-time packing, shipping, and delivery of customers' household goods through improved centralized management of the DOD's approximately 310,000 annual household goods shipments. It fundamentally restructures our relationship with the household goods moving industry to deliver the quality servicemembers and their families deserve with the accountability Congress demands. We are currently working to refine a measured, conditions-based phase-in of domestic shipments after the 2023 peak moving season beginning in September. International household goods and accompanied baggage shipments transitions will follow and move under GHC in 2024. We owe it to our customers to ensure they have the best relocation experience the enterprise can provide, and that remains our focus.

CONCLUSION

To remain successful, USTRANSCOM must be ready to project power today and tomorrow, and we will only achieve this together. Recent successes in Operation ALLIES REFUGE and delivery of substantial aid to Ukraine have validated our reputation and generated momentum. While we have achieved success over our 35-year history as a combatant command, we know we must continue to innovate and accelerate the changes necessary to remain ready now and into the future. We cannot rest on our laurels—the risks are too great. Our competitors are watching our every move and quickly digesting lessons learned to improve their own power projection capabilities while also enhancing their ability to disrupt, degrade, or deny our capabilities. Contested logistics highlights that our actions to deliberately recapitalize organic mobility capabilities, and to modernize the JDDE, must continue for the DOD to maintain asymmetric advantages and deliver on our national security requirements.

Our command has always met challenges with innovation, determination, and professionalism to deliver success. Time after time, when our Nation called, we delivered. To deliver in the future requires focused attention today. Powered by dedicated men and women, USTRANSCOM underwrites the lethality of the Joint Force, advances American interests around the globe, and provides our Nation's leaders with strategic flexibility to select from multiple options, while creating multiple dilemmas for our adversaries. I thank Congress for your continued support to the men, women, and mission of USTRANSCOM. We remain dedicated to fight, deliver, and win!

Together, We Deliver!

Chairman REED. Thank you very much, General Van Ovost. Senator Wicker has suggested that we proceed with questioning, and when he is called upon, he will have opportunity to submit his statement and also ask his questions.

So let me begin. Both General Van Ovost and General Cavoli have absolutely critical positions. In fact, General Cavoli, the Ukrainian situation is the most pressing military situation in the world at the moment.

Unfortunately, here in the Senate, we have reached an impasse in terms of the promotion of noncontroversial General officers on a routine basis, usually by unanimous consent. Could you indicate what effects this will have on your operational capacity, but also on the morale and personal dynamics of families?

General CAVOLI. Thanks, Mr. Chairman. Yes, in an operational sense, if I have officers who are scheduled to retire, General officers who are scheduled to retire and do so, but I don't have somebody to replace them, I will suffer a gap in that. Some of those are in fairly critical positions right now.

For example, the Chairman's military representative to the Military Committee, General John Diedrich, is scheduled to retire this summer. His replacement hasn't been confirmed so we would have a gap in the Chairman's representation at that rank at the Military Committee and NATO, which in my U.S. role is a vital connection between me and the Chairman to influence activities in NATO, and in my role as SACE, of course, it is very useful to have a line to the U.S. military representative. So that is one example, sir.

Chairman REED. Well, thank you. General Ovost, your perceptions?

General VAN OVOST. Thank you, Chairman. Besides any operational impacts from not being able to rotate General officers into positions of significant responsibility, the United States Transportation Command is responsible for moving 311,000 families every year around the globe.

It is important to continue these movements so that the children can be enrolled in schools, they can find adequate housing, and ensure that they are ready to succeed in their new responsibilities.

So, these delays add additional stress to our military families who already sacrifice enough.

Chairman REED. Thank you very much, General Van Ovost. General Cavoli, there has been some discussion about the relative contributions of NATO countries and other countries to this fight.

If we look simply at the dimension of military equipment, military supplies, that is one measure. But overall, in terms of accepting refugees, in terms of supporting those refugees, the Kiel Institute has analyzed that total input and indicates that the U.S. would rank 12th in terms of the amount of GDP [gross domestic product], the 11 preceding countries are European countries.

It raises the question of how important these contributions are to the battlefield, even though they don't represent military equipment or military advice.

General CAVOLI. Mr. Chairman, thanks for the opportunity to comment on this topic. So, first of all, the United States can and should be extremely proud of the quantity of aid that we have given and the leadership role we have taken. I think that is absolutely imperative to note up front.

In gross numbers, I think it is very fair by whichever mode of calculation we arrive at a gross number, that the U.S. clearly is the leader. In terms of proportion, though, you are right. I mean, more than half a dozen allies have given greater—a greater share their GDP in military aid to the Ukrainians.

I can't speak to all the other types of aid, but maybe I can give a couple of illustrations. Five hundred fourteen tanks have been given by the West to the Ukrainians in the past few months. None of them have come from the United States yet. Our Abrams won't get there until later in the year. Sixteen mid-level or high-level air defense systems have been given.

Two of those were given by the United States. So, there are some genuine donations. More than a third of our allies have given over half of their capacity in a given category to the Ukrainians. I would be reluctant to be really precise in public, but I would be delighted to be precise in closed session later today, if you would like, sir.

Finally, in nonmilitary ways, there is a lot going on. Our allies have treated or are treating about 2,400 wounded, grievously wounded Ukrainians in their hospitals, largely in their national defense systems—national health systems. We have treated four at Landstuhl—so there are some genuine contributions being made, sir.

Chairman REED. Well, thank you very much, General. Let me recognize Senator Wicker. Thank you very much, both.

Senator WICKER. Thank you, Mr. Chairman, and I do ask unanimous consent that my opening statement be included after yours in the record.

Chairman REED. Without objection.

Senator WICKER. I thank the Chairman for bringing up the point about burden sharing. I think it is helpful to reemphasize the 5 million Ukrainian refugees that are being cared for by Europeans

at some considerable cost, 1.5 million in Poland, 920,000 in Germany, 177,000 in the Baltic states, 500,000 in the Czech Republic.

I am glad to see the Chairman bring that up in his first round of questioning. I think one thing that could really harm public opinion here in the United States would be if we found that there was some corruption and siphoning off of money or weapons sold or donated by the United States.

I had a chance to ask you about that earlier. But would you give us your take and any assurance that you could give us that our friends who are actually carrying the fight in Ukraine are mindful of this possibility and how serious it would be if it were to occur?

General CAVOLI. Thank you, Senator. Of course. First of all, just with the general statement, my colleagues, my interlocutors in Ukraine assure me that they understand how important this issue is to the American people, and I believe it is sincerely so.

But as usual, military people put into action systems to try to verify things, so, we are doing enhanced end-use monitoring. If you would permit me, I would like to describe that for you for a second.

Senator WICKER. Please do, yes.

General CAVOLI. The first thing we do is, whenever we receive U.S. equipment that is going to go into the country, it comes through one of a couple of ports of entry. The main one is in Southeastern Poland, and a number of the Members have visited there.

At that location, we inventory everything by serial number so that we know exactly what is going into the country. A couple of months ago, about 6 months ago, we gave the Ukrainian military a NATO standard logistics tracking software system called LOGFAS [Logistics Functional Area Services]. It is what we use to track our own system.

So, we ingest all of that inventory into LOGFAS, and then the Ukrainians use that to track and to distribute their equipment around the country, and we have access to that in real time. That helps us to a certain degree. But then, of course, once you get inside the country, we have a responsibility to go lay eyes on things and check them.

That enhanced end use monitoring is done by the defense attaché office in Kyiv, led by Brigadier General Garrick Harmon. They go out to sites and they inspect. They went to Odessa yesterday to inspect and to inventory, and they will go to another location next week as well.

When they can't get to a location, they have barcodes placed on things and Ukrainians self-report by clicking on the barcode, and then we ingest that information into LOGFAS so we can track it as well.

Senator WICKER. Perhaps you could supplement that answer on the record, but you have confidence that there are safeguards for our weapons and donations.

General CAVOLI. Yes, I do, Senator.

Senator WICKER. General Van Ovost, we are not where we need to be at all in the Pacific, if conflict breaks out there, are we?

General VAN OVOST. Senator, we are not yet fully set in posture in the Indo-Pacific, I would agree.

Senator WICKER. You mentioned on page 15 of your testimony, in particular the importance of the tanker security program. In

your verbal testimony, you mentioned the importance of the Jones Act.

Now, we are aware that in some circumstances the consumers pay more because of the Jones Act. But in a previous conversation with you, you were, I believe, very compelling in explaining why the Jones Act is so important to our national security in case conflict breaks out. If I might, Mr. Chairman, let General Van Ovost expand on that.

General VAN OVOST. Certainly, Senator. Thank you. The United States, we only have 85 U.S. flagged, U.S. crewed ships in international trade right now. We have less than 2 percent of the foreign trade that passes using U.S. flagged U.S. crewed ships.

In other words, 98 percent foreign flagged. Is not enough for our national security. We have actually already reserve force because there is not enough U.S. flagged U.S. crewed shipping.

It is very important that we have maritime security program, tanker security program, cargo preference laws, and the Jones Act to ensure that we keep U.S. flagged U.S. crewed vessels available for our national security needs.

Senator WICKER. What if we didn't have those?

General VAN OVOST. Senator, if we didn't have those, we perhaps would have to grow our organic fleet of sealift ships requiring 100 percent of the burden being on the U.S. military.

Senator WICKER. Thank you very much. Appreciate that.

Chairman REED. Thank you, Mr. Chairman—Ranking Member. Senator Fischer, please.

Senator FISCHER. Shaheen.

Chairman REED. Shaheen, I am——

Senator SHAHEEN. You know, I know we all look alike, but——

[Laughter.]

Chairman REED. No, Roger does not look at all like——

Senator WICKER. Like a chairman perhaps——

[Laughter.]

Chairman REED. No, it is just—I apologize. It is early, and my coffee has not yet taken hold. Forgive me. Senator Shaheen of New Hampshire.

Senator SHAHEEN. Thank you, Mr. Chairman, and thank you, General Cavoli and General Van Ovost for being here this morning and for your service. General Van Ovost, I would like to begin with you because in your opening statement, you talked about the stressed capacity of our air refueling and the importance of that.

I know you have been to—we have been delighted to host you at the former Pease Air Force base where Pease Air National Guard 157th Air Refueling Wing has KC–46 tankers to do refueling.

But can you talk about, when you talked about the stress capacity, how important the KC–46 is, and what else we need to do in order to address our needs?

General VAN OVOST. Senator, thank you. As I mentioned, our ability to project and sustain the force, the foundation of that is our air refueling capability.

It makes us a global superpower. So, it is really critical that we continue to recapitalize the KC–135s and KC–10's with KC–46. I appreciate this Committee's support in continuing that recap and thinking about the next generation air refueling.

As far as the KC–46, it brings new capabilities to the fight, capabilities we have not had previously. That aircraft is what I call connected to the battlespace. It can see battlespace maneuvers and it can assist the Joint Force in ways that we haven't even fully explored yet.

So, it is a force multiplier. It can do probe and drogue as well as boom refueling, and it can receive and it can take on gas in flight. It is a multi-capable airplane and we intend to use it that way to augment the Joint Force.

Senator SHAHEEN. Thank you. You also talked about the importance of section 702 in terms of intelligence gathering. Senator Budd and I were with a number of other Senators in Latin America a couple of weeks ago, and at every stop we heard about the importance of reauthorizing 702.

Can you and General Cavoli both speak to what that allows us to do when we don't have people on the ground in terms of collecting information that we need?

General VAN OVOST. Yes, Senator. Signals intelligence is critical to my ability to understand the threats around the world, where they are moving to, what their intentions are, and how we can mitigate those threat. That is for the open session. I am happy to expound in a classified section.

Senator SHAHEEN. Thank you.

General CAVOLI. Senator, of course, a full answer is best done in closed session, but I can assure you that an enormous amount of the intelligence that I rely on in the current crisis is derived from the authorities under 702.

Senator SHAHEEN. Thank you. Thank you both. I think, General Cavoli, this question is probably for you because we see Iran continuing to supply Russia with critical support in this war against Ukraine.

There are reports now that Iran is providing artillery and ammunition to Ukraine as well as drones. Has that been confirmed and how are we working with our counterparts in CENTCOM to track and respond to that Iranian equipment? Also, are we seeing other countries provide weapons and ammunition to Russia as well?

General CAVOLI. First, more broadly, Senator, we see other countries considering it. We see precious few actually doing it right now, and we are gratified by that. But it is because of significant efforts on the part of the United States and our allies to discourage them.

You have seen some of that in the open press. We can discuss some more in closed session. With regard to the Iranian threat specifically, we have seen and the Ukrainians have reported to us the presence of Iranian drones especially.

That has been pretty well covered in open sources but I can go into some details in closed session with you if you would like. I am in significant contact with my good friend and colleague Eric Kurilla in Central Command, and some of the things we are thinking about in terms of handling this situation, I can address with you in closed session as well, if you will permit me.

Senator SHAHEEN. Well, thank you. You may want to address this in closed session, but do we think they have an unlimited sup-

ply of the weapons] that they are providing to Russia, or are we seeing challenges within their industrial base?

General CAVOLI. They have a significant supply, but it is certainly not unlimited, ma'am.

Senator SHAHEEN. Thank you. I have only a little time left, but could both of you speak to the importance of the air defender exercises that NATO is going to be doing? Again, I am pleased that the 157th from New Hampshire is going to participate in those. But how important are those? I understand it is the biggest exercise, that air exercise NATO has done.

General CAVOLI. If I could start, as the commander of allied command operations, Senator, extremely important. Air defense is one of the things that most of the nations in the alliance are challenged on in terms of capacity.

Then the integration is something that has to be done and repetitively exercised constantly because systems change and the technology gets updated and the soft, and then you have got to bring it back together. These are absolutely vital exercises.

General VAN OVOST. Our teams are fully engaged. This is a critical exercise for us, for interoperability with our allies and partners, growing their capabilities, including command and control.

Senator SHAHEEN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shaheen. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. General Cavoli, what do you assess to be the impact of Russia's assertions that it would deploy tactical nuclear weapons in Belarus, along with its handling over Iskander mobile short range ballistic missiles to the Belarusian forces?

General CAVOLI. Senator, thank you for the question. As a military matter, I do not think that it is a particularly concerning development. We can go into the specifics of that in closed session, of course. Therefore, I think it is mainly a gesture, and——

Senator FISCHER. Do you think it is more saber rattling again?

General CAVOLI. I do. I think it is a gesture and it is a gesture that we will handle through our policy means, etcetera. I have less to comment on in that regard.

Senator FISCHER. Okay, thank you. Also, can you discuss what your demands are for both manned and unmanned ISR [intelligence, surveillance, and reconnaissance]?

General CAVOLI. Yes, absolutely, Senator. Of course, like all the combatant commanders, ISR is what we depend on, especially during peacetime, to maintain situational awareness. There is a demand for ISR, both manned and unmanned, aerial ISR, that far exceeds the supply across the Department of Defense, and we are grateful when we get our share of it.

Right now, it is extremely important for a variety of reasons. We can't do everything with other means. It is our ability to collect and analyze depends on using a layered approach with a variety of systems, and we depend on those.

We are grateful for the advances that the services are making, from the Army with its new Artemis system, which has been doing great work in Europe for the last couple of years, to the Air Force's

advances, and to the Navy's P–8 program, all a very valuable, ma'am.

Senator FISCHER. How do you believe the threats are going to change in EUCOM in the coming decades? In your crystal ball, what do you see?

General CAVOLI. Do you mean in General, Senator?

Senator FISCHER. In General.

General CAVOLI. Well, I think Russia is quite likely to remain the core security challenge in Europe for some years to come. Their military has suffered significant losses in this conflict, but they have mainly been in the ground domain.

The air force, the tactical air force has lost about 80 fighters and fighter bombers, but they have more than 1,000 of them left. The long-range aviation has not been touched. The navy has barely been touched, lost a ship or two. The strategic nuclear forces, the cyber, the space have not been touched.

I think Russia will continue to be the core security challenge. But there are others. China is gaining influence and China continues to press for influence. Then there is always instability in the Balkans. You know, we are not done with that. So, I think perhaps we will see more of the same, Senator.

Senator FISCHER. You brought up where Russia hasn't touched many of their capabilities currently, and so, they have those in reserve for the next decade. When we look at munitions that are being used, especially in the conflict in Ukraine, and the amount of munitions that are being expended, do you think that we need to increase our production capacity here in this country? Would you encourage our allies to do the same?

General CAVOLI. Absolutely, Senator, to both. Our allies are very aware of the shortfalls that they have in munitions in certain cases, where they do exist.

Senator FISCHER. You were talking about the number of tanks and the—our allies have already shared with the Ukrainians.

General CAVOLI. Right, and so inside NATO, in my other role as the Supreme Allied Commander, I have been responsible to deliver a new set of operational plans. We turned them in on the 14th of April.

They are very specific regional plans for collective defense, and they have a level of specificity that is going to drive a force structure requirement, which will be the first time in 35 years that the alliance has a plans based force structure requirement. This will guide national defense investments across the alliance.

Senator FISCHER. Thank you. General Van Ovost, you talked a little bit about the sealift and being able to fuel, have that fueling capability. You mentioned working with MARAD. Can you kind of focus in, especially on the MARAD point there, on how important that is?

General VAN OVOST. Sure, Senator. We have a great relationship with the Maritime Administration who oversees our ready reserve force, those ships that are in reduced operating status. When we need to activate them, they wake up and they come to TRANSCOM [Transportation Command] and we fight them.

So, it is really important that we keep that relationship going, and especially when it comes to our mariners, because the same

mariners that crew ships that do foreign import and export, they are also the same mariners that are on our great haul ships. It is really important that we continue to support them.

Senator FISCHER. Thank you. Thank you, Mr. Chair.

Chairman REED. Thank you very much, Senator Fischer. Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. Thank you both for being here. General Cavoli, China is sending a special representative, an envoy to Ukraine and other countries for talks on regulating the Ukrainian crisis. Not sure what that means.

The special envoy has been selected and Ukraine is sending a special envoy to China. Do you consider this a significant development, and what does that portend?

General CAVOLI. Thank you, Senator. I am not sure we know yet the significance of the development, but what we do know is that China should begin by condemning Russia's illegal and unprovoked invasion of Ukraine. That should be the first step in my mind to any productive role for China in the conflict or its resolution, ma'am.

Senator HIRONO. I think that—yes, well, this also signifies China's engagement in Europe. I think that it remains to be seen, but to me, it is possibly a positive sign that perhaps there will be an end to this terrible conflict. General Van Ovost, we have spoken at length about Red Hill and your plan for the fuel currently stored there.

I understand there is a plan for where the fuel will go once de-fueling begins. With over half the required repairs at Red Hill complete, de-fueling remains on track to be completed in June 2024. Is your plan for fuel distribution in the Pacific complete?

General VAN OVOST. Senator, we are lockstep with INDOPACOM [Indo-Pacific Command] and the Navy Task Force Commander on the de-fueling of Red Hill. We have assets ready to support and we are on track to meet all of their needs.

The posture in the Indo-Pacific is still under assessment. We are in our role as the global bulk fuel manager for the Department of Defense. We are looking very closely at the posture requirements, the requirements to ensure that we can buy fuel or store fuel, and also what needs to be afloat and what should be in in various areas.

We are still doing that assessment. We are working with INDOPACOM on the section 333 report that should highlight the key aspects of that posture.

Senator HIRONO. As you are assessing how you are going to complete the safe de-fueling of the 100 million gallons or so that is that Red Hill, if you require anything further at this time to ensure that de-fueling happens in the way that we would want it to happen, will you let me and this Committee know.

General Cavoli, in war, it is often the most vulnerable who pay the highest cost, the elderly, women, girls. While it is vital that we continue to provide Ukraine with the military equipment it needs to continue to bulwark democracy in Europe, our support of the civilian population also speaks to our country's values and stands in sharp contrast with Russia and other malign actors.

What is the EUCOM doing to support and protect the people of Ukraine? How is EUCOM working with Ukraine and other United States Government agencies to monitor human rights abuses by Russia?

General CAVOLI. Thank you, Senator. First of all, we support NATO's and other European efforts in this regard. The first one, of course, was the acceptance by our allies of large numbers of refugees who were in the main—women and children. They have very successfully done that, and they did it spontaneously.

Our initial thought was we were going to have to help significantly, but the societies absorbed them. As they have done so, we have worked with them carefully through non-DOD entities, but advised by EUCOM—to make sure that rights are established. Then as we talk to our Ukrainian colleagues, we do keep our gender advisers and everybody involved as we develop plans with them.

The Ukrainians are remarkably sensitive to civilian casualties, of course, because those are Ukrainian civilians who will be inadvertently wounded in their operations. We routinely, in exercises here, even junior Ukrainian servicemen, saying, hey, wait a minute, you know, I know people in that town.

What are we going to do about this? It is a complex question, ma'am, but those are some of the things that we are doing to help. We do provide support to those organizations that are attempting to figure out war crimes as well, although we have not put people on the ground to do that.

Senator HIRONO. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Hirono. Senator Cotton, please.

Senator COTTON. Thank you both for your service and your appearance today. General Cavoli, you testified earlier that 31 Abrams tanks would arrive in Ukraine later in the year. Estimates I have seen say that we are still about 8 months away from that. Is that correct?

General CAVOLI. No, Senator. The first thing we are going to do is put a training set in——

Senator COTTON. That starts next month in Grafenwoehr, correct?

General CAVOLI. That is correct. Then the next set, the dates are moving right now. We are trying to accelerate as much as we can be——

Senator COTTON. The same tanks at Grafenwoehr are going to be the tanks that go to Ukraine?

General CAVOLI. The first set will not. Those will be training tanks that we keep and then will send a different set in. We did the same thing with Bradleys earlier this year, sir.

Senator COTTON. Okay. General Van Ovost, have you received an order to transport that second set of tanks to Ukraine yet?

General VAN OVOST. Senator, I worked very closely with European Command to meet all of their requirements in a priority manner. Certainly, we are in coordination on the tanks, as well as all the other significant equipment.

Senator COTTON. Is that a, no?

General VAN OVOST. We anticipate the movement. From an order perspective, we are ready to move it.

Senator COTTON. Sounds like a no. General Cavoli, you look like you have something to say here.

General CAVOLI. Yes. My command has not issued a specific date for movement for those yet. As soon as we have the exact sourcing pinned down with the timeline, we will issue the actual order for the aircraft.

Senator COTTON. Why has your command not issued that order?

General CAVOLI. Can I take that for the record, Mr. Cotton? Because I would like to give you the exact—the exact status of it.

Senator COTTON. I mean, we our country has thousands of main battle tanks. It would seem like it's not that hard to find 31 and get them there.

General CAVOLI. Senator, some of the reasons for that I could cover in closed session, but if I could——

Senator COTTON. I guess. I think the main reason for that is the main reasons why we didn't even agree to supply the tanks for a year, which is that President Biden didn't want to supply them.

Again, I think we could supply them faster than 8 or 9 months if there was the political will. It is not a decision for you or General Van Ovost to make. I think it is just reflected from the political decision to continue to drag our feet in what we are supplying to Ukraine. It is just a repeated story we have seen over and over again throughout the course of this war.

I want to get to one of the potential reasons for that as well. You talked earlier about submitting new OPLANs [Operational Plans] for NATO. It came to my attention earlier this year that we have not changed our OPLANs or our warfighting requirements in EUCOM for Russia. Is that correct?

General CAVOLI. Senator, I am in consultation with the Secretary of Defense on that question right now. The question that has been posed to me and we are working our answer with the staff.

I believe I have a date with the Secretary of Defense later this month or next month to discuss in detail and to come to a conclusion on what timeline we will or will not adjust for the answers.

Senator COTTON. So that is a no then. Once again, that is a no, we haven't changed our requirements in the OPLAN to fight Russia.

General CAVOLI. Could we discuss exactly what we have done with OPLANs in closed session, sir?

Senator COTTON. Again, we can, but I think the question has been answered now, and the reason I highlighted is the Committee is continuously told that, by the Administration, not by uniformed military officers, that we can't provide this, that, or the other weapon to Ukraine because we need it for our own requirements.

I understand that, special requirements in the Western Pacific against China, but if we still have the same requirements in place to fight Russia in April 2023 that we had in February 2022, after we have seen the performance of their military in Ukraine and after the known degradation of their military in Ukraine, then I think that is just a pretext that the Administration is using for not supplying more capabilities to Ukraine.

We can get into more detail in closed setting, but I think it is very troubling that the Administration is still stuck in the pre-Ukraine war mindset of what it would take for us to adequately deter or defeat Russia in a conflict in EUCOM.

One final point I want to raise is the flying of our MQ–9 drones in the Black Sea. Russia dangerously downed one a few weeks back. The reports I have seen and what I have heard from my sources is that we have now altered our flight patterns in the Black Sea, that we are no longer flying in the same airspace where we were flying before that negligent incident with the Russian aircraft. Is that correct?

General CAVOLI. Yes, Senator. It was not just negligent. It was not competent. The Russian pilot bumped into the MQ–9, which is not something pilots typically do on purpose. Again, on ISR operations, especially in the Black Sea, I would be delighted to answer you in detail in closed session.

Senator COTTON. Well, I asked the Secretary of Defense this recently, and he repeatedly said, we will fly the paths we felt necessary to collect intelligence information.

General CAVOLI. Those have been his instructions to me.

Senator COTTON. I understand that. But again, that is not a—that is not a no, when I was asking him that. That is—to me, that is him saying we are not flying where we were anymore because we don't want to be provocative, which again, is a political decision, is not a military decision. This is not some secret.

I mean, Russia knows where we are flying these aircraft like anybody here could find out we are flying them for the most part just by going on open-source information. If we are flying those aircraft in certain airspace in the Black Sea before that incident, because that is where we thought we needed to get intelligence, and now we are saying we can get that intelligence by flying them somewhere else, well we shouldn't have been flying there in the first place.

If we needed to get in there to get that intelligence in the first place, then we should be back there, otherwise we are simply ceding that airspace to Russia. My time has expired. I guess we will address more of these in closed setting.

Chairman REED. Thank you, Senator Cotton. Senator Gillibrand, please.

Senator GILLIBRAND. General Cavoli, last year we passed the Justice for Victims of War Crimes Act, improving the Department of Justice's ability to prosecute war crimes committed in Ukraine. However, prosecutors, whether in the United States or in an international tribunal, cannot proceed with cases without evidence.

How is EUCOM working with Ukraine and with our allies to preserve evidence of war crimes? If your personnel discover evidence of a war crime through classified systems, are you ensuring that the evidence is flagged for declassification and eventual used by prosecutors?

General CAVOLI. Senator, thank you. We don't have the lead on this question, on this initiative, obviously. We do support it, as requested. When we find evidence of war crimes, whether in open sources or any other way, we do refer those and we do keep track of them. Yes, ma'am.

Senator GILLIBRAND. Thank you. The war in Ukraine has allowed the world to observe wartime operations in the cyber and space domains. As a combatant commander in the theater where this conflict is occurring, what have you learned from the conflict about the employment of military forces in the cyber and space domains?

General CAVOLI. We have learned a ton, both in terms of adversary capability and capacity, Senator, as well as our defensive needs. We are working hard to improve where we need to improve.

Most of all, we are working to help our allies defend their networks and to help our partners who are vulnerable also to defend their networks. We have a very tight cooperation with Paul Nakasone and his U.S. Cyber Command to do this.

There are some specific things, of course, that at a classified level would be interesting to talk about. In general, we have seen a significant employment of cyber, both inside the conflict zone and outside the conflict zone, on the part of our adversaries, ma'am.

Senator GILLIBRAND. General Van Ovost, TRANSCOM is turning over responsibility for servicemembers' permanent change of station moves to a private contractor. How will the Department ensure the servicemembers' experience actually improves under this contract? How does the Department intend to respond if military families' experience worsen rather than improve?

General VAN OVOST. Senator, thanks for the question. We are focused on delivering the quality, service, transparency, and accountability that is not existent in the current series of contracts.

So, we are partnering with Home Safe, and we have a measured phasing plan with 28 separate metrics monthly that we will be reviewing for which we own the data. So, we are going to continue to watch them as they bring along the capacity, as they begin right after peak season, September 2023.

We have a spouses group where we are getting feedback from, actively seeking from them their experiences. Our first sample rate is going to be about 50 percent. We are going to definitely be understanding how they are bringing on the capacity and are they delivering on the quality that we desire.

Senator GILLIBRAND. Thank you. Part of your strategy for TRANSCOM has involved the increased use of commercial contracts for defense missions rather than military aircraft and crews.

Can you discuss how you are ensuring that these contracts are implementing appropriate and aggressive cybersecurity protocols? How are you including cybersecurity in these contracts, and how are you verifying that these contractors are not endangering the security of our military personnel or allies?

General VAN OVOST. Senator, cyber is a consistent discussion point amongst us and our transportation service providers. We are collaborating with industry. We have contract cybersecurity standards to safeguard defense information in those contracts. They annually assess them and we review those assessments.

We are working throughout the department with Paul Nakasone on sharing and collaboration initiatives with our industry partners. I appreciate Congress's support of the no cost cybersecurity offerings offered in the Cyber Collaboration Center and the defense industrial based cyber security program.

Our transportation service providers are taking advantage of these, and we are assessing them almost constantly.

Senator GILLIBRAND. General Cavoli, following up on Senator Shaheen's question and Senator Hirono's question about Iran and China, can you talk a little bit more about what the impact of Iranian involvement and Chinese involvement in the conflict create, and what recommendations you have to the Administration?

General CAVOLI. Yes, ma'am. So, the first complication is diplomatic and political, right? The fact that they don't condemn. The fact that in some cases they affirm Russia's position. Second, Iran, as we noted a few minutes ago, has provided some material support, specifically drones.

Those have had an effect. Those do two things. First, when they succeed, they strike targets, and second, they have to be countered. Sometimes they are countered with air defense missiles.

As Chairman Milley and Secretary Austin have made very plain, the primary requirement the Ukrainians have right now is ground based air defense to control their skies. It is a cost imposition strategy that should go after with that. Chinese aid has been non-material and it has not had a direct physical effect on the battlefield yet, ma'am.

Senator GILLIBRAND. Are there any other impact non-material?

General CAVOLI. In closed session, I could discuss one specific one, ma'am.

Chairman REED. Thank you, Senator Gillibrand. Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman, and thank you to both of you for your service to our country and to your families as well. Thank you also for your teams that are with you today, and their families as well for their service to our country.

I just want to followup a little bit. The line of questioning that Senator Cotton began here is one that I think I would like to understand a little bit more clearly. There—I believe there were 31 Abrams tanks that were committed to by our country to Ukraine's defense. Are those—in that 31, do those include the training tanks that are already in, you know, in Europe today?

General CAVOLI. Senator, there will be 31 Abrams as of right now, donated to Ukraine. The training set will be a separate set.

Senator ROUNDS. Okay, and so, you have got some there in Europe right now. Do you have the 31 identified as being already in Europe or are they in the United States?

General CAVOLI. Senator, if I could, I would like to take that for the record so I can give you the exact location.

Senator ROUNDS. I don't need the exact location. I was just curious if they were within your area of operation today in Europe.

General CAVOLI. Senator, again, I would want to give you an accurate answer, and I don't have it off the top of my head, sir.

Senator ROUNDS. It would seem to me that if we have committed for those tanks to be made available, what is the length of time from when you are notified that it is time to deliver them? How long does that take—and perhaps this is a better question for General Van Ovost—how long does it take to actually deliver the Abrams tanks once you have been notified or requested to deliver them?

General VAN OVOST. Senator, we have multiple avenues to deliver Abrams tanks, by air or by sea. We consistently look not just at Abrams tanks, but the significant amount of aid that is being provided to Ukraine.

We source that from around the globe, not necessarily just out of CONUS [Continental United States] or just out of Europe. As we determine where the sources are going to be, we match it to the best resource to move it to meet the timelines as needed by the priorities set out by the European zone.

Senator ROUNDS. So, you are prepared to make that move as expeditiously as possible once you have been given the orders to transport the tanks?

General VAN OVOST. Yes, Senator.

Senator ROUNDS. Where would those tanks be located at today if you were to do them? Can you share that in an open session?

General VAN OVOST. Senator, again, I don't know where all the tanks are and which ones would be viable for this donation. I would leave that up to Army Materiel Command and——

Senator ROUNDS. So, it hasn't gotten that far yet.

General VAN OVOST. Not to my awareness, has gotten that far.

Senator ROUNDS. All right. Thank you, and, General, once again, the orders, or at least your authorizations to move tanks over. You will play a part in that, but you have not been given the authorizations yet to do that at this time?

General CAVOLI. Right. When the exact tanks are identified and their location. They could come from stocks in Europe, as General Van Ovost just pointed out. They could be reconstructed.

When I have got the set identified, then I place an order with General Van Ovost, and it usually goes fairly quickly, sir. They can be moved by air or better by sealift.

Senator ROUNDS. I think it is fair to say that we probably have the best logistics capabilities of any country in the world, and that is a testament not just to the men and women that serve within that, but also because we do a good job of planning.

I think the reason why I am following up on this, and I recognize this is not a line of questioning that you really want to go down, but I think it is important to point out that this is not a case of where we just simply can't deliver 31 Abrams tanks.

Bottom line is that this has been a policy decision that they are not prepared to deliver 31 Abrams tanks at this time. It is not within your authorization. General, would that be a correct statement on my part?

General CAVOLI. Senator, there is an intention to deliver the 31 tanks. I think there are some technical things that we have to go through in terms of exactly which tanks, that we are working on.

Senator ROUNDS. But the bottom line is, is if we needed those tanks, it shouldn't take 8 months for the United States Army to be able to access 31 Abrams tanks. If we needed them tomorrow, we would get them very, very quickly. If you needed them, you could get them.

Or if you were authorized to get them, you could get them. This is not a case of us not being able to get them. It is a matter that somebody has got to make a decision on when they want those tanks delivered. Is that a fair statement, General?

General CAVOLI. Sir, I think the key is exactly which tanks and which capabilities, and their levels of classification that the Army has to wade through on that question for releasability, sir.

Senator ROUNDS. Fair to say, though, sir, that should never take 9 months. If you needed those tanks, you could get those tanks.

General CAVOLI. Sir, if I needed those tanks for the U.S. Army, I certainly could.

Senator ROUNDS. Yes, Okay. That is very helpful. Thank you, General. I recognize this was not the line of questioning that I wanted to go down today, but this, I think, is important to understand that those decisions need to be made and that this is not within your area of operation.

You are ready to go. You can get it done, but someone has got to tell you, it is time to go. I want to thank you for those very frank answers. I also, I am mindful that my time is expiring, but I just have to also say, I want to take home just to thank you and your staff for resolving an issue that the South Dakota Army National Guard's 129th Mobile Public Affairs Detachment had in getting its meals paid for while deployed in support of Atlantic resolve.

It takes a total force to defend the Nation. The Guard is a key component to that force, but sometimes the pieces just simply don't fit together very well. I want to thank you for going the extra mile to take care of these soldiers, even while tending to the strategic issues that you are responsible for. I want to just publicly say thank you for getting involved and getting that fixed for these young soldiers.

General CAVOLI. Senator, my command was wrong in that case. We appreciate your care for your constituents, and for bringing it to our attention, and we are rectifying it.

Senator ROUNDS. Thank you, sir. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rounds. Senator Kelly, please.

Senator KELLY. Thank you, Mr. Chairman. Thank you both for being here today. I have a question for each of you. First, I want to start with General Van Ovost on the tanker recapitalization plan.

The Air Force has modified this approach in order to accelerate the next generation air refueling system, NGAS. Having a modern and survivable tanker plan is critical to any future fight. It is also part of strategic deterrence.

As you know, the Arizona National Guard provides a significant amount of support for rapid mobilization, worldwide deployment, airlift, aeromedical evacuation, and sustained aerial refueling operations for both our Air Forces and the Navy, and partner nations air forces. The 161st air refueling wing fleet is now more than 50 years old, and it remains in really high demand.

General, what can you share about the Air Force's plan to recapitalize Arizona's National Guard tanker mission, as well as the other Air National Guard units supporting this mission across the country?

What I am getting at is what is the plan here, and for Arizona specifically to get either a KC-Y bridge recapitalization tanker, or to continue with the KC–46 until NGAS comes online?

General VAN OVOST. Senator, thanks for that question. You know, our ability to project and sustain the Joint Force without fail is a deterrent to our aggressors, and it assures our allies and partners we will be there, and air refueling is the backbone to that. Along those lines, thank you for your support.

The Total Force, we could not do our job in in logistics and mobility without the total force, the strength of the total force. I use them every day, so I thank them for their service. As far as the recapitalization, as we work with the Secretary of the Air Force, the Air Force staff, they are committed to a continuous recapitalization program, because when we get the last KC–46 on the current contract, 179th aircraft, we will still have 287, 67-year-old KC–135s.

They have committed to a very targeted modernization program for the KC–135, which need to last us out into the 2040's, to ensure the safety of the airplanes and the survivability of those airplanes out into the future.

Meanwhile, they have committed to a continuous recapitalization program with capabilities that are relevant to the KC–46 Block 1, because as they accelerate next generation air fueling system to the left to the mid–2030's, we will have a gap of 6 or 7 years there where we won't have any production of airplanes.

I look forward to their plan. They are doing an analysis of alternatives. I look forward to their plan to continue to seed and recapitalize with all of our air refueling units, because in the end, all of those KC–135 need to be recapitalized.

Senator KELLY. Okay. Can I get your commitment to work with me to ensure that the Guard will receive modernized tankers in a timely fashion comparable with Active Duty units?

General VAN OVOST. Yes, Senator. I will work with you and the Air Force on that.

Senator KELLY. Thank you. Thank you. General Cavoli, good seeing you again. We met in Munich and I just got back in Kyiv a couple of weeks ago, met with President Zelensky for over an hour. We had a very productive talk about what he thinks he needs to defeat Russia. I am more than ever committed to support Ukraine.

We can't let Russia win this thing. Last week, Congress was notified of a Presidential drawdown authority for more HIMARS, 155-millimeter artillery rounds, and a series of other equipment.

Just for me to get to the point here, in your military assessment, is the equipment of the United States and our partners providing enough to pave the way for a decisive victory against the Russians by Ukraine?

General CAVOLI. Thank you, Senator, and thank you for the notes on your recent trip to Kyiv as well. They were very helpful to me. We went into a planning process with our Ukrainian colleagues last winter, and we developed with them a number of courses of action, wargaming them carefully.

When we came down to the key courses of action for an offensive, we calculated the amount of equipment and the various types that they required, and we have fulfilled that. We have nearly gotten everything into Ukraine, and I am confident they have what they need for the offensive that we have planned with them. I can go into significant detail in a closed session with you, sir.

Senator KELLY. Okay. We will pick it up then. Thank you. Thank you, General.

General CAVOLI. Sir, thank you.

Chairman REED. Thank you, Senator Kelly. Senator Ernst, please.

Senator ERNST. Thank you, gentlemen, very much for—or excuse me, ma'am. Thank you, sir, General Cavoli, for being here today, and General Van Ovost, thank you very much, ma'am, for coming in front of the Committee today.

I am going to start with you, General Cavoli. A number of my colleagues have raised the issue of Ukraine and Russia, and what we hear in the news, and this has been a hot button topic with the Administration as well, is that we are afraid of escalation. As the war continues to go on, we will escalate, Russia will escalate.

General Cavoli, how do you assess the prospect, or excuse me, the prospect of Russia escalating to a point of a nuclear weapons use in this conflict? Can you talk in open session just broadly about what you see, what you have heard, and what would that be that tipping point for Vladimir Putin?

General CAVOLI. Thank you, Senator. It is nice to see you again. Of course, this is a complicated and difficult question. There are an enormous variety of things that go into successful deterrence and successful escalation management. It is something we work on every single day.

I am in constant communication with the Department as well as my subordinate commands, as well as our allies in terms of what we are doing, where we are located, what is happening inside of Ukraine, what is happening outside of Ukraine.

To include with my fellow combatant commanders, many of whom have Russian presence in their AORs [area of responsibility] as well, successful so far, right. We have managed to control every incident to the extent possible, and I think that is due to a lot of hard work and learning as we go along.

With regard to nuclear escalation specifically, ma'am, it is very difficult to talk about in an open session, but I have traveled back to the United States to deliver testimony, so I obviously have a certain degree of confidence that we, the United States and the alliance are in a good, strong position in deterring such things.

Senator ERNST. Yes, thank you very much. I appreciate that. We hope that we continue on a strong path of deterrence in that area. With the other assessments out there of President Zelensky's wishes to not only expel the Russians from Eastern Ukraine, but also to retake Crimea, what is your assessment of their ability to retake Crimea, and what would the posture be coming from the United States and our partners and allies?

General CAVOLI. Thanks. The question of retaking any specific piece of ground depends on a variety of things. Crimea is pretty tough. Crimea has got a mountainous center.

Of course, Crimea is pretty hard to keep resupplied if you are the adversary as well. It really depends on the situation at the time. If Crimea were empty of Russian soldiers, it would be easy. If Crimea were defended at a certain level, it would be harder, and it is hard to see where things go.

What we do know is that any such question would be answered sequentially with the activities—after the activities that the Ukrainians are planning to undertake in the next months. It is hard to say from here.

Senator ERNST. Yes. Thank you very much. As we look to the future, and I know we don't know when this conflict will end, we hope it would be soon, but General Cavoli, would NATO's military requirements in EUCOM increase if there is a political decision to extend a security commitment to Ukraine?

General CAVOLI. Our posture, the U.S. posture has shifted over time, of course, ma'am. In the initial phases, we went up about 103,000 uniform. We have adjusted that over time. We are about 82,000 in uniform right now, and that depends on what we see going in the AOR.

It is a constant back and forth with the Department and the situation. If we were to extend some form of security guarantee to Ukraine, it would clearly depend on exactly what the nature of the security guarantee was. It would also depend, importantly, on what approach our allies took to that.

Our allies are increasing their defense commitments. Many of our Eastern flank allies, such as Poland, have made massive investments, 3.94 percent of GDP right now, which exceeds U.S. expenditures on defense.

It depends on what role they would take as well, and that would certainly be our choice, our preference to have them lead in such a situation.

Senator ERNST. I see that my time is expiring, but part of that equation as well, I would like to discuss further at another time, but our continued participation in the State Partnership program, especially with a number of our European partners.

Obviously, Iowa is partnered with Kosovo. There is a lot of concern with some of those nations as well with Russian influence. I think they can be an extremely important part of that solution.

General CAVOLI. Ma'am, I am the biggest fan of the State partnership program.

Senator ERNST. Thank you very much. Thank you, Mr. Chair.

Chairman REED. Thank you very much, Senator Ernst. Senator Blumenthal.

Senator BLUMENTHAL. Thanks, Mr. Chairman. Thank you both for being here and for your extraordinarily service to our Nation.

To each of your teams, some of them behind you, my thanks as well. General Cavoli, I have been to Ukraine three times over roughly the last year, plus. I have also, by the way, visited the training area in Grafenwoehr, and I have been just immensely impressed not only by President Zelensky on the three occasions that I have spent time with him and everyday Ukrainians, but his military team, and our team training Ukrainians.

Their dedication, their bonding, in fact, in providing the hands-on skill they need to operate the Bradley and Stryker vehicles. I think it is a great tribute to our military that we have committed in the way that we have, not just at the 30,000-foot level, but literally person to person, hands on in the way that we have.

I am deeply troubled as I view the assets they have and the assets that we could provide. You have just testified in response to

Senator Kelly that your belief is that they have what they need to be successful in the counteroffensive this spring in the South and in the East. Is that correct?

General CAVOLI. That is correct, Senator.

Senator BLUMENTHAL. Our mantra is that we never want to see a fair fight. Do they have what they need to have an unfair advantage in this offensive going forward?

General CAVOLI. Sir, they have to be better than the Russian force they face, and there are great weaknesses in the Russian force they face right now. Those weaknesses are temporary and the Russians will improve their posture and their capabilities over time. Time and the enemies, the Ukrainians' enemies' capabilities is an important factor in this.

Senator BLUMENTHAL. Don't they need more?

General CAVOLI. I believe that they will have what they need.

Senator BLUMENTHAL. Sorry to interrupt—don't they need more air defense? Couldn't they use planes? What about more of the armored vehicles, even more tanks? Where would you assess the platforms that we can do more to provide to give them greater strength at this critical moment, because I assume you agree that if this counteroffensive is unsuccessful, it will be a significant setback for the Ukrainians.

General CAVOLI. Sir, yes, of course, there are things we continue to give them and that we will need to continue to give them over time. I may have mischaracterized things. We haven't delivered a force, and then that is it.

We continue to build with them and we have plans to continue to build with them over the summer and into the autumn. Then eventually we intend to help them restructure their entire military.

In the short term, ground-based air defense remains important. We have made some important advances in the last couple of months. I could be very specific about them in closed session, of course, sir, but I feel pretty comfortable about where we are and I am comfortable about where we are going in the next couple of months, sir.

Senator BLUMENTHAL. What about——

General CAVOLI. An army can always use more.

Senator BLUMENTHAL. Understood. What about planes? What is your assessment?

General CAVOLI. Sir, they have just received a bunch of MiG–29s from two of our allies. They have begun to employ some of those MiG–29s. They have a few dozen aircraft right now. They are conducting offensive as well as defensive operations with them right now. I think they are key to controlling their own airspace right now. However, it is ground based air defense, as you pointed out a minute ago, sir.

Senator BLUMENTHAL. The Washington Post reported yesterday that leaked United States intelligence indicated that the Russians can fund the war in Ukraine for at least another year. Do you agree with that assessment?

General CAVOLI. Sir, I can't talk specifically to the undisclosed—to the unauthorized disclosures. Clearly, there are investigations going on and everything like that. However, it is important to note that, as General Milley has said on a number of occasions, the Rus-

sians have strategic depth, they have manpower, and they are not to be underestimated in terms of their ability to endure.

Senator BLUMENTHAL. So, you don't disagree with the conclusion that they could fund the war for another year, which again heightens the importance of the counter offensive.

General CAVOLI. As completely separate from what may or may not be in any documents——

Senator BLUMENTHAL. Yes——

General CAVOLI. Yes, no, I think they can fund for another year, sir.

Senator BLUMENTHAL. One last question, sir, just following up on Senator Cotton's question.

You may not be aware, but four of us wrote to the Secretary of Defense on March 21 asking that our warfighting requirements in Europe be updated to reflect the degradation of Russian forces, 200,000 or more of their troops killed, significant damage to their armored vehicles, and so forth, because obviously it is a different force than it was when those warfighting requirements were devised.

Putting aside the timing, wouldn't you agree in your professional capacity that those warfighting requirements do have to be updated?

General CAVOLI. Absolutely. When we can assess the exact status, Senator, of the capabilities, the capacity, and the disposition of whatever Russian army emerges from this, absolutely, we will update that stuff.

I am in contact, as I mentioned to Senator Cotton a moment ago, with the department about this. I would point out one or two things, though. The Russian army inside Ukraine today is bigger than it was at the beginning of the conflict. We have to make sure we got the right-side picture, and that is what I am working on.

Separately, sir, I thank you for your visits to Grafenwoehr, your kind words about our soldiers and our NCOs who are absolutely putting the ball over the left field fence every day. All components, all three components every day, and I invite all Members to please come visit those soldiers at Grafenwoehr and see what they are doing for our country.

Senator BLUMENTHAL. Thank you.

Chairman REED. Thank you, Senator Blumenthal. Senator Scott, please.

Senator SCOTT. Thank you, Chairman. Thank each of you for being here. Thank you for what you do.

I just had the opportunity to go to Greece and Cyprus a couple weeks ago, and that was with Admiral Sciretta and some other sailors. You really have to admire what people are doing. General, can you talk about the importance of Cyprus and the importance of making sure we continue to allow them to get the military equipment that they need?

General CAVOLI. The Eastern Mediterranean in General, Senator, thank you for bringing it up, it is a complicated area and it is an area that has seen greatly increased competition, as well as Russian naval presence in the past few years.

The establishment of the naval base in Tartus has been an important part of that. In my NATO role, we devote a lot of attention

to that, and we have a couple of operations, maritime operations and air operations, that help us with that.

In my United States role, Naval Forces Europe, work extensively down there. One of our requirements is to be able to project power into the Eastern-Med, and Cyprus is ideally located to do that, as you know, and does figure into some of our thoughts in that regard. We keep a strong military to military relationship with Cyprus, sir.

Senator SCOTT. Cyprus—it is in our best interest if Cyprus continues to buy American equipment rather than rely on Chinese and our Russian equipment.

General CAVOLI. Sir, American equipment sharing and equipment set with another nation creates a strategic bond as well as a practical bond that is very useful.

Senator SCOTT. Yes. I want to thank you and everybody in Europe for all their efforts to make sure Ukraine wins.

You ever talking to just somebody that is not very political and doesn't really think about geopolitics? What would you tell them is a reason why we ought to be involved in the Ukraine more with—as, and all the help we give them? What would your pitch be?

I mean, just think about it for a second. Americans are saying, we have spent—I think we have committed $100 billion plus to this, and that is clearly a lot of money. So how would you—what would you say to people?

General CAVOLI. Sir, thank you for the incredibly important question, right. The first thing I would tell just one of my cousins or something like that is that America does not like bullies and having bullies around does not help America.

That is step one, and Russia is a bully, and we need to deal with that. We need to help those who stand up to bullies to deal with that. Second, the United States doesn't let adversaries control things that are valuable to us, and that part of Europe is valuable to us, and so is Europe in General.

If Ukraine loses, then more at Europe is at stake, and we don't let that happen. Then finally, I would say just in a self-interest sense when I was a lieutenant and came in the Army in the 1980's, we had more than 300,000 United States servicepeople stationed overseas because of Russia, because of the Soviet threat, and we don't need to return to that. We don't need to return to that.

Ukraine deserves help so we don't have to.

Senator SCOTT. General, when you look at, and like on this chart, do you see where your troops are, your servicemen and women are stationed, is there any logic to moving more people out of places like Italy and Germany, and closer to where there is more risk?

General CAVOLI. Thanks, Senator. Yes, of course, there is. We have done that as the risk has gone up. We have shifted forces on temporary deployments out to the East, and all of the reinforcement just about that have come in have gone out to the East.

Moreover, in the past year, the Department has announced the intent to station some new organizations in Europe, the Fifth Corps headquarters forward is in Poland. A new special logistics base has gone straight into Poland. We have shifted a combat aviation brigade on rotation out to Poland.

We have a permanent rotation—we have an enduring rotational presence in each of the three Baltics. We have a division head-

quarters and a brigade combat team in Romania. So, we have done a significant shift to the East.

The forces that are left in places like Italy and Germany are well positioned for deployment to reinforce the correct location. They have Got Good Readiness facilities, training facilities, and they have good infrastructure for deployment. They give us flexibility as we go forward, sir.

Senator SCOTT. Thank both of you.

Chairman REED. Thank you, Senator Scott. Senator King, please.

Senator KING. Senator Scott, when people ask me that question, why are we there, my short answer is Google Sudetenland, 1938. Hitler could have been stopped and 55 million lives could have been saved.

To me, that is the most compelling argument. If Putin is successful in Ukraine, then we are going to be facing threats in the Baltics, Poland. He has said that he wants to rebuild the Soviet Union. General, I just want you to know that the concern about tanks is bipartisan. I am very frustrated that those tanks, they ought to be sitting in Chechlo, Poland right now, ready as soon as the training is done.

This counteroffensive that everybody is talking about, it is the longest wind up for a punch in the history of the world, is going to be trench warfare and it is going to involve tanks. That is why the tank was invented at the end of World War I. If our tanks don't get there until August or September, it may well be too late.

I just want to urge you to urge—I know it is—you have done, you both have done an amazing job of logistics and working with the Ukrainians and integrating and supplying them with what they need. This tank story is not satisfactory. The decision has been made, okay. Then let's get ready to execute it and cut through whatever the red tape is. I know we have got to do the training, but the tanks should be sitting there in the Polish border ready to go when that training is done.

I just hope you will take back that this is a bipartisan concern on this Committee that, you know, coming in at the end, after the counter offensive is just—that will be looked on as a tragic mistake. I learned 5 years ago that the Russians have a doctrine called escalate to deescalate.

That they will use tactical nuclear weapons if they believe that they are about to have some kind of catastrophic loss on the battlefield. You were asked earlier, but I want to put a finer point on the question, isn't it at least within the realm of the thinkable, that Putin would use tactical nuclear weapons if indeed he felt that Crimea was at risk, or if there is a significant breakthrough by the Ukrainians in the South and East?

General CAVOLI. Thanks, Senator. It has certainly been mentioned by members of the Russian Government as well as by observers on the Russian political scene, that is the potential or the possibility for using nuclear weapons.

Senator KING. This is part of their military doctrine, going back before this invasion.

General CAVOLI. Yes, sir. The exact conditions under which they would do that, I think, are not completely known and might not be

completely known to them. They might look good on paper, but then when the moment comes, it might be harder to decide.

We have some insights into it, Senator, that I would be, of course, eager to share with you in closed session. As I said a few moments ago, our deterrence, our escalation management so far, as well as our deterrence, have held very well so far, and I feel comfortable where we are right now.

Senator KING. Deterrence is the key. They have to understand that there will be a response that would be very costly to them. Deterrence is the heart of our, as you know, of our entire military strategy. Iron Dome. Wouldn't Iron Dome help? Why don't we have Iron Dome in Ukraine?

General CAVOLI. Sir, Iron Dome clearly could help, and the things that we have provide help also.

Senator KING. Oh, I agree. Iron Dome seems to be particularly calibrated to the kind of low-level attacks that are coming in by drones and missiles.

General CAVOLI. Yes, I can't speak to exactly why Iron Dome in particular is not there, sir. If I could defer that to the working group that develops those solutions.

Senator KING. I would—if you could take that for the record, I would really like to know. Because we certainly help to fund the development of Iron Dome, and it just seems to me that it fits in this situation.

We have moved Patriots in, and as you mentioned earlier, air defense is one of the most crucial things that the Ukrainians need. I would like if you could take for the record some thoughts on how we could move forward with Iron Dome.

General CAVOLI. I sure will, Senator King. Thanks.

Senator KING. You have talked about China. It seems to me China can play either a useful role or a destructive role, and the jury is out on which direction. We have seen some hopeful diplomatic moves in the last 24 hours, but if they start supplying significant material to the Russians, that also could tip the balance in the wrong direction. Would you agree to that?

General CAVOLI. I absolutely agree with that, Senator.

Senator KING. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator King. Senator—I believe Senator Budd.

Senator BUDD. Thank you, Mr. Chairman. Again, thank you both for your service. It is great to have a former deputy commanding General of the 82d Airborne Division before the Committee, so thank you for your service, especially in North Carolina. General Cavoli, I have a few questions I would like to ask about our foreign military sales process.

I have asked these questions, similar questions of other geographic combatant commanders, and I am hoping to finish this up with you. I would appreciate on the first part, just yes or no on each one.

Then at the end, I will have an opportunity for you to expand, if you would. Is the current foreign military sales (FMS) process, is it fast and flexible enough to meet our foreign partners' security needs in your area of responsibility?

General CAVOLI. No, Senator.

Senator BUDD. Does the transfer of U.S. defense articles build our partners' capacity to provide for their own defense?

General CAVOLI. Absolutely, Senator.

Senator BUDD. Does the FMS increase the interoperability between the U.S. military and those countries we sell defense articles to?

General CAVOLI. Absolutely, Senator. It is one of the most important aspects of our foreign military sales.

Senator BUDD. Thank you. Given the outstanding performance of United States defense systems in Ukraine versus the lackluster performance of Russian systems, are you seeing an increase in FMS requests from our European allies and partners?

General CAVOLI. Without a doubt, Senator, there is an enormous appetite around the world for U.S. armaments right now.

Senator BUDD. Thank you. What particular systems are in demand right now?

General CAVOLI. Sir, the ones that have been on display. The HIMARS system, the GMLRS [Guided Multiple Launch Rocket System] rockets, radar systems, the Patriot missile system is in high demand. But I would point out that just about all U.S. armaments are looked upon around the world with great desire. There is great appetite for them.

Senator BUDD. Thank you, General, and from your view, how are these FMS challenges impacting strategic competition with China and Russia on the European continent?

General CAVOLI. Well, sir, in Europe specifically, they don't impact too much because the Chinese and the Russians aren't selling too much war materiel inside Europe. Clearly not to NATO, for example.

In fact, our European allies with our assistance are in the process of divesting their Soviet era stuff. However, as you may know, I used to be the Commander of United States Army Europe and Africa.

In places like Africa, it is very difficult for us to compete if it takes us a long time to deliver a set of Humvees to a nation, but it takes China 6 months to put them on a boat and roll them in there. It gets hard to compete in that regard.

So, speed is, I think, your point, speed in foreign military sales is an essential part of delivering the influence that we seek when we conduct those sells.

Senator BUDD. Thank you, General. General Van Ovost, in North Carolina, we couldn't be more proud of the military ocean terminal, Sunny Point, and I had a chance to visit recently, and the 596 Transportation Brigade, the unit who ever sees it.

In the past, there have been concerns about staffing and funding shortages at Sunny Point and the Nation's other terminals. Can you please provide an update on those issues and what resources, if any, are needed to ensure these critical transportation nodes are prepared to support the Nation's needs?

General VAN OVOST. Thank you, Senator. Thank you for visiting MOTSU [Military Ocean Terminal Sunny Point]. It is a critical ammunition outlook location for America. As we look at both MOTSU, and MOTCO [Military Ocean Terminal Concord] in California, we are working closely with the Army and the Department of Defense

to ensure that they have the resources they need so that we can protect and keep the capabilities there.

As you probably know, infrastructure. I think about that, especially with contested logistics, that there—that those would be a point of interest for our aggressors to try to slow down. From a cyber perspective and infrastructure perspective, the berthing perspective, we want to make sure that they are working well.

The 596, I couldn't be prouder of the work that they have done to support General Cavoli and the outload to Ukraine. That is a really critical point for us. Their readiness, again, when I think about day-to-day readiness and readiness to the future, the number one thing you can do for us to ensure our readiness is to pass an on-time budget, because that cedes both time and money to the enemy.

Senator BUDD. Thank you, General. Chairman, just a question. I didn't see the time reset. Do I have time for one more question? Thank you. General Van Ovost, do you have any concerns about cyber-attacks that could slow down the flow of forces or material in crises or conflict? If so, what is TRANSCOM doing about it?

General VAN OVOST. Senator, cyber is one of the major concerns that we have because we have a large, what we call surface attack area, across the logistics network from end to end.

We are looking very closely at cyber hardening practices, not just in the U.S., not just under Department of Defense systems, but our civilian systems within the defense industrial base, and with our allies and partners. It is critical that we stay focused on that, and we have.

The other thing is our ability to command and control. We must have secure command and control, secure communications, and updated cryptographic materials so that we can maintain a consistent flow of logistics at a time and place of our choosing.

Senator BUDD. Again, thank you both. Chairman.

Chairman REED. Thank you, Senator Budd. Senator Peters, please.

Senator PETERS. Thank you, Mr. Chairman. Thanks to both of you for your service to our country. General Cavoli, nowhere in the world is the power of our alliances clearly more evident than what we are seeing in NATO right now.

Through the National Guard's bureaus State Partnership program, the Michigan National Guard has supported the alliance through our partnership with Latvia for now nearly 30 years.

One of the advantages of these State partnership programs is that it provides NATO an opportunity to utilize CONUS based facilities for training purposes. A complaint that I have heard from other combatant commanders is the lack of suitable training facilities in their AOR, and how that is going to—how oftentimes a complement or complicates partner force training. My question for you is, what is your current capacity for training in your AOR?

Given the renewed focus on our NATO allies, on defense issues, would you benefit from having a CONUS location that could be used for training similar to what the Latvians have been doing in Northern Michigan for many, many years?

General CAVOLI. Thanks, Senator. Again, as I mentioned a couple of moments ago to one of the other members, the State partner-

ship program is just invaluable to us in USEUCOM. I think the other geographic combatant commanders share my opinion.

Inside Europe, we have plenty of training capacity right now for the United States forces as well as for our allies. There is quite a bit in Western Europe of training capacity, training facility capacity, that existed for larger armed forces during the cold war. In our Eastern European allies, however, there are some things that we need to get done.

As you know, Latvia has been building quite a bit, has been improving quite a bit. Throughout the Baltics, it is necessary. It is necessary for a couple of reasons, not just for the host nation, but because in order to reinforce that host nation with NATO forces at a time of need, those forces would need to continue to train in place in the country to maintain the readiness necessary.

All three of our Baltic, as well as our Polish allies, are working hard on their training areas in that regard. Latvia's activities in the United States have been very useful to Latvia. They have other ones throughout Europe, and I think a good mix is a useful thing.

It is a useful thing, especially because it is useful for countries like Latvia to get a chance to go back to the states and to interact with their State partners on their State partner's home ground and see the way our systems work there as well. As a matter of strict capacity, not as necessary, but as a matter of benefit, it has been huge.

Senator PETERS. Great. Thank you. My next question for you, sir, is in your opening statements, you mentioned EUCOM's efforts to conduct activities in the information environment, in cyberspace, and electromagnetic spectrum to counter Russian aggression and other malign activities in Europe.

My question is, as the Joint Force moves toward data centric concepts to synchronize common operation pictures for the Joint Force, are you comfortable with DOD's current platforms for crowd management and the capacity to display an accurate common operations picture for not only our Joint Forces, but for our allies and our partners as well?

General CAVOLI. Thanks for the question, sir. I don't think you would find any of my combatant commander colleagues who is anything but eager for the advances that we are working on inside the Department right now, specifically the JADC2, the joint all domain command and control system, which is intended to link any sensor to the best shooter as quickly as possible.

In my case, being the Commander of European Command, as well as the Allied Command Operations Commander, it is imperative that that JADC2 be combined JADC2 so that we can share it with our allies.

In the allied space, no, sir, I am not satisfied. We have work to do, and I am eager for the efforts of the department to continue to bear fruit.

Senator PETERS. Thank you. General Van Ovost, during your testimony to the House Armed Services Committee and with me in our discussion in my office, you highlighted the ongoing challenges with contested logistics and the task to conduct air refueling missions within that contested and degraded environment.

Given these challenges and persistent threats, how are you working with the services to prioritize and really replicate training scenarios similar to potential threats from China, Russia, North Korea, and Iran?

General VAN OVOST. Thank you, Senator, for that question. Contested logistics is first and foremost in our minds on all of our development, our requirements development, and our exercise development out into the future, especially in things like air refueling, which is my most stressed ability.

We are working to try to first understand ourselves. We are using, what we just talked about here, with JADC2 to understand where our data is, the ITV [in transit visibility], to understand what is going on, what is in motion.

We are beginning to develop predictive analytics, to understand what needs to be moved in a predictive manner so we can marry up our scarce resources with the highest priority, something that we are doing today with Ukraine, being agile enough to change out our priorities.

I think about the exercise, as we lay down the exercise, we are trying to get after those gaps, giving them hard problems to solve, loss of command and control, loss of precision navigation and timing, trying to get understanding of commander's intent all the way down to the tactical echelon.

We are doing this not just in Europe, but across all of the continents, and with heavy, heavy emphasis in the Indo-Pacific.

Senator PETERS. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Peters. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. In 2014, after Russia moved into Crimea, NATO countries agreed to raise defense spending to at least 2 percent of their GDP by 2024.

Last year, 8 years after that pledge, only 7 of the 30 NATO countries met that goal. Prosperous nations like France and Germany still lag well behind that goal.

I know there has been some discussion about when we are delivering tanks, but we are talking about over the course of that period of time, billions and billions and billions of dollars from NATO countries that seemingly refuse to ante up to protect themselves and Europe.

General, I want to ask you a question. If those additional billions of dollars would have been designated for defense, wouldn't that have gone a long way in deterring Russian aggression?

General CAVOLI. Sir, thanks for the question. You know, first of all, you would have to look pretty far to find somebody who was a bigger advocate than me of all our allies spending 2 percent. In fact, in my confirmation hearings, I made clear that I consider 2 percent to be a floor.

Senator SCHMITT. Right.

General CAVOLI. There are shopping lists that have to be filled out there. There are readiness requirements that have to be filled out. They are going to require money, and I believe 2 percent is a floor, not a ceiling. Where we are right now—so in 2014, we had an average spending of 1.4 percent of GDP, sir, across the alliance.

Now we are at 1.8 percent, which is still short. We have got 10 allies, with the addition of Finland this year. We have got 10 allies who currently spend 2 percent or more. We have got 11 allies who have a credible plan to get there, some of them enshrined in law, to get there by 2024, which was the goal. But that leaves 10.

Senator SCHMITT. Yes, and I just, I have to tell——

General CAVOLI. I encourage them to do——

Senator SCHMITT. Yes, and I know you are in kind of a unique position with your role, but I have to tell you, you know, in the United States, I think it is like 54 percent of the share of the GDP of all those NATO countries, and we provide 70 percent of the funding. I think the American taxpayer is getting a little weary, essentially, of subsidizing these Western democratic socialist states.

When they are not investing in their military to defend their backyard, they are using that money on social programs that we may or may not agree with. But yet the United States continues to have to hold the bag. We are having legitimate questions today about delivery of weapons systems.

But I would argue that if they were actually meeting what they should be doing on their own continent, Russian aggression would have either been deterred or Ukraine would have what they need. I want to ask about one country in particular, France.

President Macron recently visited communist dictator Xi and said that it is not in Europe's interest to strongly support Taiwan and stand allied with the United States. I find this comment, by the way, totally insane.

Do you have a sense that France is on their way to meeting their NATO obligations, this amount of funding? Because that is a pretty bold statement for the president of a country that kind of refuses to live up to their own commitments.

General CAVOLI. Senator, I, of course read the coverage of those comments and everything. I think I will leave commentary on them to my civilian leadership.

Senator SCHMITT. Fair enough.

General CAVOLI. I am a huge advocate of burden sharing, sir, and I believe the plans that we are working in NATO will create the blueprint to get to that.

Senator SCHMITT. Well, that is probably a question more for Secretary Blinken. General Van Ovost, I want to ask you, after the disastrous withdrawal from Afghanistan by President Biden, what was left behind was $48 million worth of ammunition, 80 aircraft, 23,000 Humvees, 250,000 automatic rifles, 95 drones, 42,000 pieces—42,000 pieces of night vision, surveillance, biometric, and positioning equipment.

I mean, this is unbelievable, and of course, you were charged with scrambling and saving over 19,000 people from perhaps one of the most embarrassing moments in American foreign policy history. My question to you is, where did all that equipment go? Where is it? Do we know?

General VAN OVOST. Senator, I am not familiar with where the equipment is, but I can tell you that the Afghanistan retrograde presented a really unprecedented situation. We had a rapidly evolving security deterioration there on the ground, and I am proud

of how the United States servicemembers were able to evacuate and take care of our Afghan citizens.

Senator SCHMITT. No, I agree, and I applaud you for that. In fact, a serviceman from Missouri, Jared Schmitz, lost his life that day. I don't think we talk about it enough. I mean, and I believe this would be bipartisan.

What happened there is inexcusable. I just mentioned the equipment, not the loss of life, to compound all of that. I know you were charged with that, and just finally—well, I am out of time. I just—appreciate what you do, but the idea that we left all of that behind and lost those lives, and there is not a word of it.

In fact, I guess the most recent report was trying to blame a previous Administration and inject politics into this, which was just an abject failure by this Administration and we ought to get to the bottom of it and make sure it never happens again. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Schmitt. Senator Kaine. Excuse me. All right, Senator Rosen. Thank you.

Senator ROSEN. Thank you, Chairman Reed. I appreciate you holding this hearing. I would also like to thank Generals Cavalier and Van Ovost for testifying today, and for your service to our country. We really appreciate you.

General Cavoli, I want to talk a little bit about Ukraine, obviously, with both of you and a potential Ukrainian counteroffensive, because Russia has committed significant manpower and equipment to launch offenses in Ukraine this past winter.

We know that. Their gains have been limited and their losses, we also know, have seemed to be significant. Nonetheless, the defense of these towns has not come without cost to Ukraine.

My colleagues have been asking about sending equipment to Ukraine. Talking about the counter-offensive, you have been speaking about that, and I just want to buildupon that for a moment.

Let's just include drones in the conversation, right. What is your assessment of the use and effectiveness in the Ukrainian conflict of the short-range drones, the one-way attack anti-tank munitions that are being used right now?

Can you also speak to what lessons we have learned about these kinds of weapons for our own force going on in the future and our defense industrial base?

General CAVOLI. Thank you, Senator. That has been one of the most interesting developments in this conflict. It was prefigured a little bit during the Azerbaijan, Armenia war 2 years ago, when Azerbaijan used unmanned aerial vehicles extremely effectively. Both sides are using them very extensively.

Both sides are using surveillance drones, as well as armed drones, as well as one way attack drones. They meet varying degrees of success. They can be shot down. They can be shot down with small arms.

They can be shot down with standard machine guns. They can mostly be shot down with missiles as well. They can also be stopped with electromagnetic interference, and we see that going both ways.

That is providing a very good learning experience for us as we consult with the Ukrainians, and we are incorporating those

through our services and through our commands—we are incorporating those lessons to stay ahead of that EMI [electromagnetic interference], especially.

Some of them have been proven very effective and—as weapons, and some of them have proven pretty effective. We have been in an area of improvement, a cycle with regard to U.S. supplied drones, ma'am.

Senator ROSEN. Well, that is great. I am glad to—see, I like to followup with you on being sure we have enough R&D [research and development] and enough dollars in programs there for public partnerships, wherever that is, with Department of Defense, to expand these UAS [unmanned aircraft system] programs. They are really important.

That leads me into my next question about defense innovation, because in 2021, NATO launched the Defense Innovation Accelerator for the North Atlantic. We call it DIANA. The goal of DIANA is to sharpen our technological edge by working with the private sector to integrate emerging dual use technologies and rapidly scale these innovations, because things are happening right as we speak, right on the battlefield.

Lives are being lost and maybe these can help save that. The U.S. Government doesn't have the authority to contribute to R&D initiatives which received funding from other nations, so we would need to provide specific authority to allow the U.S. to make contributions to NATO DIANA by this October for us to have the opportunity to be a full participant.

General Cavoli, again, would you support Congress providing the authority for us to contribute to DIANA and really be that innovator? Can you speak of the value for us to be part of this group with the entire NATO alliance?

General CAVOLI. As you know, Senator, DIANA is emerging right now. So far, they have got about 54 initiatives that they are working on, but the budget is fairly small. Defense innovation and then procurement is national business for the most part in NATO, but especially for allies without significant defense budget bases, it is useful to collaborate. I think the U.S. collaboration with them is great, and I would advocate such authority, ma'am.

Senator ROSEN. Well, thank you, and I am going to build on that, too, because we know things are happening technologically faster than we can keep up oftentimes.

As the war in Ukraine obviously has progressed, we have seen proliferation of the relatively cheap, easy to use, all the commercial drones that are out there. You can just buy them off—I mean, an internet website, right, for both intelligence, reconnaissance, for surveillance and kinetic missions.

Can you maybe expand on us working again in whatever sectors we can here, public, private, to deliver advanced capabilities using some of these technologies that are emerging in the private sector?

General CAVOLI. Yes, ma'am, absolutely. I would advocate any way for us to innovate quicker and adopt things more quickly. With regard to the commercial drones, they have been very, very present on the battlefield in Ukraine. They tend to have a fairly limited lifespan, however.

It is harder to find commercial drones that are adequately hardened against electromagnetic interference, for example. They have been enormously effective at the lowest levels for squads and things like that, to spot things.

Senator ROSEN. Well, thank you. I appreciate it. We will followup with you on all of these. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Rosen. Senator Kaine, please.

Senator KAINE. Thank you, Mr. Chair, and to each of our witnesses for your service, I so appreciate it. General Cavoli, I want to sort of flag an issue that I don't really want you to answer.

It may be inappropriate. It could be appropriate in the followup session that we will have that will be classified, but here is a concern. In my time on the Committee, and particularly in the last couple of years, I have sometimes been struck by blue skies scenarios being painted that turn out not to be accurate.

A blue-sky case scenario about the capacity of the Afghan security force in the aftermath of the withdrawal turned out to be vastly overstated, and there was somewhat of an overestimation of the likelihood of Russia being dominant in the early days of the Ukraine investigation.

Thank goodness that proved not to be true. In each instance, sort of what we were being told, the capacity of—our intelligence about the capacity of another military turned out to be overstated.

The reason I am just flagging this now in the EUCOM domain is I have been part of three classified briefings about Ukraine one—two, and one in Foreign Relations on January 25th, two in SAS [Senate Armed Services] on February 2d and March 2d, where certain predictions or assessments were made about Ukrainian capacities' potential for the counteroffensive.

When the leaked documents have come out, I have not looked at those documents, but I followed the public accounts of it, a lot of the accounts of the documents suggest internally in the Pentagon, maybe more skepticism than we were being messaged in the meetings that we had.

Again, I don't think the right time is to talk about this now, but I hope during the next session that we have, we may dig into that a little bit because I want to make sure that the assessments being given to this Committee are the best current information so that we are not led to believe one thing, when there may be a lot of folks in the Pentagon thinking something else.

I will leave that there, if I could, but I do think it is something we ought to discuss in the classified setting.

General CAVOLI. I look forward to that, sir.

Senator KAINE. Great. General Van Ovost, I have got a couple for you. In the INDOPACOM, our ability to access logistics support is going to be absolutely critical, and there are some challenges because of distances across water that are not necessarily challenges elsewhere.

How is TRANSCOM considering supporting the Joint Force in a contested logistics environment like the INDOPACOM?

General VAN OVOST. Thank you, Senator. When you think of every day we are postured to operate on a global scale, but our adversaries are growing in their capabilities to disrupt, degrade, or

deny our ability and our freedom of maneuver that we haven't so enjoyed around the globe.

In fact, as I think about European Command, in Europe, we enjoy very robust ground lines of communications and we are able to use essentially all of them, frankly, without impedance. As I think about the Indo-Pacific, we are going to be using more of fast sealift and air than we would be in ground like we are seeing.

We have to change our tactics, techniques, and procedures. We are working with the services on their concepts to ensure that we can integrate and end across the entire deployment distribution enterprise, so we can deliver where and when Admiral Aquilino needs it.

Senator KAINE. Then one other question in that space, global bulk fuel. Again, in the INDOPACOM, that can be particularly challenging. What are you doing to do planning around fuel accessibility to INDOPACOM missions?

General VAN OVOST. Senator, U.S. Transportation Command has been designated the single manager for global bulk fuel in this latest unified command plan that just came out. What we are doing is we are taking a new approach of synchronizing end to end fuel so that we can assuredly deliver where and when we need it in a contested environment.

So, we are taking the very best of what DLA energy does to combine it with what we do for global command and control and prioritization and managing in this new environment. We are relooking in the posture of the fuel in the Pacific. That includes not only the stations, the places we are going to keep it both on land and on the water, as well as how we are going to maneuver fuel around that area.

Let me just to add to that we have robust fuel capability in the European theater, as we did in the Central Command Theater. This is a concern we have right now.

We are getting right after it with our tanker security program, with movement of fuel, and also with our ability to really look and give feasibility assess—a real feasibility assessment on the ability to do that war fight to the INDOPACOM Commander.

I could not do it without your support for the Pacific Deterrence Initiative, which allows us the additional funds to do exercising interoperability, and to lay out the logistics posture that we are going to need in the future.

Senator KAINE. Thank you both very much. I yield back.

Chairman REED. Thank you, Senator Kaine. Senator Duckworth, please.

Senator DUCKWORTH. Thank you. Good morning to our witnesses. General Van Ovost, thank you for your discussion last week highlighting all the great work TRANSCOM is doing at Scott Air Force Base in Illinois.

TRANSCOM is a linchpin of projecting and sustaining the force, key to our strategic deterrent. I also recognize that Joint Force sustainment is a Whole-of-Government and Whole-of-Nation effort.

TRANSCOM must coordinate and balance equities across multiple Government agencies, numerous industry partners, and diverse allies and partners in order to project and sustain combat power.

General Van Ovost, I don't think enough people realize how complex your mission really is and how critical that message is, and how critical the people in TRANSCOM are to tackle their everyday mission.

Can you speak just one example to the efforts that your Command is supporting right now, both at headquarters at Scott Air Force Base and around the world, just to paint a picture of how complex your mission is?

General VAN OVOST. Thank you, ma'am. We have discussed our key priority of supporting a European Command in supporting Ukraine and their defense. But beyond that, we have we have supported down the State Department with Sudan, with the with the support for moving the diplomats out of Sudan in this recent crisis.

We were inside 24 hours of the devastating a series of earthquakes in Turkey. Our ability to launch out within 24 hours, the urban search and rescue teams with the dogs and the cement breaking equipment to get to their rescue, as well as deliver a 100-bed field hospital.

We are doing extensive exercises around the globe in almost every continent to increase the interoperability with our allies and partners, and to ensure access basing and overflight and agreements that is going to keep our freedom maneuver into the future.

We are also, of course, doing the global bulk fuel mission, and of course, I can't forget our families. We are moving 311,000 families a year all around the globe to achieve our mission.

Senator DUCKWORTH. Thank you. Your witness testimoneys both underscore your combatant command's effort to exercise the Joint Force. In EUCOM Exercise Defender Europe 24, General Cavoli and General Van Ovost.

Defender Europe 24 assembled a division level formation on NATO's Eastern flank for the first time since the cold war, and I quote your testimony, "TRANSCOM is regularly wargaming with partners and stakeholders to identify and close operational gaps, to strengthen deterrence, and develop new concepts to prevail."

If both of you could answer this question, can you explain how your combatant commands exercise with each other and other combatant commands? What is the relationship between geographic and functional combatant commands as the Joint Force looks to exercise, experiment, and integrate new tools and capabilities? I know I am very macro today.

General CAVOLI. Thank you, Senator. That is a great question because it gives me an opportunity to talk the moment about TRANSCOM. Geographic combat commands are responsible for delivering military results in a specific AOR.

There are other commands that are in charge of a specific function, usually globally. General Van Ovost oversee obviously does transportation. Everything in USEUCOM depends on the reinforcement that Jackie's forces can provide from CONUS.

It is remarkable. We exercise it literally every day, ma'am, for routine movements, for rotational force movements, as well as for exercises. I said in my opening statement, there is literally nothing in the world like U.S. Transportation Command.

General VAN OVOST. Thanks, ma'am. We are participating in extensive series of exercises across the joint portfolio that allow us to

increase our capabilities to test new concepts, and frankly, old concepts like convoy operations with not only the United States and our allies and partners.

I appreciate the comments from General Cavoli. Functional combatant commanders do bring extensive experience in our specific areas of space, strategic nuclear deterrence, and in transportation, and it is an honor to work with them.

Senator DUCKWORTH. Thank you. General Van Ovost, we had a good conversation about aeromedical evacuations, and I would like to expand on that a little bit, especially as it applies in a contested environment and the vast distances of our Nation's Joint Force that we might be facing in the future, especially in the Indo-Pacific region.

Can you speak to efforts currently underway at U.S. TRANSCOM to bolster the critical aeromedical evacuation capability? Also, what are you doing to provide our wounded servicemembers rapid access to medical care?

Because we talked about maybe they have to go someplace in between, especially when you are in a place like the South Pacific.

General VAN OVOST. Thank you, ma'am. This is a critical question. You know, we performed brilliantly over decades, with the golden——

Senator DUCKWORTH. I know.

General VAN OVOST.—and countless people saved, ma'am, yourself included. But, in a near-peer, a global power contest, we expect high casualty rates. In fact, I expect to be able to have to move the same amount of patients I moved in 2022, the entire year, on a weekly basis.

We have got to do something differently, and here is what we are going to do. We are working with other partner nations to try to understand what capabilities that they have, both in theater and their movement capabilities.

We are working with the services on a multimodal platform to move patients in mass form. We are working on innovative capabilities for patient movement items, and we are also looking at ability to have smaller crews of people work on larger numbers of patients via using wireless and talking to doctors that are on the ground while we are in the air.

We want to bring all of this together to try to reduce the risk. To your point on allies and partners, where there is capacity with allies and partners, we are looking into agreements to try and ensure that they will be able to support us as an interim location until we can get them back to the United States.

Senator DUCKWORTH. Thank you.

Chairman REED. Thank you, Senator Duckworth. Senator Manchin, please.

Senator MANCHIN. Thank you, Senator. Thank you all for your service, everybody here. I appreciate it very much. General Cavoli, I just had the pleasure of being able to go to Ukraine and speak with Zelensky, and I was with Senator Kelly and Senator Murkowski.

It was a great trip. We learned an awful lot about them, and we talked directly to them. Our main concern was transparency. For every dollar that we are sending in, for every bullet that we are

sending, they are making sure it is being accounted for and used properly. That was our biggest concern.

We took it to everybody we talked to in Poland. Also, we went to the staging area in Poland and they told us that after it leaves there, that the tracking is not as good from once they leave it in Poland, put in the theater.

We are trying to work with our Ambassador there, Brink. She has, and with a little bit of help there, some personnel, she will be able to track it much better, but they are staying on top of it. I left very satisfied knowing that we have good grasp, and they, knowing how sensitive this is, because the naysayers that we have, and you have them everywhere to a certain extent, but they are a minority.

I don't want to give them any credence whatsoever or credibility that something happened wrong. We shouldn't be sending equipment, we shouldn't be supporting, and we shouldn't be financing it. How do you feel about that, and you are, I am sure, tracking the same thing.

General CAVOLI. Thank you, Senator, and thank you for your recent trip, and thanks to your staff for sharing your after-action review of your trip. It also was very useful to us. I feel confident that there has not been specific illicit transfer or pilfering of material.

I believe we are aware of one case reported to us by the Ukrainians of a couple of automatic rifles that were attempted to be diverted and those guys have been arrested there. By and large, this is an extremely strong effort that we are putting out.

We recognize how challenging it is. However, a couple of things about the way we do it. When things go to the staging base in Uchanka, Poland there, we inventory all of that at that point.

Senator MANCHIN. Right. I saw the clipboard. I saw those pasties on the board.

General CAVOLI. We ingest it into a computer software system that we have given to the Ukrainians that we maintain access to. So, we can track their tracking of it.

Senator MANCHIN. Where they are putting the equipment.

General CAVOLI. Exactly, and, you know, so it—we track it.

Senator MANCHIN. Let me just say—I know our time is limited. I want to say a couple of things here. I truly believe that we are not telling our story. With the amount of support that we are putting in and all of our allies, there is always going to be a hiccup.

Something is going to go wrong. We haven't built a base of how well we are regulating and staying on top of this and monitoring and the transparency. Zelensky said it once to me in an hour and a half we were there. He said that 10, 15 times. Bring a hundred people and observe what we are doing.

We are happy to share. Do whatever you want, and if you see something wrong, let me know, because we are looking for it, too. We are not telling that from our side of it and it is not being—and I just think that we need to get ahead of this because that way—there is an old saying, tell your story before they tell one on you.

As soon as they see something wrong, they are going to blow it out of proportion. There is so much good support that we are giving him and so much valiant fighting that they are doing, I just don't want to lose that.

General CAVOLI. Thank you for giving me the opportunity to tell part of the story, sir. Our defense attaché office has been diligently going——

Senator MANCHIN. Tell the press—tell your press people to start putting things out. We are happy to work with them. We are happy to coordinate with you all to put out what we saw firsthand, and the confidence we had, I will put a statement out. I am happy to continue that.

General CAVOLI. Thanks, Senator.

Senator MANCHIN. Let me throw this at you, too. I am concerned now about our Baltic allies and Albania, Bulgaria, Croatia, Montenegro, Northern Macedonia, Romania, and Slovenia. They are all kind of tied into this TurkStream, Okay.

The same as the Nord Stream is tied into Europe. They are tied in TurkStream. We know exactly what Putin will do. He used energy as a weapon. Are we doing anything so that they don't get caught in the same thing that our allies did up in Europe?

General CAVOLI. Sir. Thanks. Of course, the closure of Nord Stream and the weaning off of Russian gas through much of Europe has been an incredible success story of the last year. It is not universal, however, as you point out.

Senator MANCHIN. We have got a lot of vulnerability down here and he will have the same playbook.

General CAVOLI. Exactly, sir, it is the exact same playbook. So, we worked with them to wean off it. We are not the lead agency on that. I defer to the Secretary of State or the Department of State for specifics on what exactly they are doing. But we are operationally not dependent——

Senator MANCHIN. Okay. I will reach out to them because being chair—I am chairman of their Energy Committee——

General CAVOLI. Yes, sir.

Senator MANCHIN. We want to do everything we can to basically back them up so they don't get caught exactly like how our European allies did.

General CAVOLI. It strategically would be very welcomed by EUCOM and NATO.

Senator MANCHIN. Can you briefly comment on developments regarding Turkey's relationship with NATO? I just can't believe that here they are holding up the Swedes, Okay. Made it very difficult for the Finns and they are playing footsie with the Russians. It makes no sense to me at all.

General CAVOLI. Sir, clearly there is a lot of policy wrapped in there and I will defer to my civilian leaders on those questions. I would point out, sir, that there is a sharp difference between our military relationships and our other relationships when it comes to some countries.

I was just down in Antakya with the minister of defense in the Turkish charter a couple of days ago, looking at the humanitarian assistance that we have provided through the U.S. and NATO for the earthquake. I would just point out there is a pretty distinct difference between our military relationship——

Senator MANCHIN. Well, they—I am so sorry, Mr. Chairman. But they didn't they acquired the S–400 from the Russians?

General CAVOLI. Oh, yes, sir.

Senator MANCHIN. Canceled the F–35?

General CAVOLI. That is exactly right.

Senator MANCHIN. Yes. So, you are saying I need to take this in a different direction? I got you——

General CAVOLI. The policy issues, sir——

Senator MANCHIN. I got it, sir. I got it. I will too. Thank you both and thank all of you for your service. I appreciate it more than you know.

Chairman REED. Thank you, Senator Manchin. General Cavoli, General Van Ovost, thank you for your testimony. I look forward to the closed session, in which will reconvene at 12:30 p.m. in SVC–217, after the address by the South Korean President, I am sure one of the issues that might come up is the Abrams tank.

I understand that there are some significant issues involving transferring Abrams tanks to any place in the world, one of which I think can be publicly discussed here is that it operates on something closer to jet fuel than diesel, which makes the creation of independent supply lines by the Ukrainians essential to use.

There is also the issue of training, and the fact that our European allies, I believe, just brought thousands of tanks which are more familiar to the Ukrainian forces, which obviates the training issues related to the Abrams tank.

I think all those issues have to be explored in the closed session. I think also, General Van Ovost, a real serious discussion about contested logistics, particularly in the Pacific, would be appropriate. So let me see if there is anything else. No, I believe that—oh, one other point, General Cavoli is that there has been discussion about reevaluating, which you are, our plans for Europe, looking at the depletion of Russian forces.

But I think you are also considering the fact that many of our NATO forces have depleted themselves of equipment, and other factors that have to be included in the evaluation. So, it is not simply looking at Russia and saying, well, they are much weaker now than they were. Is that correct?

General CAVOLI. Absolutely, and it is very difficult to speak about it in open session for operational security reasons.

Chairman REED. I understand. Well, I think we have got a lot to talk about. So, I will adjourn this open hearing and look forward to seeing you at 12:30 p.m. in SVC–217. Thank you.

[Whereupon, at 10:20 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR ANGUS S. KING, JR.

TECHNOLOGY

It's clear to me that we're witnessing the future of warfare in Ukraine. The United States Army, Security Assistance Group-Ukraine, and Ukrainians have harnessed commercial technology and successfully integrated and deployed Artificial Intelligence-powered software on the battlefield.

1. Senator KING. General Cavoli, how much of a role is software playing in the current conflict and what lessons should the U.S. learn about adopting and deploying new technology at a pace required by the warfighter?

General CAVOLI. We are at a turning point in the role of Artificial Intelligence (AI) on the battlefield. The Ukrainian Armed Forces have incorporated new technology and AI applications with impressive speed and agility. They have proven

highly adept in the deployment of AI applications to enhance battlefield intelligence, and to improve the lethality of weapons and tactics used against Russian forces.

AI technology is advancing rapidly; our culture must adapt with equal speed. We must train our workforce to utilize these new tools and increase experimentation to test and refine new technologies alongside Allies and partners in the European theater. Significant investments will be needed in the future to upgrade the digital infrastructure necessary to support and leverage these new capabilities. As demonstrated by the Ukrainian Armed Forces' successes, early adoption, integration and cultural acceptance are all critical components to future success in fielding potentially disruptive new technologies.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

2. Senator WARREN. General Cavoli, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

General CAVOLI. Yes. USEUCOM works with the Department of Defense (DOD) to identify priorities for inclusion into the annual budget process.

3. Senator WARREN. General Cavoli, historically, have previous unfunded priorities list items been included in the following year's base budget? Have Unfunded Priorities Lists items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

General CAVOLI. USEUCOM did not submit an unfunded priority list for the fiscal year 2023 budget; instead we thanked Congress for Ukraine Supplemental Funding.

4. Senator WARREN. General Cavoli, do you agree that Federal agencies should be required to work within the confines of base budget process?

General CAVOLI. Yes. However, there are instances where the Administration seeks our advice for supplemental appropriations such as Ukraine Supplemental funding.

5. Senator WARREN. General Cavoli, Secretary of Defense Austin supports legislation that would repeal the requirement for individual leaders to submit unfunded priority lists under 10 U.S.C. 222a. He stated this publicly in a Senate Armed Services Committee hearing on March 28, 2023 and in a letter that Under Secretary Michael J. McCord sent on behalf on Secretary Austin to me on March 20, 2023. Do you plan to continue to submit unfunded priority lists?

General CAVOLI. I intend to comply with the requirements as written in 10 U.S.C. 222a. If the requirements change, I will comply with the new requirements.

6. Senator WARREN. General Cavoli, if you plan to submit unfunded priority lists in the future, why are you doing so despite Secretary of Defense Austin's support for the repeal of these required lists?

General CAVOLI. As directed by 10 U.S.C. 222a, if requirements are identified that the Department is unable to resource within the base budget, I will submit an Unfunded Priority List.

INFORMATION ON UNFUNDED PRIORITIES LISTS

7. Senator WARREN. General Cavoli, what was the cost of putting together this Unfunded Priorities Lists?

General CAVOLI. The cost of creating the fiscal year 2024 list of unfunded priorities was approximately $36,000 in DOD Labor.

For each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

8. Senator WARREN. General Cavoli, please provide a detailed description of the Unfunded Priorities Lists.

General CAVOLI. European Communications Infrastructure (ECI) funds the modernization of communications infrastructure and facilities at United States Air Forces Europe (USAFE) air bases that eroded over the last two decades. Total fiscal year 2024 request: $81.24 million.

Air Base Air Defense (ABAD) funds require capabilities to defend USEUCOM's air bases from air and missile threats with a scalable, deployable, and readily transferable system. Total fiscal year 2024 request: $78.27 million.

9. Senator WARREN. General Cavoli, what does the Unfunded Priorities Lists purchase?

General CAVOLI. (ECI) If funded, ECI would modernize communications infrastructure at USAFE air bases throughout the USEUCOM theater, in order to reduce single points of failure at Technical Control Facilities (TCF) and Point of Presence (POP) facilities. Communications fiber infrastructure requires significant upgrades to support operational needs at both Main Operating Bases (MOBs) and Geographically Separated Units (GSUs). Many of USAFE's MOBs and GSUs are unable to fully support communications requirements and suffer from severe network outages, lack of bandwidth, and periodic degradation of network services. Funds would procure fiber optic cables, routers, switches, firewalls, and uninterruptable power supplies. Additionally, ECI funds would specifically purchase Secret Internet Protocol Router Network (SIPR) Service Delivery Point servers, terminal application processing systems, Non-Classified Internet Protocol Router Network (NIPR) delivery point servers, high speed data transfer capabilities, and data center connection redundancy.

(ABAD) Additional funding for ABAD would be leveraged to enhance close-in protection for aircraft and personnel operating in bases throughout Europe. This funding would purchase multi-mode radars similar to those currently used in the National Capital Region (NCR), and operator consoles with communication and data packages. These systems enable defense of critical infrastructure, and U.S. Forces. All equipment and software is Technology Readiness Level 9 and is ready to purchase off the shelf.

10. Senator WARREN. General Cavoli, please include detail on all end items with quantities, contractor Full Time Equivalent, etc.

General CAVOLI.

ECI	Description	Cost of Equipment	Appropriation ($K)	Total Cost ($M)
Upgrade Technical Control Facilities Bandwidth (5 sites) **Cost per site is $4.623M:** **Incirlik, Turkey** **Ankara, Turkey** **Moron, Spain** **Sigonella, Italy** **Rota, Spain**	Upgrading antiquated technical control facilities with fiber inside and outside the plant, uninterruptible power sources, switches, routers, and data encryption hardware to handle increased bandwidth to mitigate latency issues. This requires power upgrades to the facility as well as increased heating, ventilation, and air conditioning (HVAC) power to keep the systems at the required temperature. Current facilities overheat, resulting in equipment damage. The HVAC and power system is a critical limiting factor (LIMFAC) throughout the theater and continues to negatively impact our ability to meet communications requirements for increased mission sets.	Fiber: $1.0M per site x 5 = $5M Cooling upgrade: $1.1M per site x 5 = $5.5M Power upgrade: $985K per site x 5 = $4.925M Switches: $12K x 5 = $60K Routers: $24K x 5 = $120K Uninterruptible Power Sources: $1.5M x 5 = $7.5M	3080: $12,500 3400: $10,615	$23.115
eLMR Modernization	Modernize Enterprise Land Mobile Radio (eLMR) systems that support flight line operations, first responders, and air base defense. Upgrading switches and routers that connect 18 sites to enterprise LMR assets throughout the theater. **Sites:** Ramstein 15 switches and 2 routers; Spangdahlem 7 switches and 2 routers; Aviano 7 switches and 2 routers; Incirlik 9 switches, 2 routers; Moron 7 switches, 2 routers; Lakenheath 10 switches and 2 routers; Mildenhall 7 switches 2 routers; Croughton 4 switches 2 routers; Wellford 1 switch; Fairford 1 switch, 2 routers; Alconbury 3 switches; Molesworth 3 switches 2 routers; Feltwell 1 switch; Lajes 5 switches 2 routers	Switches: 81 x $12K = $972K Routers: 22 x $24K = $528K	3080: $1,500	$1.5

ECI	Description	Cost of Equipment	Appropriation ($K)	Total Cost ($M)
Secondary boundary upgrades: **Alconbury and Molesworth $1.1M** **Akrotiri $532K** **Aviano $2.5M** **Croughton $1.6M** **Incirlik $1.6M** **Lajes $1.6M** **Lakenheath $2.9M** **Mildenhall $1.9M** **Moron $532K** **Ramstein $1.7M** **Spangdahlem $1.9M**	Address secondary or backup base boundaries at all MOBs and GSUs on NIPRNet and SIPRNet: Servers for firewall, console switches, routers, cyber security boundary monitoring.	SIPR Service Delivery Point Servers 12 x $217.7K ≈ $2.6M SIPR Terminal Apps Processing System 12 x $146.7K ≈ $1.8M NIPR Service Delivery Point Servers 18 x $390.7K ≈ $7.0M C9500 Switch 8 x $111.4K = $891.2K C9300 Switch 16 x $11.8K ≈ $189K Firewall 15 x $23.6K = $354K Fiber Optic Readers 31 x $116.7K ≈ $3.6M Console Switch 326 x $7.4K ≈ $2.4M Dual AC Power Supply 38 x $5K = $190K	3080: $18,843 3400: $190	$19.02
Commercial Solutions for Classified at three locations: Ramstein Aviano Lakenheath	Purchase and install NSA's Commercial Solutions for Classified program including the Mobile Access Capability Package. Provides a secure, mobile, multi-classification capability to support three sites in the European theater. This capability allows end users to have one device that runs NIPR, SIPR, Air Control Battle Network and Battlefield Information Collection and Exploitation System. Expands current usage from 250 users to 5,000 per enclave to allow interoperability and communication with our Allies and partners. The end-state solution provides mobile access for maximum flexibility for Eastern Flank operations, as well as continuity of operations (COOP) for contingencies supporting the Air Operations Center.	Commercial Solutions Software $2.156M per site x 3 ≈ $6.5M Remote access to multiple networks $2.292M x 3 sites ≈ $6.9M High Speed Data Transfer Capability $562.4K Connect all three data centers together for redundancy $400K End User system upgrade $2.0M per site x 3 = $6.0M Installation $1.461M Annual sustainment costs $210K	3400: $22,033	$22.03
Deployable Air Base System (DABS) **Communications Support**	Extends base networks to DABS facilities	NIPR Service Delivery Point Servers 8 x $390.7K ≈ $3.1M C9300 Switch 8 x $11.8K ≈ $94K Firewall 8 x $23.6K ≈ $189K Fiber Optic Readers 8 x $116.7K ≈ $934K Console Switch 32 x $7.4K ≈ $237K Dual AC Power Supply 16 x $5K = $80K	3080: $4,660	$4.66

ECI	Description	Cost of Equipment	Appropriation ($K)	Total Cost ($M)
Tactical to Enduring Standard Communications Package (3 Sites): Campia Turzi, Lask, and Grafenwohr	Standardized communications package including primary and alternate terrestrial circuits, manhole distribution system, base fiber ring, and wiring.	Fiber 3 sites x $1M = $3M Uninterruptible Power Sources 3 x $944K = $2.832M SIPR Service Delivery Point Servers 6 x $217.7K ≈ $1.3M SIPR Terminal Apps Processing System 6 x $146.7K ≈ $880K NIPR Service Delivery Point Servers 6 x $390.7K ≈ $2.3M Firewall 6 x $23.6K ≈ $141.6K	3080: $10,454	$10.45
ABAD System Procurement	Radar systems, associated consoles, illuminators, communications and buildout costs	Sentinel Radars 3 x $5.79M = $17.37M Distribution Control Center 1 x $4M = $4M Comms, Tactical Data Link and Buildout 1 x $12M = $12M Radar Display, network, link, comms 2 x $1.60M = $3.2M Multi-spectral sensor/ illuminator 3 x $2.2M = $6.60M Multi-spectral sensor controller 1 x $1.80M = $1.80M Joint Multi-Platform Advanced Combat ID 2 x $0.5M = $1.0M Multi Source Correlator Tracker 2 x $1.5M = $3.0M Joint Range Extension 2 x $0.6M = $1.2M Cross Domain Solution 2 x $2.3M = $4.6M Forensics Recorder 2 x $1.60M = $3.2M Center Design and Buildout 1 x $1.5M = $1.5M Army Long-Range Persistent Surveillance 5 x $1.4M = $7.0M	3080: $66,470K	$66.47
Operations and Maintenance Costs	Network Sustainment, Contractors, Flight Plan Service	Network Sustainment 1 x $1.05M = $1.05M Flight Plan Service 20 x $0.3M = $1.2M Contractor Support (25) 25 x $0.4M = $9.55M	3400: $11,800K	$11.80

11. Senator WARREN. General Cavoli, what specific capability will the Unfunded Priorities Lists provide?

General CAVOLI. (ECI) ECI will enable Forward Operating Locations (FOLs) to reliably communicate with supporting forces, command structures, as well as Ally and partner forces. ECI will also enhance infrastructure resiliency at Main Operating Bases (MOBs), while providing forward deployed forces reach-back support through resilient and survivable communications services.

(ABAD) The ABAD system will provide active defense and enhance the passive defense of fixed and deployed assets in theater to discourage and deter future attacks. Strategic guidance and threat assessments available at higher classification levels document the operational imperative to develop and/or acquire ABAD capabilities. ABAD is intended to protect bases and critical infrastructure in order to project combat power and minimize risk to Joint Force Commanders.

12. Senator WARREN. General Cavoli, what gap will this fill that is not in the base budget?

General CAVOLI. (ECI) Our ECI funding request is intended to help build a more robust, resilient, and survivable Command, Control, Communications, Computers, and Intelligence (C4I) System in the USEUCOM theater. This C4I investment would build greater domain awareness and enable agile combat coordination. ECI's multi-domain critical infrastructure network provides ISR and C2 mission assurance for weapon systems and OPLAN execution, enables Combined Joint All-Domain Command and Control (CJADC2) and Agile Combat Employment (ACE) to support USEUCOM operations and NATO Allies and partners' interoperability.

(ABAD) Funding this submission contributes to the air base air defense capability gap. USEUCOM's air bases have limited options to identify and eliminate air and missile attack threats, which pose significant operational risk. They require advance warning to implement their resource-limited dispersal plans. Critical missions such as air superiority, global strike, ISR, rapid global mobility, and C2 will be impeded at USEUCOM bases that lack the ability to defend themselves against adversary aircraft, missile, and unmanned aerial systems.

13. Senator WARREN. General Cavoli, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

General CAVOLI. My unfunded priorities are firmly nested within the National Security (NSS), National Defense (NDS), and National Military (NMS) strategies, and directly support the NDS's priorities to deter strategic attacks and aggression.

(ECI) ECI supports the NSS's objective to provide a tailored deterrence approach to mitigate the risk of strategic attacks. ECI will reduce risk by increasing our ability to seamlessly integrate Joint, Alliance, and partner Command and Control (C2) architectures into our networks. It will deter aggression through the development of increased C2 resiliency, which undermines Russia's ability to achieve their objectives through coordinated Joint, Allied, and partner action. It will also improve the C2 infrastructure required to support and expand intelligence capabilities that provide decisive information and decision advantage to the U.S., Ally, and partner leadership. This contributes to integrated deterrence, both within the Department and alongside our Allies.

Additionally, ECI directly supports the NDS's objective to build a more resilient Joint Force. ECI addresses one of the key operational problems, Command, Control, Communications, and Computers systems with a diverse and resilient C2 capability. This effort will help to build agile, resilient, and survivable Command, Control, Communications, and Computers, Intelligence, Surveillance, and Reconnaissance architecture that supports the Alliance and Joint Force.

(ABAD) ABAD supports the NDS's priority to deter strategic attacks, protect forces, and integrate with Allies and partners. ABAD provides defense of air operations, ensuring USEUCOM will be able to withstand, fight through, and recover from disruption to air operations. Cooperation with Allies and partners will enhance our collective integrated air and missile defense efforts. Such cooperation strengthens our collective efforts to increase protection from regional missile threats, coercion, and potential attacks.

ABAD also helps to deter Russian aggression through the improvement of our ability to project, generate, and sustain combat power. This capability introduces uncertainty and risk to the adversary's decision calculus, adds resilience to the Joint Force, and better prepares our forces to prevail in conflict.

If funded, both of these capabilities will contribute greatly to the safety of the Homeland, United States troops stationed in Europe, and our NATO Allies and partners.

14. Senator WARREN. General Cavoli, what is the operational requirement? How does this Unfunded Priorities Lists support current or future operations?

General CAVOLI. ECI enables Forward Operating Locations to reliably communicate with supporting forces, command structures, as well as Allies and partners. It will also enhance infrastructure resiliency at Main Operating Bases, while providing forward deployed forces reach back support through resilient and survivable

services. Most of USAFE's MOBs and GSUs currently support Eastern Flank operations. This funding request is intended to address single points of failure and facility issues to avoid major IT outages that could potentially affect current operations.

ABAD was identified in the 2022 Chief of Staff of the Air Force's Strategic Requirements Document, to protect critical mission capabilities and infrastructure from growing air and missile threats. This requirement is intended to improve our ability to project, generate, and sustain combat power in contested environments. This unfunded priority list submission provides an organic, self-defense capability for U.S. airbases now, while simultaneously baselining a model for future employment. Establishing a baseline base defense capability will hasten the development of airspace control de-confliction and coordination processes between U.S. base defense authorities and their respective NATO host nation civilian authorities.

15. Senator WARREN. General Cavoli, what is the operational impact if this Unfunded Priorities Lists is not funded in fiscal year 2024?

General CAVOLI. (ECI) Our current communications infrastructure provides insufficient support to permanent and rotational forces supporting NATO operations. Without near term action to improve the resiliency of USEUCOM's aging and inadequate network infrastructure, reliable C2 operations and air superiority will remain at risk. Ultimately, this translates into greater risk to both force and mission throughout the spectrum of conflict.

(ABAD) Without adequate resourcing, USAFE operations, infrastructure, personnel, and C2 will remain vulnerable to theater missile and air attacks. USEUCOM air bases have limited options to mitigate the strategic air and missile attack threat, requiring advance warning to implement resource-limited dispersal plans, retaining significant operational risk and reduced capability and flexibility.

16. Senator WARREN. General Cavoli, are there plans to include this item in the fiscal year 2025 base budget?

General CAVOLI. (ECI) Project completion and sustainment funding will be pursued in the fiscal year 2025 budget.

(ABAD) While funding to address the ABAD shortfall is being pursued, it is not included in the USAF fiscal year 2025 POM at this time.

17. Senator WARREN. General Cavoli, why was this Unfunded Priorities Lists not included in the fiscal year 2024 President's Budget submission?

General CAVOLI. Both requirements were submitted to the Department of the Air Force, and considered by OSD CAPE, but ultimately fell below the funding cut line.

18. Senator WARREN. General Cavoli, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

General CAVOLI. (ECI) All hardware, services, and support purchased via contract will use full and open competition. USAFE expects multiple vendors to be involved. Many MOBs and GSUs require local vendors or contractors to accomplish outside plant work, which will have to be taken into consideration. Examples of vendors that would be used include Defense Infrastructure Organization (for UK sites), Huntington Ingalls Industries, Defense Logistics Agency, and General Services Administration. Some work may be accomplished using organic (active duty or National Guard) resources or support from the Defense Information Systems Agency.

(ABAD) Commercial vendors include Parsons using existing USAFE Indefinite Delivery, Indefinite Quantity (IDIQ), and sub-vendors Raytheon, Trident Corp, and Mercury Solutions.

In academia, MIT Lincoln Labs contributes via federally Funded Research and Development Centers.

Within Government, the Army Aviation and Missile Command, Air Force Research Lab Strategic Development Planning and Experimentation, and NORAD-USNORTHCOM also contribute.

19. Senator WARREN. General Cavoli, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?

General CAVOLI. (ECI) USAFE A6 has cost estimates that were accomplished for various sites by multiple vendors. There are a variety of meetings to track these critical funding requirements, including monthly project management reviews and cross organizational synchs with multiple stakeholders.

(ABAD) USAFE has a day-to-day relationship with the prime vendor due to the existing IDIQ. Meetings with other industry, academia, and Government vendors occur at least weekly as USAFE develops it's first-ever Ground Based Air Defense-Self-Defense Capability.

20. Senator WARREN. General Cavoli, what is your history with this vendor? Please detail when the relationship began, the number of contracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor.

General CAVOLI. I do not have a personal relationship with the vendors. The United States Air Force manages the contracts and maintains relationships with vendors that could execute, or are currently executing those projects.

(ECI) USAFE representatives manage contracts with the vendors listed above and have used their services to support many of the Eastern Flank site stand up efforts.

(ABAD) The USAF representative overseeing the contract is Ms. Nancy Andrews, Program Executive Officer for Combat and Mission Support, Office of the Assistant Secretary of the Air Force for Acquisition. IDIQ is with Parsons (Prime) and a team of sub-contractors (see #18). This contract began in late 2021 and continues for the next 7 years.

21. Senator WARREN. General Cavoli, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

General CAVOLI. No former employees have formally represented any vendors at meetings or other forums. Furthermore, contracting procedures require us to identify and avoid potential conflicts of interest.

22. Senator WARREN. General Cavoli, in which city/State will the Unfunded Priorities Lists be executed?

General CAVOLI. (ECI) All locations for support are located in USEUCOM's theater, to inlude: Ramstein AB, Germany; Aviano AB, Italy; Spangdahlem AB, Germany; Incirlik AB, Turkey; RAF Lakenheath, UK; RAF Mildenhall, UK; and associated geographically separated units.

(ABAD) Rhineland Palatinate, Germany is the site of final system assembly, integration and installation related to this unfunded priority. However, procurement of the primary systems come from Fullerton, California; Fulton, Maryland; Huntsville, Alabama; Panama City, Florida, and a variety of other nationwide locations hosting Industry and Government.

23. Senator WARREN. General Cavoli, is this requirement on an existing contract? If so, with who? What is the history of the contract?

General CAVOLI. (ECI) Depending on the commodity or service, USAFE has numerous options for contract support.

(ABAD) Yes, USEUCOM would use the existing IDIQ contract for USAFE, specifically for this purpose. Oversight for this IDIQ is provided by Ms. Nancy Andrews, Program Executive Officer for Combat and Mission Support, Office of the Assistant Secretary of the Air Force for Acquisition. The IDIQ is with Parsons (Prime) and a team of sub-contractors. This contract began in late 2021 and continues for the next 7 years.

24. Senator WARREN. General Cavoli, what is the anticipated contract award date if the Unfunded Priorities Lists receives funding?

General CAVOLI. (ECI) Contract award date would be approximately 90–120 days following receipt of funding.

(ABAD) Contract award date would be approximately 90 to 120 days following receipt of funding.

25. Senator WARREN. General Cavoli, what funding lines are associated with this Unfunded Priorities Lists?

General CAVOLI.

(ECI)

Appropriation (APPN)	Line Item (LI)	Program Element (PE)	Sub-Activity Group (SAG)
Other Procurement, Air Force (3080F)	54	0303055F	011Z
Operations & Maintenance, Air Force (3400F)	090	0303055F	011Z

(ABAD)

Appropriation (APPN)	Line Item (LI)	Program Element (PE)	Sub-Activity Group (SAG)
Other Procurement, Air Force (3080F)	34	0207522F	012C
Operations & Maintenance, Air Force (3400F)	110	0207522F	012C

26. Senator WARREN. General Cavoli, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?

General CAVOLI. (ECI) Each sub-project we have identified above must be completed simultaneously, for example the Tech Control Facility should be funded simultaneously (e.g., Other Procurement, USAF, 3080: $12,500K; Operations & Maintenance, USAF, 3400: $10,615K) because of dependencies in the project. However, separate projects can stand on their own.

(ABAD) This project requires the appropriations to be funded simultaneously.

27. Senator WARREN. General Cavoli, how much was enacted and obligated (or expended for Research, Development, Test, & Evaluations) in fiscal year 2022 to 2023 for this requirement?

General CAVOLI. (ECI) In fiscal year 2022, $3.409 million was enacted and obligated in the Ukraine Supplemental funding to address equipment requirements supporting Forward Operating Locations. An additional $48.405 million was enacted and obligated in Ukraine Supplemental funding during fiscal year 2023 for modernization efforts that addressed ECI requirements.

(ABAD) USAFE realigned and obligated $31.45 million (3400F) and $27.78 million (3080F) from within the fiscal year 2022 and fiscal year 2023 budgets to initially design and conduct risk-reduction work to prepare for a full-up ABAD capability.

28. Senator WARREN. General Cavoli, how much was requested in fiscal year 2024 for this requirement?

General CAVOLI. ECI total fiscal year 2024 request: $81.24 million.

ABAD total fiscal year 2024 request: $78.27 million.

29. Senator WARREN. General Cavoli, is there a tail associated with this Unfunded Priorities Lists?

General CAVOLI. (ECI) Yes, the tail associated with this UPL is $3 million per year in operations and maintenance, Air Force costs.

(ABAD) Yes, to operate and maintain the systems USAFE is anticipating a $10.5 million annual sustainment tail.

30. Senator WARREN. General Cavoli, is any tail funded in the future years defense plan?

General CAVOLI. (ECI) No, the $3 million tail funding has not been funded in the future years defense plan, but will be addressed from within existing funds enacted for theater Air Force communications capability sustainment.

(ABAD) No, the $10.5 million annual sustainment tail is not funded in the future year's defense plan.

31. Senator WARREN. General Cavoli, please describe how much the requirement will cost per year for the next 5 years.

General CAVOLI. (ECI) In addition to the total fiscal year 2024 request of $81.24 million, an additional $12 million is required to sustain the project out to fiscal year 2028 for a total cost of $93.24 million.

(ABAD) In addition to the total fiscal year 2024 request of $78.27 million, an additional $42 million is required to sustain the project out to fiscal year 2028, for a total cost of $120.27 million.

32. Senator WARREN. General Cavoli, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or Unfunded Priorities Lists.

General CAVOLI. (ECI) fiscal year 2022 NDAA included authorization for $55 million in response to a USEUCOM UPL for modernizing IT infrastructure, but was not appropriated.

Fiscal Year 2022 Shortfall ($K)	Appropriation (APPN)	Line Item (LI)	Program Element (PE)	Sub-Activity Group (SAG)
$55,000	3080F	07–837300	303055F	011Z

(ABAD) No previous requests to fund this requirement were accepted or included in the base budget.

33. Senator WARREN. General Cavoli, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

General CAVOLI. (ECI) Yes, the USAF fiscal year 2025 to fiscal year 2029 POM includes funding to address this effort by fiscal year 2029.

(ABAD) No, the USAF fiscal year 2025 to fiscal year 2029 POM does not include funding to address and sustain this effort.

34. Senator WARREN. General Cavoli, please provide photos of this requirement for visual aid.

General CAVOLI.

(ECI)





(ABAD)



EUROPEAN DETERRENCE INITIATIVE

35. Senator WARREN. General Cavoli, the Department of Defense finally submitted the previous reports on European Deterrence Initiative (EDI) required by Section 1243 of the Fiscal Year 2020 National Defense Authorization Act. Has United States Europe Command submitted the information necessary to project the future years plan on European Deterrence Initiative activities and resources for the fiscal year 2024 budget request as required under the Fiscal Year 2020 National Defense Authorization Act?

General CAVOLI. Yes.

36. Senator WARREN. General Cavoli, what does United States European Command project to be future spending in European Deterrence Iniative over the next 5 years given the ongoing conflict in Ukraine?

General CAVOLI. We currently project EDI associated funding to be:

Fiscal Year 2024: $3.6 billion
Fiscal Year 2025: $3.4 billion
Fiscal Year 2026: $3.4 billion
Fiscal Year 2027: $3.3 billion
Fiscal Year 2028: $3.3 billion

Additionally, future spending in the EDI should remain flexible and adaptable to accommodate potential changes in the security landscape. The conflict in Ukraine is dynamic, and new developments will arise over the next 5 years that could require adjustments in resource allocation. We will continue to conduct robust assessments and reviews to ensure that funding aligns with the evolving security needs across EDI's five lines of effort. It is important to note that this appears to be an enduring problem that will not be resolved in the near term.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN III

UKRAINE CODEL

37. Senator MANCHIN. General Cavoli, based purely on your military experience and advice, are you satisfied that Ukraine is a good steward of the equipment and funding that United States taxpayers are providing to them?

General CAVOLI. Ukraine continues to demonstrate their commitment to effectively and responsibly employ United States-provided security assistance to counter Russian aggression. Equipment and donated materiel are monitored with the best in-transit visibility available, utilizing numerous systems, data bases, coordination cells, and auditing backstops. In light of this robust monitoring regime, we have not seen any credible evidence that would suggest the diversion of United States-provided weapons from Ukraine.

38. Senator MANCHIN. General Cavoli, based off of Putin's thirty-year history of destabilizing Russia to put himself in power then using the same tactics in Crimea, Georgia, Moldova, Syria, and Libya, what risk does Putin pose to our allies and the United States directly if we allow him to succeed in Ukraine?

General CAVOLI. Putin has had clear geo-political objectives for the past 30 years—to reassert a Russian sphere of influence in the former Soviet space and re-establish itself as a world power. Russia's success in Ukraine could embolden Putin to exert increased pressure on Russia's periphery and over its claimed sphere of influence, including our NATO Allies and partners in the Baltic and Black Seas. If left unchecked, Putin's long process of annexation could continue to create a series of frozen conflicts—to include vulnerable NATO Allies—that would continue to undermine Euro-Atlantic and global security. This includes interference in democratic processes, political and economic coercion, widespread disinformation campaigns, malicious cyber activities, use of paramilitary and private military contractors to exert hard military power across the periphery and abroad, and continued illegal and disruptive activities of Russian intelligence services. Domestically in Russia, a victory in Ukraine will justify and normalize the militarization of Russian society that will outlive Putin, ensuring Russia retains sufficient military will and capability to pose a near, mid-, and long-term threat to the Alliance.

SMALL MODULAR REACTORS IN CONTESTED LOGISTICS

39. Senator MANCHIN. General Van Ovost, are you familiar with this program and the benefits it offers to our fuel logistics and resiliency in the Pacific?

General VAN OVOST. We are aware of the Small Modular Reactor program and continue to monitor progression through the Joint Capabilities Integration and Development System (JCIDS) process, specifically the work of the Logistics Functional Capability Board (LOG FCB) led by the Joint Staff J4. While the capability has great implications for how the Joint Force may operate in the future, its implications on bulk fuel requirements, which remains the near-term primary fuel source for combat power, are not as well understood. My new Global Bulk Fuel Management and Delivery team will remain linked with the LOG FCB as Project Pele matures to ensure we are ready to leverage this capability if/when it becomes viable.

40. Senator MANCHIN. General Van Ovost, if not, could I get your commitment to receive a briefing from the Program Manager that oversees Pele [Pay-Lay]? We'll ensure your staff are directly connected with him.

General VAN OVOST. As mentioned previously, we are aware of Project Pele and continue to monitor its development primarily through the efforts of the Joint Staff J4-led LOG FCB. No briefing is required at this time, however we will not hesitate to request additional information if/when it becomes a mature capability.

ENERGY SECURITY IN EUROPE

41. Senator MANCHIN. General Cavoli, do you share my concerns with our Balkan allies, and how can European Command get out ahead of them?

General CAVOLI. I share your concerns. Many of our Balkan Allies are dependent on Russian sourced fossil fuels. Energy security should be viewed in the larger context of moving our partners and Allies away from Russian and Chinese influence and toward EU and Atlantic integration. We have recently seen some encouraging signs of our Balkan Allies moving away from energy dependence on Russia. For example, Croatia has developed a liquefied natural gas terminal in Krk. This terminal has the potential to supply Croatia's natural gas requirements and serve the southeast Europe region. USEUCOM will continue to encourage our Allies in the region to diversify their energy sources.

DELAYED BUDGETS AND CONTINUING RESOLUTIONS

42. Senator MANCHIN. General Cavoli and General Van Ovost, can I have each of your commitments to get Congress as accurate an estimate as possible on the financial impact previous and future Continuing Resolutions have on the Department of Defense?

General CAVOLI. Yes, you have my commitment.

General VAN OVOST. USTRANSCOM has three primary funding sources, the Transportation Working Capital Fund (TWCF), Operation and Maintenance (O&M), and Research, Development, Test, and Evaluation (RDT&E).

TWCF—Continuing Resolutions (CRs) have minimal direct impact on TWCF funded operations if cash is maintained within established thresholds. The longer the CR, the greater potential for cash to diminish when customers are unable to pay bills.

O&M—The Joint Enabling Capabilities Command (JECC) and USTRANSCOM O&M programs will have sufficient funding to operate in the event of a CR.

RDT&E—CRs have significantly impacted RDT&E programs. Although existing projects receive sufficient funding to continue during a CR, new starts, which are approximately 25 percent of the annual innovation program, would be delayed. The late receipt of funding hinders our ability to meet obligation and expense goals. The perceived under execution translates to an out-year top line reduction. Since 2020, USTRANSCOM has been taxed $15+M for under execution directly related to CRs. This jeopardizes our ability to collaboratively pursue contested logistics technology innovation with the Services, Combatant Commands, OSD, Joint Staff, DLA, other government agencies, industry, and academia.

QUESTIONS SUBMITTED BY SENATOR MARK KELLY

LONG TERM UKRAINE STRATEGY

43. Senator KELLY. General Cavoli, I understand that some of the equipment we would like to provide Ukraine right now comes with a lot of training and a big sustainment tail. But I also think we need to be looking at the long game, in addition to providing Ukraine what they need to win the war as soon as possible. Long-term planning doesn't happen all at once. It needs to start now. What type of equipment do we need to be looking at long-term for Ukraine as the battlefield dynamics change? Does it differ from the more immediate needs?

General CAVOLI. We remain committed to both supporting Ukraine's urgent needs and increasing their combat capabilities over the long-term. Specifically, USEUCOM supports DOD efforts to transition Ukraine toward a western-style military with advanced and NATO-interoperable equipment. I am thankful for the supplemental funding already provided by Congress to enable our progress toward this goal. Ukraine will need a combination of legacy and Western-provided equipment in the short to midterm. However, the types of equipment Ukraine requires now for ongoing combat operations are often the same type of equipment that will make the Ukrainian Armed Forces successful in the future. Of particular importance, air defense systems and interceptors will continue to be a high priority to protect civilian populations and infrastructure, while contributing to the security required to encourage economic recovery after the cessation of hostilities.

44. Senator KELLY. General Cavoli, what type of force do we need to start planning for now from a long-term deterrence perspective?

General CAVOLI. Ukraine's long term force requirements will depend in large measure on the outcome of the current counteroffensive, intended to expel Russian forces and restore Ukraine's territorial integrity. Assuming these efforts are successful, Ukraine will require an advanced, multi-domain force of sufficient size and capability to deter and, if necessary, respond decisively to future Russian aggression.

EXERCISE LESSONS LEARNED

45. Senator KELLY. General Cavoli and General Van Ovost, the Joint Force is doing a great job with large-scale exercises worldwide. I'm eager to hear the readout from DEFENDER 23 in United States European Command as it concludes. United States Indo-Pacific Command has a number of joint and multi-national exercises throughout the year. It's a great time to deepen our partnerships, practice the way we will fight, and prepare for an exceedingly complex wartime environment. We've seen through the Russia-Ukraine conflict the importance of logistics in war. Additionally, with advanced long-range weapons, the risk of cyber-attacks, and a complex electronic warfare environment, it's more important than ever to closely evaluate and practice contested logistics. What are these exercises highlighting about any logistics or supply chain challenges we have?

General CAVOLI. The DEFENDER 23 series highlighted the need for USEUCOM to continue its close coordination with our Allies and partners to expand the throughput capacity of ports, roads, railways, and airfields in the European theater. We will also work together to further develop the assembly areas needed to conduct large-scale reception, staging, onward-movement, and integration operations. Finally, the DEFENDER 23 series experimented with the use of non-standard ports in an effort to diversify and provide options to succeed in a contested logistics environment. Our integration with Allies and partners during these exercises have enabled us to leverage their expertise to mitigate many of these challenges in their respective operating areas.

General VAN OVOST. The challenges we confront from today's complex wartime environment include the fact logistics support to global operations may be at risk from the Homeland to the destination. Exercises, conducted with the other Combatant Commands, other U.S. Government departments and agencies, along with our commercial partners and allied nations when appropriate, enable us to gain a deeper understanding of these challenges so we are better prepared to face them. The exercises also highlight that we must continue to recapitalize organic mobility capabilities and modernize the Joint Deployment and Distribution Enterprise (JDDE) in order for the DOD to maintain asymmetric advantages and deliver on our national security requirements.

46. Senator KELLY. General Cavoli and General Van Ovost, what are these exercises telling us about how well we operating jointly, and what areas do you think we're doing the best, and what can we improve on?

General CAVOLI. Although we could always use more inter-theater strategic lift, USEUCOM planners do a tremendous job of coordinating closely with subject matter experts from USTRANSCOM to move approximately 3,000 and 5,000 troops into and out of theater every year in support of the Defender series of exercises. One area for future improvement is in Joint Force planning for port and airfield openings in a contested European theater. Once those details are included in future exercise plans, we will need to exercise these activities across the Joint Force and with allies and partners. At the tactical level, we will continue to improve our integration of naval surface fires into our ground force schemes of maneuver during the Defender series.

General VAN OVOST. Exercises validate that today's Joint Force is integrated and effective, however they also show us how to further improve globally integrated operations. We can no longer presume the JDDE will have complete freedom of maneuver with full access to our lines of communication on the ground, in the air, at sea, and in space. The Joint Staff is enabling Combatant Command understanding of the global war fight challenges through the Globally Integrated Exercise (GIE) series, Globally Integrated Wargame (GIWG) series, and the Advancing Globally Integrated Logistics Effort (AGILE) series. The Joint Staff has recently proposed a single exercise event, supported by multiple Combatant Commands, to explore global integration within a realistic and relevant global logistics problem set. Recognizing the logistics operating environment extends beyond purely DOD lanes, we are expanding our approach to include a holistic perspective. This enables the Joint Force, industry, interagency, and our allies & partners to collaboratively work toward advancing solutions to identified gaps. We have found, through exercises and wargames, that improving awareness of authorities and processes have enhanced our joint ability to understand available options. We have also identified areas where we lack capability or authority. The DOD has prioritized Contested Logistics as an analytic focus area.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

EXTENDED DETERRENCE

47. Senator COTTON. General Cavoli, please provide more details on enhanced deterrence requirements. This is a followup to discussion in the closed session. Please refer to that session for details of the exact question.

General CAVOLI. [Deleted.]

CONTESTED LOGISTICS

48. Senator COTTON. General Van Ovost, you've spoken about the need to ensure the U.S. command and control apparatus will be sufficiently robust and resilient to coordinate logistical operations across the globe in event of a conflict. General Minihan of Air Mobility Command lists "command and control" as one of the four main capability gaps he is most concerned with filling. Please provide an update on U.S. Transportation Command efforts to modernize the command and control of our logistics fleet.

General VAN OVOST. USTRANSCOM efforts to ensure command and control of the Logistics enterprise have been focused on increasing the real time visibility of forces, status of capabilities and assets, improving redundancy in communication avenues, monitoring and securing systems, and increasing awareness of impacts to USTRANSCOM entities. We have accomplished this through the establishment of a robust Knowledge Management team integrated across multiple directorates within USTRANSCOM that have integrated over 100 capabilities into a Common Operating Picture. The most visible aspects of this effort have combined different information feeds across the civilian and military enterprises to provide a holistic situational awareness tool, delivering accurate, and relevant information to entities across the Joint Deployment and Distribution Enterprise. Additionally, annual exercises such as TURBO CHALLENGE and ULTIMATE GUARDIAN challenge USTRANSCOM's ability to project and sustain the joint force in a degraded operating environment. These exercises further inform our ability to test, develop, and codify resilient business practices across the global logistics enterprise as well as enhance our ability to sense and provide decision advantage for our global mobility posture and capacity. Finally, to thwart adversary attempts to gain information ad-

vantage, USTRANSCOM continues to develop, test, and acquire technologies that ensure secure and resilient command and control capabilities.

49. Senator COTTON. General Van Ovost, the Services are focusing extensively on the concept of contested logistics in the Pacific, whether Army's new cross functional team for contested logistics or the Air Force's agile combat employment (ACE) concept. These actions recognize the massive challenge posed to our logistics forces by China. What most concerns you have China's growing military power in regards to your ability to fulfill United States Transportation Command's mission?

General VAN OVOST. USTRANSCOM relies on robust access, basing, and overflight (ABO) to deploy and sustain United States Forces in time of conflict. The PRC may use their growing influence and military power to pressure allies and partners to decline or limit ABO to United States Forces, as well as to threaten or deny freedom of movement through logistics chokepoints. This challenge is compounded by vulnerable cyber and information domains in our many networks, global Command and Control constructs, and global integration that also require Allies and Partners to fulfill our mission. China's growing military power, to include highly networked anti-access capabilities, could potentially allow them to interdict our lines of communication that link our global supply chains, reducing the US' relative advantage in global speed and reach. Furthermore, improvements in PRC military capabilities, such as their missile forces, also allows them to hold United States Forces at risk in the Western Pacific. This may reduce strategic and operational options in crisis or conflict. The PRC is likely to continue refining and improving this capability.

To maintain our ability to project power at a time and place of our choosing, including in contested environments, we must continue to build a robust, resilient, and highly effective global logistics command and control structure, with integrated prioritization and governance processes to maximize decision advantage. Furthermore, our new Unified Command Plan mission set as the Single Manager for Global Bulk Fuel Management and Delivery is critical to meeting Combatant Command requirements and assure efficient distribution for the entire enterprise. To execute this responsibility amidst China's growing military power, USTRANSCOM will continue to closely coordinate with the Combatant Commands, the Services, and Defense Logistics Agency to ensure we are appropriately postured to assure bulk fuel distribution to the point-of-need through escalation from competition to armed conflict.

50. Senator COTTON. General Van Ovost, how is Transportation Command working with each of the Services to ensure these concepts are mutually supportive?

General VAN OVOST. As USTRANSCOM conducts planning and analysis in support of the CCMDs, we work collaboratively with the Services and CCMDs to understand and incorporate their capabilities and concepts into sustainment plans. USTRANSCOM communicates capability requirements to each of the Services and the Joint Force through the Joint Capabilities Integration and Development System, which includes various Functional Capability Boards. We contribute to assessing, prioritizing, and making recommendations on capability requirements and associated investments to address Concept Required Capabilities needed to execute the Department's Joint Warfighting Concept. We provide an annual Integrated Priority List to communicate USTRANSCOM's top capability and budgetary gaps to the Joint Force and employ the program budget review process to collaborate with Services on portfolio issues not addressed in their POMs.

51. Senator COTTON. General Van Ovost, what more can be done to accelerate our ability to supply our troops in contested or denied environments?

General VAN OVOST. We must remain focused on this Nation's unique capability to project power. That is primarily accomplished by USTRANSCOM. We must focus on improving the readiness of mobility forces and recapitalizing mobility assets while continuing to invest in our strategic Airlift, Aerial Refueling, and Sealift fleets, as well as our smaller intra-theater assets and enablers.

Increased bi-lateral government to government agreements with allies and partners will greatly enhance our Nation's ability to rapidly deploy and sustain the force and all classes of supply in a contested logistics environment. This effort requires a U.S. whole-of-government approach, utilizing diplomatic channels as well as military-to-military engagements to build resilient relationships. Where possible, we must reduce the requirement for movement of equipment and sustainment supplies. This can include prepositioning of equipment and supplies where militarily useful and diplomatically possible, pursuing common platforms and systems with allies and partners, and logistics sharing agreements.

QUESTIONS SUBMITTED BY SENATOR MIKE ROUNDS

SPECTRUM

There is an effort by some in Congress to require sharing of all or some of the 3.1–3.45 GHz band of the electromagnetic spectrum between the Department of Defense and commercial interests in the private sector.

52. Senator ROUNDS. General Cavoli and General Van Ovost, as I understand it, the 3.1–3.45 GHz band is primarily used by Department of Defense ground-, air- and sea-based radars and sensors to detect airborne and missile threats. For example, the Navy's Aegis Combat System's AN/SPY radar uses that band and is one of the few systems able to track the new threat posed by low flying, highly maneuverable hypersonic missiles. Can you confirm that U.S. Forces assigned to you in EUCOM and TRANSCOM rely upon systems critical to our national security that reside on this portion of the spectrum? If so, can you share examples of either specific systems that currently operate there or some of the missions and capabilities which rely on this portion of the spectrum?

General CAVOLI. We confirm U.S. forces assigned to USEUCOM utilize critical national security systems residing in the 3.1–3.45 GHz spectrum. Specifically, the following systems occupy the spectrum in question:

- Aegis Combat System's AN/SPY radar systems are deployed to Poland and Romania as part of AEGIS Ashore. Additionally, Navy ships entering the North Sea, Mediterranean Sea, and the Black Sea will also have active AEGIS systems.
- The APY–1/APY–2 is the primary radar system of the E–3A airborne warning and control system and is routinely deployed to theater for training. U.S. provided airborne warning and control systems are also assigned to NATO for active missions.
- AN/TPQ–53 Quick Reaction Capability Radar are actively deployed to Latvia, Romania, Germany, Poland, Slovakia, and Hungary.
- AN/RPS–42 Tactical Air Surveillance Radar Systems are currently deployed to Italy and Germany.
- AN/TPS–80 Ground/Air Task Oriented Radar (G/ATOR): Although we do not currently have any assigned to USEUCOM, the United States Marines frequently deploy to our theater with these systems.

General VAN OVOST. Yes, USTRANSCOM forces rely on systems that reside in this portion of the spectrum. For example, Air Mobility Command's C–130 aircraft use an avionics formation positioning system, known as Stationkeeping Equipment, to train for flying in close contact between aircraft. Another example is the Surface Deployment and Distribution Command's use of the RPS–42 air surveillance radar system at the Military Ocean Terminals.

53. Senator ROUNDS. General Cavoli and General Van Ovost, providing this Committee with your best military advice, can you characterize the risk to mission and the risk to the force if action were taken to enable the auction of portions of this band prior to the analysis of the results of the statutorily required DOD-NTIA study, which is required to be completed by September 2023?

General CAVOLI. USEUCOM has identified significant operational and readiness impacts if the Spectrum Innovation Act is passed. At the unclassified level, these systems cover short and medium range surveillance and counter air, rocket, mortar, missile, and ground missions. Vacating these spectrums will necessitate further research, development, integration, and fielding of weapons systems capable of operating within a different frequency band.

General VAN OVOST. It is important to preserve DOD operational equities in this portion of the spectrum to enable the Department to protect the Homeland and train for all types of overseas contingencies. These operational equities involve hundreds of air, sea, and land-based radars that DOD uses for a wide range of missions.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

THE WAR IN UKRAINE

54. Senator ERNST. General Cavoli, how do you assess the prospect of success of a Ukraine offensive to retake Crimea this spring or summer?

General CAVOLI. As long as Russian soldiers continue to occupy Crimea, retaking the region will prove a challenge.

55. Senator ERNST. General Cavoli, Russia has declared that it would use nuclear weapons in existential circumstances. Do you believe Ukraine's recapture of Crimea would increase the risk of nuclear escalation?

General CAVOLI. Yes. Russia has considered Crimea legally part of the Russian Federation since its annexation in 2014, and extends the same theoretical nuclear weapons protection to Crimea as to Russia proper. Russia's June 2020Nuclear tDeterrent Policy reaffirmed its willingness to use nuclear weapons to respond to nuclear or conventional attacks threatening "the very existence of the State," and was referenced in a March 2023 interview by Russian Security Council Deputy Chairman Medvedev in connection with a potential Ukrainian effort to retake Crimea. Furthermore, at the St. Petersburg Internal Economic Forum in June 2023, President Putin also reiterated threats to the existence of the Russia Federation are grounds for the use of nuclear weapons.

56. Senator ERNST. General Cavoli, would North Atlantic Treaty Organization's military requirements in the United States European Command increase if there is a political decision to extend a security commitment to Ukraine and would European allies be capable of meeting those requirements?

General CAVOLI. Yes, a political decision to extend a security commitment to Ukraine would increase NATO's military requirements. In the near term, many of our Allies have donated a large relative portion of their military capacity to support Ukraine. Replenishment of this equipment and munitions will require a strong and robust defense industrial base with resilient supply chains. In the mid-to long-term, a security commitment to Ukraine would expand NATO's military requirements as defined within a newly approved family of plans. At the 2023 Vilnius Summit, Allies approved the implementation of NATO's new concept for the deterrence and defense of the Euro-Atlantic area based upon new regional plans that address the Alliance's core task of collective defense. This family of plans will provide a framework for future requirements that our NATO Allies have committed to meet as we work together to improve readiness, capacity, and interoperability.

57. Senator ERNST. General Cavoli, Admiral Aquilino told this Committee that United States support to Ukraine has not undermined military readiness in the Indo-Pacific. Have munitions provided to Ukraine decreased United States military requirements to execute operational plans in the United States European Command? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General CAVOLI. No. Munitions provided to Ukraine have not decreased United States military requirements to execute operational plans in USEUCOM.

U.S., Ally, and partner support to Ukraine has helped to reinvigorate collective defense and to refine the development of a new family of NATO defense plans. While Ally and partner defense investments may reduce future U.S. munitions and force requirements in theater, USEUCOM requirements remain unchanged during this perilous time.

58. Senator ERNST. General Cavoli, have we used the battlefield in Ukraine to reveal new capabilities that could deter adversaries like China? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General CAVOLI. No.

RUSSIAN EFFORTS IN THE BALKANS

59. Senator ERNST. General Cavoli, what is the risk of ongoing Russian efforts to foment unrest in the Balkans, especially in Kosovo?

General CAVOLI. Any effort by Russia to foment unrest in the Balkans is concerning, particularly given the volatility of the situation in Northern Kosovo and Bosnia and Herzegovina. Russia has continued to support Republika Srpska President Dodik and promote his unhelpful rhetoric in Bosnia and Herzegovina. The EU Force (EUFOR) mission in Bosnia and Herzegovina is essential to maintaining peace and security within the country. Russia's seat on the UNSC provides them an opportunity to block EUFOR's annual renewal, placing Bosnia and Herzegovina at greater risk for instability and associated potential violence. This instability could threaten regional stability. USEUCOM will continue to closely monitor the situation.

NORTH ATLANTIC TREATY ORGANIZATION JOINT LOGISTICS

60. Senator ERNST. General Cavoli, where are the gaps to allied contributions to North Atlantic Treaty Organization's joint logistics concept?

General CAVOLI. NATO's joint logistics concept will drive needed investments by the U.S. and our Allies in force mobility, sustainment, and mission assurance within contested environments. We need to ensure our forces are postured and able to deploy at the speed and scale required to deter and if necessary defend against aggression. Once in place, Allied forces must have the collective capability, backed by munitions and fuel stockpiles, to sustain high-end combat operations until we achieve our strategic objectives. Finally, Allies must be prepared, individually and as an Alliance, to execute these critical functions while under kinetic and non-kinetic attack.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

WHAT IS THE UNITED STATES LEARNING FROM UKRAINE WAR?

61. Senator SULLIVAN. General Cavoli, in remarks at a Swedish defense conference in January of this year, you pointed to the scale of combat in Ukraine as "out of proportion with all of our recent thinking." You noted the importance of the defense industrial base to producing equipment at scale. You also referenced Ukraine's battlefield success, saying "precision can beat mass," but it takes time for quality to beat quantity. Can you expand on those remarks and discuss what else have you learned from the war in Ukraine?

General CAVOLI. As we have witnessed in Ukraine, it takes time for precision weapons to blunt and destroy mass at scale in major combat operations. This presents a unique challenge to many of our Eastern Flank NATO Allies, who would be unable to cede large swaths of territorial control for the time necessary for precision to defeat massed Russian aggressors. United States and European defense industrial bases will need to strike a balance between the production of exquisite weapons systems and the sheer volume that allows quantity to have a quality of its own.

62. Senator SULLIVAN. General Cavoli, how are we using what we have learned in Ukraine to refine requirements and modernize doctrine?

General CAVOLI. We are currently incorporating observations from the conflict into our assumption for Air Defense, weapons expenditures and sustainment, just to name a few. We are not only gathering those lessons from this conflict but we are disseminating those lessons to the appropriate agencies for action and dissemination, including the Joint Staff via the Joint Lessons Learned Information System. Consequently, Lessons learned that could potentially drive changes in joint requirements or joint doctrine are considered by the Joint Staff and Service components for action. Finally, as Ukraine conflict is still ongoing, it is still too early to see exactly how those lessons will drive changes to joint requirements or doctrine.

Moving Ukrainian Equipment to a North Atlantic Treaty Organization Standardization (General Cavoli)

63. Senator SULLIVAN. General Cavoli, in your opening statement you stated your support for the Department of Defense's efforts to transition Ukraine toward a western-style military with advanced and interoperable equipment. Since the beginning of the war, Ukraine has slowly incorporated more Western-origin and North Atlantic Treaty Organization-spec weapons to augment its supply of Soviet-era weapon systems. This has significantly increased Ukraine's lethality but it has also created a logistical and maintenance headache as Ukraine seeks to maintain and repair multiple types of artillery, Infantry Fighting Vehicles, and tanks. How is United States European Command working within the Department of Defense and its European partners in ensuring a long-term training and procurement plan to transition Ukraine from Soviet-spec to North Atlantic Treaty Organization-spec weapons?

General CAVOLI. Ukraine's transition to a NATO-interoperable force has already begun, but the transition will require sustained materiel, training, advising and institutional capacity building support from the U.S. alongside our Allies and partners. In the short term, USEUCOM has prioritized sustainment to improve readiness to meet Ukraine's security assistance needs. This emphasis on sustainment extends the longevity of the NATO-interoperable equipment that will form the foundation of Ukraine's future force. Over the mid to long term, USEUCOM support a whole-of-government and whole of Alliance approach to ensuring Ukraine is able to

operate and maintain a NATO-standard force capable of defending its territorial sovereignty.

PREVENTING SUPPLY CHAIN WARFARE (GENERAL VAN OVOST)

64. Senator SULLIVAN. General Van Ovost, the People's Republic of China (PRC) has the largest commercial shipping fleet in the world, builds approximately half of the world's largest commercial ships, and produces 96 percent of the world's dry shipping containers. As you mentioned in our meeting, there are only 85 United States flagged and United States crewed ships involved in international trade. China has over 4,500 People's Republic of China-flagged commercial vessels. During a potential conflict over the Taiwan Strait, the People's Republic of China can leverage its vast commercial shipping fleet and control of marine terminals and infrastructure to disrupt the United States supply chain. We discussed the Tanker Security Program as a way for the United States to not rely on People's Republic of China-flagged tankers to ensure a mobile supply of fuel within the First and Second Island Chain. Can you explain how the Tanker Security Program helps the Joint Force execute contested logistics and what steps we can take to reduce our vulnerability to intentional supply chain disruptions by working with allies and partners?

General VAN OVOST. As detailed in the Tanker Study delivered to Congress in June 2021, USTRANSCOM validated the need for the Tanker Security Program (TSP) to address the gap in meeting strategic, inter-theater bulk fuel distribution during wartime demands, while increasing the U.S. flag presence within the international trade market. The first set of 10 medium-range U.S. flag tankers is expected to be fully crewed and operating in TSP by early next year. Furthermore, USTRANSCOM appreciates Congress's vision to expand TSP with the authorization of 20 tankers in the Fiscal Year 2023 NDAA. The second/additional set of ten tankers is expected to be composed of shallower draft/coastal tankers. This will allow greater theater port access in support of fuel distribution within the first and second island chains. Going forward, the expectation is for the additional tankers to reach initial operating capacity in fiscal year 2024. In parallel with the implementation of TSP, USTRANSCOM in partnership with the Maritime Administration renewed the Voluntary Tanker Agreement (VTA) in November 2022. Together we have developed VTA contingency contracts that will provide assured access to the U.S. flagged tanker fleet in support of Joint Force requirements. To continue mitigating contested logistics risk, USTRANSCOM is working within the DOD and the Department of State to build assured access agreements with critical Indo-Pacific allies for access to host nation commercial tankers and terminals directly countering PRC regional assertiveness.

REMOVING CAP ON SEALIFT RECCAP (GENERAL VAN OVOST)

65. Senator SULLIVAN. General Van Ovost, in our conversation on Tuesday, you mentioned the need to lift the caps on acquiring used Roll-on/Roll off (RO-ROs) because of the timelines associated with the retirement of ships we currently have in the fleet. Over 70 percent of our Surge Sealift vessels are approaching the end of their service life in the next 10 years. In fact as you stated in your testimony, the average age of the 44 Roll-On/Roll-Off ships we use to surge from the Continental U.S. is 44 years old, with 17 of them being 50 years or older. There are cost and timeline advantages with acquiring these used, foreign-built ships given there is no market of domestically built ships available today. How do the current caps on acquiring used roll-on/roll-off vessels constrain United States Transportation Command and how can we use the expected retirement dates of ships in the surge fleet to stimulate demand for domestically built roll-on/roll-off ships?

General VAN OVOST. Procuring used Roll-on/Roll-off (RO/RO) vessels is the fastest and most cost-effective recapitalization approach to meet surge sealift requirements. USTRANSCOM's top priority is the swift recapitalization of the fleet with four (4) used vessels for a target capacity of 800,000 square foot annually. The current authorized limit of nine used vessels will be reached by fiscal year 2024 with the planned purchase of the next four vessels, essentially ending the buy-used program. The flexibility to purchase used vessels without a cap on quantity allows us to act when market conditions are favorable and provides greater opportunities to acquire multiple vessels of the same class. This would potentially offer us lower purchase prices, lower lifecycle costs, and improve overall readiness for the RRF. MARAD anticipates continued volatility in the market for future purchases so flexibility without limitations will be critical.

Domestic new sealift vessel construction, if funded, could complement the current used vessel acquisition program to recapitalize the capacity and readiness of the RRF. The process of designing and constructing a new ship would likely take up to 5 years and potentially cost up to four times the amount compared to a used ship purchase. Nevertheless, I do recognize the importance of a robust and healthy domestic vessel construction and repair capability supported by the U.S. maritime commercial sector, and it remains paramount to assure the availability of the skilled professionals and modern facilities needed in time of war or national emergency. Finally, the Navy supports construction of new auxiliary vessels to recapitalize the Maritime Prepositioning Force (MPF) to align with planned retirements beginning in 2030.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST FOR APPROPRIATIONS FOR FISCAL YEAR 2024 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MAY 2, 2023

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
WASHINGTON, DC.

AIR FORCE POSTURE

The Committee met, pursuant to notice, at 9:28 a.m., in room G–50, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Committee) presiding.

Committee Members present: Senators Reed, Shaheen, Gillibrand, Blumenthal, Hirono, King, Warren, Peters, Duckworth, Rosen, Kelly, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Budd, and Schmitt.

OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Good morning. The Committee meets today to receive testimony on the President's Budget Request for the Department of the Air Force for fiscal year 2024. I would like to welcome Secretary of the Air Force, Frank Kendall, Chief of Staff for the Air Force, General Charles Brown, and Chief of Space Operations, General Chance Saltzman.

Thank you, gentlemen, for your leadership, and please share the Committee's gratitude with the men and women under your command for their service and to their families for their continued support. The Air Force and Space Force play a fundamental role in our strategic competition with China and other adversaries. The United States air and space power remains the finest in the world, and the entire joint force relies on these capabilities each day.

This is a challenging mission, as the Air Force must strike a balance between supporting its continuous global operations, while providing adequate resources to modernize its aircraft and maintain our technological edge.

To that end, President Biden's Defense Budget Request for Fiscal Year 2024 includes approximately $260 billion in funding for the Air Force, an increase of $12.4 billion over the 2023 enacted budget. This budget request includes considerable investments in platforms such as advanced battle management systems, Air Force joint all domain command and control, next generation air domi-

nance, the B–21, hypersonics, and air and ground moving target indication.

These are important initiatives that will contribute significantly to modernizing the service. Indeed, the Air Force's success in the coming decades will be its ability to manage and control data. The initiatives outlined in this budget would enable the Air Force to detect, analyze, and act on information across the battlespace quickly using automation, artificial intelligence, and predictive analytics.

In turn, these systems will help our forces acquire targets as early as possible and rapidly deliver information to the best shooter on air, land, or sea. The Committee would appreciate an update on these and other programs that are receiving increased emphasis and resourcing.

The budget request also proposes to retire or realign various elements of the Air Force with a net reduction of roughly 214 aircraft in fiscal year 2024. This would include reducing or altering the force structure for F–22s, A–10's, F–16s, F–15s, C–130's, KC–135s, KC–10's, JSTARS [Joint Surveillance Target Attack Radar System] aircraft, AWACS [Airborne Warning and Control System] aircraft, HH–60 helicopters, and training aircraft. Any proposal of this sort deserves careful consideration.

Discussions must be had about whether any of these weapons system retirements are necessary or appropriate in the near term. We also need to evaluate our domestic industrial base to avoid making decisions that undercut our production and manufacturing capabilities. I would ask the witnesses to provide us with reasoning for the proposed retirements and assure us that any decisions are well thought out before any changes to the force structure begin.

General Saltzman, Congress established the Space Force in order to consolidate the numerous space activities in the Department of Defense. Given that the Space Force is only 3 years old, I understand it is still becoming institutionalized within the Department and there are many challenges in that process.

General, I would like to know how you are growing the service in terms of personnel and structures like the Space Development Agency, and how you are working to foster a service culture that can succeed in the dramatically evolving space environment.

Finally, now that the Space Force is up and running, it is important to present a trained force with substantive capabilities to the combatant commanders. One of the capabilities for the combatant commands now under discussion is tactical space intelligence, surveillance, and reconnaissance, or ISR.

As our satellite constellations and sensors continue to improve, space based on ISR technologies will be able to provide global continuous information to units operating in every domain. Space is a rapidly evolving domain for the Defense Department. I want to ask the witnesses to discuss what resources are necessary to ensure its success.

Secretary Kendall, General Brown, and General Saltzman, thank you again for appearing today. I look forward to your testimony. As a reminder for my colleagues, there will be a closed session immediately following this hearing in room SVC–217. Let me now turn to the Ranking Member, Senator Wicker.

STATEMENT OF SENATOR ROGER F. WICKER

Senator WICKER. Thank you, Mr. Chairman. I join you in welcoming our distinguished witnesses, and I want to thank them for their years of service. This past year has highlighted several growing challenges confronting both the Air Force and the Space Force.

For example, Vladimir Putin's brutal and unprovoked war in Ukraine has demonstrated the significance of air and missile defense in denying the effective use of air power. Russia maintains a high level of capability in space, but communist China is much further ahead in comparison.

Meanwhile, the State of competition to use or deny the use of space capabilities is rapidly evolving, and Beijing rapidly continues to develop and field capabilities that could test our own assets in the air and in space. Although we face challenges, there are good signs of progress in this year's budget request. For example, I am encouraged to see that the Department of Air Force continue to modernize.

In particular, the Air Force is finally building out its fleet of fighter aircraft at a rate much closer to what we need. It does so while continuing to develop the next generation of advanced fighters and bombers.

I hope our witnesses will provide an update regarding plans for the next generation of tanker aircraft, considering that the KC–46 delivery is still in progress. I am also glad to see adequate resourcing for programs such as the Sentinel B–21 and Long Range Standoff Missile. However, there are alarming reports that indicate the ICBM [intercontinental ballistic missile] replacement program could be delayed.

We simply cannot afford to fall behind on nuclear modernization. So perhaps we will talk about that. I commend the Space Force for the effort it has put into building a hybrid architecture for missile warning, secure communications, and resilient navigation. I hope our witnesses will identify steps Congress can take to improve space capabilities more rapidly.

I am concerned that the Air Force is still assuming risk in the near term, particularly—in the air domain, particularly during the years of concern to operational commanders and the national defense strategy. Mr. Secretary, there remains a large gap between warfighting needs and capability.

Many of the platforms Congress has supported continue to be delayed, including the F–35 Block 4 upgrades, and T–7 trainer aircraft. This is particularly troubling since those delays indicate we may not have these assets to deploy them when we would need them the most. I am also bothered by—excuse me, I don't want to have a ring tone here. I am also bothered by potential failure to accelerate programs such as the E–7 command and control aircraft, despite the clear congressional signal of support last year. Other challenges stand in the way of agile combat employment.

To make that a reality, we need to make progress in the electromagnetic spectrum, in munitions production, and in building out the posture of basing and logistics. Further delays in these programs could have disastrous consequences.

The Air Force and Space Force have essential roles to play in deterring conflict in the Western Pacific. As I have said in other pos-

ture hearings, complacency is not an option. Complacency undermines deterrence. We need to proceed with urgency to get our forces the capabilities they need.

Thank you for our witnesses, and I look forward to an important discussion. Thank you, sir.

Chairman REED. Thank you very much, Senator Wicker, and now let me recognize the Secretary of the Air Force, Secretary Kendall.

STATEMENT OF THE HONORABLE FRANK KENDALL III, SECRETARY OF THE AIR FORCE

Secretary KENDALL. Mr. Chairman. Chairman Reed and Ranking Member Wicker, Members of the Committee, thank you for the opportunity to testify today on the Department of the Air Force's fiscal year 2024 budget submission.

Approximately 1 year ago, I began my testimony before this Committee with a quote from General Douglas MacArthur, reminding us that the history of failure in war can almost always be summed up in two words, too late.

That warning is even more valid today. Over the past year, under the rubric of 7 Department of the Air Force operational imperatives, the Department of the Air Force has worked to define the capabilities and technologies we need, along with the programs and resources required, to deter, and if necessary, prevail over our pacing challenge, China, China, China.

In fiscal year 2024, we are requesting approximately $5 billion as a direct result of this work, and over $25 billion for operational imperative related investments. War is not inevitable, but successfully deterring conflict is heavily dependent on our military capabilities.

In our fiscal year 2024 budget request, there are approximately 20 completely new or significantly reskilled program elements, some of which are classified, that we must develop, produce, and field if we desire to maintain the air and space superiority that America and our allies have counted on for decades.

In order to proceed with any of these programs, the Department of the Air Force needs timely authorizations and appropriations. The Department of the Air Force is ready to move forward with the next generation of capabilities we need, and there is no time to lose.

In addition to these new start or enhanced efforts, the fiscal year 2024 budget includes a request for additional resources to increase production and accelerate development of programs essential to the Department of the Air Force's missions, as defined in the National Defense Strategy (NDS).

For the Strategic Triad, we have fully funded the Sentinel ICBM, the B–21 radar bomber, the long range standoff weapon, and our nuclear command and control programs. For the conventional force, we are increasing production of both the F–35 and the F–15EX. The next generation air dominance program is funded to move forward, and as indicated last year, an uncrewed collaborative combat aircraft program of record is fully funded in fiscal year 2024 request.

We are also continuing the acquisition of essential programs like the E–7 Wedgetail and the new resilient missile warning and

tracking space system. As we indicated last year, hard choices have been required to move the Department into the future. We deeply appreciate the support of Congress for the divestitures we requested last year. This year, we must continue the divestment of our over 40 year old A–10 Warthog.

This program has served us well, but it is becoming increasingly obsolete and absorbing resources needed for higher priorities. We ask for Congress continued support for this and other identified changes we must make to field the forces we need to be successful against our pacing and other challenges.

But of course, it isn't all about the equipment we need to perform our missions. It is also about the men and women who serve in the total force, Active, Guard, Reserve, and those who support them. We appreciate Congress's support for a 4.6 percent pay raise last year. This year we are asking for a 5.2 percent pay increase, the largest 1 year increase we have ever requested.

In line with Secretary Austin's taking care of people initiative, we are continuing to invest in child development centers and housing to meet the highest priority needs of our airmen, guardians, and their families. Like the other services, with the exception of the Space Force, the Air Force faces challenges in recruiting in a generation where the propensity to serve is the lowest that we have seen in decades.

We are removing barriers to service to ensure that anyone with the capability and desire can serve to their full potential. Under the National Defense Strategy, we are also strengthening teams, both in the joint force and with our allies and partners. Building these relationships and investing in our ability to work together is the essence of integrated deterrence.

The effectiveness and importance of these relationships are on display in Europe today, where NATO [North Atlantic Treaty Organization] is stronger than ever. I recently returned from the Pacific, where I met with a number of our teammates who participated in the groundbreaking event for the Enhanced Defense Cooperation Agreement Air Bases in the Philippines.

Our budget request also supports strengthening our partnerships around the world, especially when we confront our pacing challenge and most acute threats. I started by talking about the value of time, and I will finish by highlighting a legislative proposal that can save up to 2 years of that valuable time.

Our proposal would expand rapid acquisition authority so that Military Departments can more quickly respond to emerging threats and take advantage of evolving technology. Within reasonable constraints, this legislative proposal would allow progress on compelling National Security needs that would otherwise be delayed until the next submission and approval of the President's Budget.

I have been pushing this reform for many years and we look forward to working with the Congress on this proposal. In closing, I believe the Department of the Air Force is well-postured to move into the future. Our work to define that future is not complete but has produced compelling results that are reflected in our fiscal year 2024 budget submission.

We look forward to your questions today. I would like to offer a more complete briefing on the classified details of our submission. Chairman, I appreciate the opportunity to do that after we finish this session. Thank you.

Chairman REED. Thank you very much, Mr. Secretary. General Brown, please.

STATEMENT OF GENERAL CHARLES Q. BROWN, JR. USAF
CHIEF OF STAFF OF THE AIR FORCE

General BROWN. Good morning, Chairman Reed and Ranking Member Wicker, and distinguished Members of this Committee. I am proud to represent the 689,000 total force airmen serving our Nation. I want to thank you for your steadfast support for our airmen and their families. It is an honor to join Secretary Kendall and General Saltzman to testify on the fiscal year 2024 budget submission.

This budget builds on the progress made in fiscal year 2023 and marks the next milestone toward the transformation of the Air Force to address the evolving security challenges outlined in the National Defense Strategy. As I emphasized last year, we must continue to accelerate change or risk losing our strategic advantage.

The Department of Air Force's operational imperatives describe key capabilities that must be attained to enable the Air Force's modernization in the face of a rapidly changing threat environment.

Remain dedicated to ensuring our investments and resources outlined in this budget submission are in line with the National Defense Strategy so the Air Force can continue to deter adversaries, prevail in conflict, and execute our mission to fight, fight, and win air power anytime, anywhere—not some time, in some places, but anytime, anywhere.

This budget ensures the Air Force continues to provide the Nation the assurance of air superiority, the advantage of global strike, the agility of rapid global mobility, and you combine that with the adaptability of intelligence, surveillance, and reconnaissance, and authority in our command and control capabilities, providing the ability to sense, make sense, and act.

This is what we must be do today and we must be prepared to do tomorrow. In order to provide these core functions to the Nation, we must accelerate development of programs essential to our mission with this budget submission.

To provide the assurance of air superiority, we are increasing production of the F–35 and F15EX while the next generation air dominance program and family assistance continues development.

To provide the advantage of global strike, we have fully funded ICBM and the B–21 bomber. To provide the agility of rapid mobility, we instituted recapitalization of KC–135 fleet, KC–46 ——

[There was a technical problem with 4 minutes of the audio recording of this transcript.]

General BROWN.—thank you for the opportunity to be here with you today. I look forward to your questions.

The CHAIRMAN. Thank you, General Brown. General Saltzman, please.

STATEMENT OF GENERAL B. CHANCE SALTZMAN, USSF CHIEF OF SPACE OPERATIONS

General SALTZMAN. Chairman Reed, Ranking Member Wicker, distinguished Members of the Committee, thank you for your continued support and for the opportunity to testify on the fiscal year 2024 budget submission——

[Technical problems.]

General SALTZMAN. Sorry. I will be as loud as I can——

[Technical problems.]

Chairman REED. We had a coup.

General SALTZMAN. No, no——

[Laughter.]

General SALTZMAN. How is that?

Chairman REED. Much better.

General SALTZMAN. That is why he is the Secretary of the Air Force.

Chairman REED. No, no, that is right.

General SALTZMAN. As the fiscal year 2024 budget will allow us to further efforts to develop a resilient space order battle and prepare for rapid transition to a wartime posture against any potential adversary to fight and win a high intensity conflict.

In conjunction with ongoing modernization projects, the Space Force has several new starts for fiscal year 2024 to support those efforts. Investing in these modernization projects will allow us to execute our assigned missions as we move forward to better posture for the emerging complexities of the space domain.

Space is now undeniably a contested warfighting domain. China and Russia define space as such and are investing in technology meant to undermine United States advantage in the domain. China, our pacing challenge, is our most substantial threat into and from space. But Russia also remains an acute threat.

Both present serious challenges with space capabilities that can track and target U.S. military forces on land, at sea, and in the air. Both can hold U.S. space assets at risk with cyber and electronic warfare, lasers, ground to space missiles, and space to space orbital engagement systems.

These systems threaten the space architecture the Nation relies on for prosperity and security. To meet this challenge, the Space Force will prioritize three lines of effort. First, we will field ready, resilient, and combat credible forces. Second, we will amplify what I am calling the guardian spirit.

Third, we will partner to win. These are directly in line with Secretary Austin's mission, people and team priorities. In sum, this budget request is designed to deliver the forces, personnel, and partnerships the Space Force requires to preserve U.S. advantages in space.

To build resilient, ready, combat credible space forces, we are accelerating the pivot toward modern, more defendable satellite constellations and support infrastructure. We are conducting transformational force design analysis based on threats, operational needs, and costs so that we can maximize our budget while investing in effective missile warning, space domain awareness, communication and navigation systems.

Additionally, we are investing to ensure our networks are hardened to defeat cyber threats, and that we have the operational test and training infrastructure necessary to prepare guardians for high intensity conflict.

With our second line of effort, we are amplifying the guardian spirit by recruiting, developing, and retaining the best talent and empowering guardians to succeed. Investment in space centric curriculum for entry level schools will build guardians laser focused on space operations in both competition and conflict.

Guardians will be empowered through mission command to innovate and execute in those scenarios. Notably, and with congressional support, we plan to integrate the space mission elements of the Air Force Reserve into the Space Force to offer guardians flexible career paths, including both full time and part time duty to retain talent and bring private sector experience to the force.

The third line of effort acknowledges that the Space Force relies on partnerships to accomplish our mission. We are investing in training, education, data sharing, and integrated capabilities with our allies and partners. The Space Force will strengthen our presence in all combatant commands where guardians are already making solid connections with allies and partners.

Because of its critical importance, the Space Force is collaborating with commercial space partners to build resilient capacity and leveraging emerging technologies. To enhance this partnership, the Space Force is working to eliminate barriers to such collaboration so that we can build enduring advantages and field these capabilities more rapidly.

In conclusion, thank you for the opportunity to discuss the Space Force's Fiscal Year 2024 Budget Request. The Space Force continues to be the preeminent military space organization in the world.

Our adversaries seek to challenge our advantage in space, but with the support of this Committee, our guardians will be able to out-work, out-innovate, and out-compete our potential adversaries to ensure that we maintain that advantage.

The fiscal year 2024 budget request will make this possible, but only if the Congress passes timely appropriations. I look forward to your questions.

[The joint prepared statement of The Honorable Frank Kendall, General Charles Q. Brown, Jr., and General B. Chance Saltzman follows:]

JOINT PREPARED STATEMENT BY THE HONORABLE FRANK KENDALL, GENERAL CHARLES Q. BROWN, JR., AND GENERAL B. CHANCE SALTZMAN

OVERVIEW

The Department of the Air Force (DAF) remains focused on implementing the National Defense Strategy (NDS) and the priorities of the Secretary of Defense: mission, people, and teams. Our ability to perform our missions comes first, and everything we are doing to support and develop our people and build strong teams supports that goal. One year ago, we submitted a posture statement in which the need to modernize the Air and Space Forces, especially to meet our pacing challenge—the People's Republic of China (PRC)—was highlighted. Over the past year, we have provided threat briefings to Congress on the severity of that challenge. A year ago, we also outlined seven operational imperatives the DAF must meet to be successful, but we were only beginning our work to analyze and define the solutions to those imperatives. We are pleased to report we have made significant progress in identi-

fying the capabilities the DAF will need to prevail against the PRC and in defining new programs and resources to develop and field these capabilities. That progress is reflected in over a dozen new efforts, including a mix of completely new or significantly re-scoped program elements, in our fiscal year 2024 budget submission. With our budget submission, the DAF's ability to execute these plans and to keep pace with the threat is now in your hands, and we urge you to act promptly on our fiscal year 2024 request.

Within the NDS, there are four priorities: defending the homeland, deterring strategic attacks, deterring aggression, and building a resilient joint force. The Nation's Air and Space Forces have key roles to play in each of these, and this is reflected in our fiscal year 2024 budget request.

The need to defend the homeland is paced with the growing threat from the PRC. We have just seen a manifestation of this threat in the high-altitude surveillance balloon destroyed by an Air Force F–22 fighter aircraft. While the recent high-altitude balloon incursion into our airspace may have garnered significant attention, there are other, more concerning threats to the homeland. PRC and Russian satellites observe the United States continuously. Cyber-attacks focused on intellectual property theft, penetration of critical infrastructure, espionage against national security networks, and disinformation, from both the PRC and Russia, are a constant reality. As the PRC increases the range of its conventional strike capabilities, the potential for missile strikes of various types against the homeland is increasing. In our fiscal year 2024 budget, we are once again requesting F–15EX and F–35 fighter production. We are also accelerating our acquisition of a new space-based missile warning architecture to improve our warning and enable defenses against missile threats.

To deter strategic attacks against the United States, our allies, and partners, the DAF continues programs to recapitalize the intercontinental ballistic missile (ICBM) and bomber legs of the nuclear triad. The Sentinel program, our ICBM replacement, is continuing in development. The Minuteman III, first deployed in 1970, is the oldest land-based strategic missile system in the world. Fiscal year 2024 budgets more than $4.4 billion for its replacement, Sentinel, which is critical for our nuclear modernization. For the bomber leg, we recently rolled out the B–21 Raider, which is scheduled to achieve its first flight this calendar year. Complementing our new bomber is the modernization of the B–52 and development of the Long-Range Standoff Weapon. Stable and consistent congressional support remains vital to ensuring a safe, secure, and effective nuclear deterrent. These programs and others that contribute to this priority are all fully funded in the fiscal year 2024 budget request.

Our biggest challenge is maintaining and strengthening our capacity to deter aggression, and to prevail, if necessary, with priority to the PRC and the Indo-Pacific followed by the Russian challenge in Europe. While there is overlap with other priorities, the focus of our seven operational imperatives described in last year's posture statement has been on this challenge. The Nation's ability to project power, in the western Pacific in particular, is being challenged aggressively. The fiscal year 2024 budget request includes approximately $5 billion in funding focused directly on achieving the seven operational imperatives and includes several new initiatives. The DAF's Future Years Defense Program (FYDP) request includes nearly $35 billion in funding to continue our investments designed to address the operational imperatives. The criticality of these efforts highlights the importance of an on-time appropriation.

Space has been recognized as a military domain of crucial importance to the joint force, allies, and partners, and to our ability to project power. The first operational imperative is to define the Space Force that we will need and to put the programs in place to field that force. The Space Force has two fundamental missions: to provide essential services to the joint force and to protect the joint force from adversary hostile uses of space systems. The ability to perform these missions is at risk today and that risk is increasing over time. Our space systems are threatened by a variety of growing anti-satellite capabilities, and the joint force is threatened by increasingly sophisticated adversary space-based systems intended to target the joint force. Our fiscal year 2024 budget request continues the work on a resilient missile warning constellation initiated last year. Our budget also builds out a more resilient space communications capability for the joint force, based on diversity and dispersion of communication satellites. This development work includes programs being managed by the Space Development Agency (SDA), now a part of the DAF and the Space Force, continuing to field distributed communications architectures. The total Space Force budget in the fiscal year 2024 request is $30 billion, 15 percent above the enacted fiscal year 2023 Space Force appropriation. It includes over $2 billion and seven new efforts for this imperative. Other initiatives in this portfolio can be discussed at a higher level of classification.

The Air and Space Forces play crucial roles in Joint All Domain Command and Control (JADC2). The second operational imperative is intended to ensure the totality of DAF Command, Control, Communications, and Battle Management (C3BM) programs provide an integrated capability with the resilience and performance needed to provide the Air Force and Space Force, the joint force, allies, and partners, with timely information and the systems to communicate, manage, and employ that information. Providing this capability resiliently is critical to enable our warfighters to make effective decisions in a high-speed, complex fight against our pacing challenge. The Advanced Battle Management System (ABMS) is one part of this overall effort, which has now been brought under the technical management of a recently created Program Executive Officer (PEO) for Integrated C3BM. Additionally, our Nuclear Command, Control, and Communications (NC3) capability investments will be synchronized with the PEO for Integrated C3BM efforts. The fiscal year 2024 budget submission includes a net of roughly $500 million for DAF C3BM, including an additional $65 million for one new effort in this area.

If the United States is to deter aggression and prevail should conflict occur, we must have the ability to track and engage advancing enemy forces in the air, on the sea, and on land. The third operational imperative addresses this need with a combination of space-and air-based systems. For space-based systems, the Space Force is working in close collaboration with the intelligence community to ensure that the joint force has the support it needs from integrated intelligence and operational support systems located in space. This will include operational space sensing, coupled with tasking and data management, designed with joint tactical warfighting as a primary mission. For airborne systems, the DAF is continuing the acquisition of the E–7A replacement for the E–3 airborne warning and control system. Other initiatives can be discussed at a higher level of classification. Overall, the fiscal year 2024 budget requests $431 million for moving target related systems (exclusive of the Intelligence Community and classified funding) and includes six new efforts.

For over 75 years, the Air Force has dominated opponents in the air. The PRC is challenging that dominance, and we cannot afford complacency, nor can we afford Air Force capability and capacity composed largely of fighters that cost as much as or more than the F–35. The fourth operational imperative addresses the family of-systems needed to sustain our dominance in the air. The centerpiece of this effort is the Next Generation Air Dominance (NGAD) platform, but this platform will be too expensive to be purchased in large numbers. The fiscal year 2024 budget enhances funding to field uncrewed Collaborative Combat Aircraft (CCA) to complement the NGAD, F–35, and possibly other current and new crewed platforms. Concurrent with CCA development, the DAF will acquire assets for experimentation and testing to explore organizational structures, maintenance concepts, and operational tactics. CCA inventory goals have not been established, but for planning purposes, we are assuming an initial inventory of 1,000 CCAs, with nominally two CCAs paired with each NGAD aircraft, and a portion of the F–35 inventory. In addition to the CCAs, this operational imperative has addressed other aspects of the NGAD family of-systems. In total, the fiscal year 2024 budget submission requests approximately $490 million for air dominance, with the entire CCA program and supporting elements encompassing three new efforts.

The PRC and Russian investments in long-range precision strikes have put our forward airbases at risk. The Air Force's Agile Combat Employment (ACE) concept partially addresses this threat. The fifth operational imperative team analyzed additional steps to enhance forward air base availability and resiliency. In the fiscal year 2024 budget request, the DAF prioritized actions that could be taken quickly to increase the overall resiliency of our forward-deployed air assets, including building hardened shelters and pre-positioning equipment and supplies needed to implement ACE. The fiscal year 2024 budget includes $1.2 billion to strengthen the resiliency and expand the availability of our forward airbases in the Indo-Pacific region. While not a new start, it represents a significant increase over fiscal year 2023 funding levels.

The Air Force's global strike capabilities provide a powerful conventional and strategic deterrent. The sixth operational imperative examined ways to improve the cost-effectiveness of the family of-systems surrounding the B–21 bomber. As noted above, the B–21 Raider is fully funded in the fiscal year 2024 request, and it continues to make progress toward production and fielding. The Raider is more than a new platform, and this imperative identified new weapons, sensors, and communications that can make the B–21 more effective in the joint tactical fight. The fiscal year 2024 request includes $80 million to modernize our global strike capabilities and includes two new efforts.

Both the Space Force and the Air Force have a number of systems and facilities on which they depend to mobilize and transition to wartime operations. The final operational imperative addressed the need to ensure these systems and facilities would function as needed in wartime. Much of the work to date under this imperative focused on the cyber-security of our critical information systems and infrastructure, especially modernizing and hardening our network infrastructure and giving our cyber operators new tools for cyber defense. Air and Space forces must also be capable of operating in a contested cyberspace environment. Our current budget reflects initial investments to achieve these objectives by cyber hardening networks, weapon systems, and priority defense critical infrastructure, and we recognize that there is much work to do in this area. The fiscal year 2024 budget request includes $613 million in this area to strengthen the DAF's cybersecurity posture. This represents a significant increase in enterprise information technology and cyber defense funding over fiscal year 2023 levels.

The work on the operational imperatives over the past year has informed the fiscal year 2024 request, but it has also indicated some areas in which more effort is required. In just the last year, the threat has become more severe. As a result, the DAF is continuing and expanding our efforts to define solutions to the challenges we face. We are continuing the work of the seven operational imperatives to refine resource needs and plans across the lifecycle of these capabilities. In addition, we have started work on three cross-cutting operational enablers. These are mobility, electronic warfare, and munitions. These combined efforts will inform our fiscal year 2025 request, but they have already influenced our fiscal year 2024 plans.

In the DAF mobility portfolio, the tanker recapitalization effort has been our highest priority. The KC–46 is still working to meet all its requirements, but we believe they will be achieved. As the threat continues to increase the range at which it can engage our aircraft, we are being forced to reexamine how we will operate these platforms. The mobility study we have initiated will identify new ways to achieve more mission resilience and effectiveness with existing platforms and will define the requirements for the next generation of tanker and transport aircraft. While it is too early to provide any results, one outcome seems probable: the next tanker must be much more survivable than current designs and is unlikely to be a derivative of a commercial aircraft design. The DAF will conduct an Analysis of Alternatives to determine the requirements and concept for the Next Generation Air-Refueling System and we will evaluate our future mobility platform needs.

Russia's war against Ukraine, Korea Readiness Review, and the experience combating the Islamic State of Iraq and Syria (ISIS) have taught us that munitions planning, production capitalization, and stockpiling must account for the possibility of a longer and more intense conflict than previously assumed. The munitions cross-cutting operational enabler analysis will inform our fiscal year 2025 budget, but we are not waiting to address our highest-priority munitions requirements. The target set for which we must be prepared is evolving. We must build a munitions inventory that is more diverse with greater capacity while accelerating design and production capability, which includes advanced weapons. In the fiscal year 2024 budget, we are increasing our procurement of munitions and partnering aggressively with the other services, allies, partners, and industry.

The combat support area of electronic warfare (EW) must be reevaluated in light of emerging threats. Historically, EW development has been stove-piped for the sole purpose of providing enhanced survivability of individual platforms. As our adversaries have advanced their long-range sensing and targeting capabilities, we need to examine new ways to use EW as an offensive capability designed to defeat adversary kill webs. While most of this analytical work is classified, we expect new programs as well as some program restructuring in our fiscal year 2025 budget.

Last year we indicated that hard choices would have to be made. Often those choices are between current and future capabilities. The DAF fiscal year 2024 budget provides an acceptable level of operational risk for the current force in order to fund the future force. Affording the investments necessary to implement the operational imperative-derived recommendations requires both divestitures from the current force and an acceptance of risk in the level of readiness of the current force. Make no mistake: your Air Force and Space Force are ready and able to confront and defeat any adversary, but they are not being maintained at as high a level of readiness as might be possible. The fact is that the threat is racing to make those existing forces obsolete. The DAF must move as rapidly as possible to the future set of capabilities we need to sustain our deterrent and our ability to project power. There is not a moment to lose.

We deeply appreciate the support of Congress in fiscal year 2023. Congress largely supported our divestiture requests in fiscal year 2023 with one exception—the divestiture of 32 of our oldest and least capable F–22s. A year later, the threat is more

severe, and the need to modernize is more pressing. This year we hope to continue the divestitures that were requested last year as we transition the force to one that is relevant to the threat. In particular, we are requesting the retirement of an additional 42 A–10's. This 40-plus-year-old fighter has served the Air Force and the Nation well, but it does not deter or survive against our pacing challenge, and we need to move forward.

The Air and Space Forces are working to fulfill the NDS priority of building a resilient joint force and defense ecosystem. All our mission capabilities rest on one single foundation—our people. The hard work and dedication of over 700,000 military and civilian airmen and guardians across the Active, Guard, and Reserve components power our department. In fiscal year 2024, we vow to continue supporting them by ensuring they can serve to their fullest potential. We demand a culture of respect, will promote accountability, and aim to end harmful behaviors, such as sexual harassment, sexual assault, racial, ethnic, and gender disparities, domestic violence, domestic abuse, and suicide as well as hazing, bullying, and other forms of discriminatory harassment. We will also promote initiatives that improve diversity and inclusion, ensure quality healthcare access, advance recruitment and retention, and improve our talent management processes to strengthen readiness. Every current and potential airman and guardian should understand their value and the importance of service to our Nation.

As we move forward to meet our challenges, we do so as members of a much larger team. First, the Air and Space Forces are critical members of the joint team. We are also members of an international team with our allies and partners who collectively ensure our success at achieving integrated deterrence against any threat, but first and foremost against our pacing challenge.

Our people and our missions are successful because of teamwork. The fiscal year 2024 budget continues numerous investments, such as $194 million for Pacific Deterrence initiatives, to strengthen our relationships and interoperability with our joint force, allies, partners, and interagencies. The North Atlantic Treaty Organization (NATO) is stronger than ever, and the ever-increasing F–35 community provides strong interoperability. In the Pacific, we are expanding our relationship with traditional partners like Japan, South Korea, and Australia, while strengthening our cooperation with nations like the Philippines and other Pacific Island nations. Our united resolve against Russian aggression and our combined focus on the pacing challenge in the Indo-Pacific highlight the incredible partnerships we have with democracies around the globe that share our values. As we research, test, acquire, and build the military capabilities of tomorrow, we strengthen and expand the Defense Industrial Base, and we do so in concert with our allied and partner nations.

UNITED STATES SPACE FORCE

The United States Space Force was created in recognition of the space domain's critical importance to national prosperity and the need to contest the domain for national security purposes. Recently, the U.S. has seen dramatic changes in the domain with an exponential increase of launches, on-orbit active payloads, space debris, and proliferation of counter-space threats. This reality presents new risks and opportunities to national objectives across diplomatic, information, military, and economic instruments of power. Consequently, ensuring our Nation's ability to operate in, from, and through a stable space domain is a vital national interest for the Space Force to address.

Spacepower is not simply "important" in modern competition and conflict—it is foundational. Russia's war against Ukraine continues to validate this assertion in several ways. First, Russian counterspace attacks since the outset of the war reinforce the reality that space is a warfighting domain. Second, proliferating constellations and disaggregating space missions are proving to be far more resilient and effective, especially with commercial augmentation. Third, equipment alone cannot win in the modern fight. Winning takes space-enabled, multi-domain operations and a joint force trained on the most current operational concepts. In this environment, we must shift to a resilient and effective Space Order of Battle and ensure we have the tools, talent, and experience to be ready to face the challenges to our missions of providing space superiority so that we can enable and protect the joint force, our allies, and partners.

SPACE FORCE'S ROLE IN DEFENDING THE NATION

A primary responsibility of the Space Force is to field ready, resilient, and combat-credible forces. To be ready, guardians must be trained, exercised, and postured. To be resilient, our architectures must be designed to render threats operationally impractical or self-defeating. To be combat-credible, space forces need systems for

full spectrum operations utilized by competent warfighters practiced in their tradecraft.

Through the operational imperatives, we are defining the space systems and capabilities we need to prevail against the pacing challenges—the PRC and, secondarily, Russia. Through the work in the first operational imperative, we are focused on increasing resilience for space architecture by addressing the risks facing people, platforms, and processes through systems proliferated across multiple orbits. Resilient systems will allow us to prevent, respond, and campaign through competition and aggression. When operated by a ready, combat-credible force, resilient systems will disincentivize would-be aggressors.

The fiscal year 2024 budget includes critical investments for meeting all four priorities demanded in the NDS and the DAF's first operational imperative by evolving toward more resilient space architectures. Building resilience must first consider the continuous operation of over 50 legacy platforms, which necessitates investing $172 million in fiscal year 2024 for additional cyber protection, evaluating select legacy systems for upgrades, and integrating space capabilities from several allies and partners. These upgrades will broaden the resilience of several mission areas, including military Positioning, Navigation and Timing (PNT), Command, Control, Communications, and Battle Management (C3BM) systems, and NC3 by migrating the Evolved Strategic SATCOM (ESS) system to a proliferated architecture that will be more resilient during a strategic attack.

Still, the surest way to lessen long-term risk is through the generational replacement of legacy platforms. This year's budget requests $102 million to continue our analysis of the force design for how space-based systems support several critical warfighter needs, including delivering communications to the tactical edge, providing secure PNT information, and enabling data links that connect sensors, warfighters, and weapons. The insights gained from comprehensive force design analyses ensure we make effective and cost-effective transitions from legacy to next-generation space systems.

The first mission area to undergo this transformation will be Missile Warning/Missile Tracking (MW/MT), with the last legacy Space-Based Infrared System launch having occurred in 2022. In the fiscal year 2024 budget, we turn the page into a new era of MW/MT with over $2.3 billion to ramp up research, development, test, and evaluation of the first tranche of proliferated satellites, ground segment development, and interoperability testing which sets the way for a complete constellation in the years to follow. Additionally, we are on track to deliver the first Next-Gen Overhead Persistent Infrared geosynchronous space vehicle by 2025 to reduce risk and improve the transitional resiliency and effectiveness of MW/MT, missile defense, battlespace awareness, and technical intelligence.

Recognizing that joint warfighters need to sustain and expand SATCOM capabilities, this budget pursues new solutions. MeshONE, for example, is a $151 million effort that will deliver a novel approach to a modern, scalable, resilient, cyber-secure Wide Area Network available to the joint force at the tactical edge. We are also leading the transformation of communications via the emerging space data transport layer. Beginning in fiscal year 2024, our investment of $1.8 billion will deliver an initial warfighter capability that will provide low-latency data transport and beyond-line-of-sight targeting, with persistent regional access to the joint force. Once fully operational, this capability will serve as the backbone of data transport in support of C3BM and JADC2.

We must also provide protection to the joint force and our allies from adversary space systems that threaten our forward-deployed forces and those of our partners. The fiscal year 2024 budget includes funding for critical counter-space capabilities intended to fulfill this mission need. Specific budgetary information is available at a higher level of classification.

Our ability to use space effectively requires assured access, being first to field the necessary capabilities, and the ability to reconstitute them, if necessary. This budget ensures the National Security Space Launch (NSSL) program is equipped to place essential capabilities in orbit when needed. The NSSL program is preparing for a new phase in which we are pursuing a dual-lane, hybrid approach that maximizes the use of the Nation's robust commercial launch market. Recognizing the exponential growth of the commercial space industry, we are investing $99 million in fiscal year 2024 and over $1 billion over the FYDP into the Range of the Future vision, which aligns us with the accelerating domestic space launch market, and maintains safe and assured launch for commercial, civil, and Department of Defense users.

SPACE FORCE'S ROLE IN TAKING CARE OF PEOPLE

The Space Force is implementing a more modern talent management approach based on a competency framework that optimizes individual contribution. Over the past year, we have made progress toward achieving our end State described in the Guardian Ideal. The result has been tangible impacts on retention and the development of guardians of all ranks. Our future hinges on recruiting and retaining a diverse and innovative force of highly talented guardians, and we are proud to have met our recruiting targets. Guardians will soon be leading an innovative approach to holistic health by emphasizing a continuously healthy lifestyle rather than episodic fitness testing. We are retooling how we measure healthy living and providing guardians and leaders with the resources they need to uphold the highest standards expected of military professionals.

We are also advancing opportunities and education for all ranks and phases of a guardian's career. Starting with Basic Military Training, fiscal year 2024 will see graduation standards fully established, with guardians being held to service-specific requirements, while Air Force Officer Training School and Reserve Officers' Training Corps Space Force cadets will see increased space-related academic content. This budget will mature the University Partnership Program to inspire and recruit the right talent and provide additional opportunities for guardians to obtain advanced academic degrees in essential Science, Technology, Engineering, and Math subjects. Reflecting our continued commitment to professional military education, this budget funds the program with our first graduates in 2024. With congressional support, we intend to innovate by pursuing a personnel system with full-to part-time fluidity that will improve career flexibility and enhance retention tools.

Recruiting initiatives are only the beginning for guardians as space professionals. To develop professional warfighters, this budget commits to enhancing readiness by increasing the quality and quantity of realistic testing of new systems and training of guardians on them. By incrementally instituting Operational Test and Training Infrastructure and the National Space Test and Training Complex, fiscal year 2024s investment of $21 million will continue progress in delivering more realistic testing and training against a thinking adversary, much like the high-end fight our Nation may face in a future contingency. To do this, the Space Force will build agile operational capabilities and execute orbital experimentation to rapidly expand our technological prowess.

SPACE FORCE'S ROLE IN SUCCEEDING THROUGH TEAMWORK

Teamwork for the Space Force starts internally within the DAF, where the Space Force relies upon support from the Air Force. For example, the Air Force supports the six Space Force Bases with over 8,000 Total Force Airmen providing numerous activities to the Space Force. This includes, but is not limited to, finance, contracting, education and training, child and youth services, dining, fitness, lodging, manpower, logistics, communications, medical, emergency services, and base security. Externally, the Space Force is building teams in four key areas: joint force, commercial industry, the intelligence community, and internationally.

With congressional support, the Chief of Space Operations is formally designated as the Force Design Architect for Space Systems of the Armed Forces. This is important because our closest partnering efforts are inside the joint team. We are exercising our role as the integrator of all space requirements from and for the joint force as we merge and integrate requirements through more-responsive processes from sister services and Combatant Commands. Moreover, this budget requests to restructure the Space Force's organizations responsible for this important analytic work, namely by redesignating the Space Warfighting Analysis Center as a direct-reporting unit, which will increase responsiveness to warfighter needs.

In coordination with the Intelligence Community (IC), guardians are also taking the initiative and exploring joint service intelligence, surveillance, reconnaissance, and targeting needs and opportunities. Inherent coordination in integration with the IC ensures that operational and intelligence requirements are being met efficiently, especially when they overlap and use shared assets. For example, the IC and DAF are similarly seeking new means for moving target engagement, the fourth operational imperative.

To best partner with our industrial base and commercial space, we must improve space acquisition to be more dynamic, cost-sensible, and effective. In the past 3 years, several significant improvements have been made to the structure and relationships comprising space system acquisitions. For example, all major stakeholders in space acquisitions are collaborating to define resilient architectures, assess risks to identify needs, and drive rapid change that aims to deliver results faster than the threats can react. The nine acquisition principles developed by the Assistant

Secretary of the Air Force for Space Acquisition and Integration will revamp acquisition strategy to epitomize responsive acquisitions that apply state-of-the-art commercial best practices.

Expanding the use and future of the commercial space industry and academia across all mission areas organic to the Space Force and the joint force remains critical. These include satellite communications (SATCOM), space domain awareness (SDA), launch, PNT, and more. A strategic advantage for the United States is our robust, innovative, and responsive industrial base, which includes the highly specialized traditional defense industrial base and the highly innovative new commercial space industry segment. We are embracing a hybrid architecture of commercial solutions across many mission areas. Our approach to hybrid architectures affords several benefits including resiliency, cost competition, responsive surge capacity, rapid technology refreshment, increased innovation, improved diversification to industry, and more expedient integration with international partners.

We continue to expand the team of allies we cooperate with across all mission areas. Space Systems Command recently delivered two SDA sensors on Japanese satellites to build SDA capacity and relations with a key ally in the Indo-Pacific region. In the European theater, our partnership with the Norwegian Ministry of Defense led to Enhanced Polar SATCOM payloads on two Norwegian satellites that will provide communications from highly elliptical orbits. The Space Force continues to address partnering challenges by implementing new classification guidance and sharing agreements, investing in more accessible hardware and software such as the Unified Data Library, and supporting DAF-and Department of Defense-wide solutions, particularly the Mission Partner Environment. The Space Force recognizes that the best solutions are preventative, such as the implementation of the Combined Space Operations Vision 2031 and the successful maturation of the NATO Space Centre. These structural improvements will help us to develop and operate resilient, interoperable architectures by and for coalitions.

UNITED STATES AIR FORCE

The United States Air Force is critical to our national defense, is committed to airmen and families, and succeeds by teaming with our joint teammates, allies, and partners as we execute our mission to "Fly, Fight, and Win . . . Airpower Anytime, Anywhere." Our speed, agility, and lethality are exponential force multipliers to any global military operation. Our capabilities underwrite the entirety of the joint force, and we are uniquely suited to provide this cornerstone of the Nation's defense.

To meet the threats facing the force of today and in the future, we must implement the programs that have been defined by the analysis of the seven DAF operational imperatives and continue the momentum of Accelerate Change or Lose. We are orienting our decisionmaking processes and shaping investments around resilience and lethality against the pacing challenge, long-range kill chains, and the elements supporting them. We remain dedicated to ensuring our investments and resources are properly aligned with the NDS to deter our adversaries and prevail in conflict. As the combat environment and the character of war continue to evolve, our determination to be the leader in speed, agility, and lethality remains an irreplaceable role for the joint team and our allies and partners.

AIR FORCE'S ROLE IN DEFENDING THE NATION

As stated above, we must continue to make hard choices in Airpower modernization to keep pace with our strategic competitors while balancing risk. The difficult decisions are far from over, and the measured near-term risk decisions which prioritize essential modernization and acceptable current readiness continue. Airpower modernization is critical to address the four NDS priorities: defending the homeland, deterring strategic attacks, deterring aggression, and building a resilient joint force.

The NDS priorities depend upon platforms and capabilities that support effective command and control and are survivable in the threat environment of both today and tomorrow. In fiscal year 2024, we continue our modernization efforts while divesting platforms and capabilities that have decreasing relevance against our pacing challenge. Current airborne platforms, such as the E–3 and E–8, are not adequately survivable against emerging threats, are not optimal for joint or coalition operations, and need to continue divestiture as we look to the future. These airborne capabilities play a critical role in meeting the operational imperative to track and engage enemy forces at scale. A combination of space-and air-based systems will be needed to maximize lethality and close kill chains. We remain committed to balancing current, mid-term, and longer-term capability and capacity by divesting the E–3 while rapidly acquiring and fielding the E–7A to modernize efficiently.

A focused redesign of the C3BM network, being pursued under the second operational imperative, is overdue and a top-priority modernization effort that will define and field ABMS capabilities. The establishment of the C3BM Integrating PEO will align command and control modernization efforts across the DAF and with the joint force. ABMS will fulfill the Air Force's integral contribution to JADC2 and the fiscal year 2024 budget focuses on building and maturing ongoing programs.

Air superiority for the joint force demands affordable Airpower modernization, which includes NGAD. The fiscal year 2024 budget continues NGAD development. The NGAD family of-systems operational imperative will provide an innovative suite of capabilities that allow us to establish and maintain air superiority, a precondition for the joint force's freedom of maneuver. The uncrewed CCA program included in this budget is a significantly enhanced activity for air superiority and is targeted to support both NGAD and the F–35. The CCA program will have three simultaneous lines of development—the platform, autonomy, and unit construct.

In addition to the longer-term operational imperative programs described above, the modernization decisions we are making consider the entirety of the Air Force's capability and capacity mix. As we work to develop a new generation of capabilities, we are also working to improve current and mid-term capability and capacity. This process includes replacing some legacy platforms, namely the MH–139A replacing the UH–1N, and the Survivable Airborne Operations Center replacing the E–4B. It also includes modernizing existing platforms that will remain in operation for many years, including the B–1, B–2, B–52, C–17, C–5, F–16, F–15E, F–22, and F–35 fleets. Within the fiscal year 2024 budget, we have committed over $12 billion to modernize these existing platforms. These modernization efforts are designed to improve mid-term capability and reduce risk while providing needed capacity to complement the improved capabilities provided by the programs defined by the operational imperatives and the new families-of-systems such as the B–21 and NGAD.

As noted earlier, capable, improved, and complementary munitions are needed for both our new and existing platforms. We are prioritizing investments in munitions and technology to counter pacing threats in highly contested environments. This includes investments in both air-to-air and air-to-surface capabilities to engage mobile targets from standoff ranges in adverse weather. Investments into hypersonic munitions will enable us to hold high-value, time-sensitive targets at risk in contested environments from standoff distances. The fiscal year 2024 budget invests over $5 billion to support Small Diameter Bomb II, Joint Air to Surface Standoff Missile, Hypersonic Attack Cruise Missile, Air-Launched Rapid Response Weapon, and more munitions' facilitation across the defense industrial base. These investments will shorten the kill chain while supporting the moving target operational imperative.

For the current force, we are pursuing improved readiness through multiple channels, including the Air Force Force Generation model (AFFORGEN). AFFORGEN enables the presentation of sustainable, predictable capacity and capabilities while ensuring operational preparedness and required readiness. AFFORGEN balances risk between Combatant Command requirements, Air Force readiness, and modernization by deploying pre-identified units and/or teams who have trained together to improve performance. AFFORGEN will meet initial operational capability in fiscal year 2024.

Agile Combat Employment (ACE) increases readiness by dispersing operations from large bases to networks of smaller locations and provides the basis for the operational imperative of resilient forward basing. We are standardizing the concepts and terms of ACE in Air Force Doctrine as well as incorporating them into ongoing exercises and worldwide training. There is $1.2 billion to fund the resilient forward basing operational imperative this fiscal year in addition to funding for ACE. Additional work is being done to identify and create capabilities and formalized training programs to field an agile force that sets the theater and establishes distributed command and control.

The Flying Hour Program (FHP) and Weapon System Sustainment (WSS) budget requests ensure our airmen have the training and equipment necessary to "Fly, Fight, and Win." The $9 billion in fiscal year 2024 funds our FHP to levels that can be reasonably executed and meet our readiness requirements. Our WSS fiscal year 2024 funding of over $19 billion is aligned with our FHP but is challenged by requirements growth due to an aging fleet, the fielding of more complex weapons systems, increasing operational requirements, and increasing organic and contract costs.

Execution of our mission requires appropriate infrastructure support and resilient basing. The Facilities, Sustainment, Restoration, and Modernization (FSRM) efforts focus on prioritizing existing quality-of-life requirements and maintaining our operational and training infrastructure. In addition to new mission builds for Military Construction (MILCON) projects, we are pursuing improvements for our airmen,

supported guardians, and their families to our Child Development Centers (CDC) and dorms with targeted investments totaling $107 million in fiscal year 2024 MILCON and $294 million in FSRM. Since 1990, we have 60 percent fewer fighter squadrons, 40 percent fewer airmen, but only 15 percent fewer installations in the continental United States. Our fiscal year 2024 budget reflects our commitment to right-sizing our facilities and infrastructure footprint through consolidations, demolitions, and optimizing our space utilization.

AIR FORCE'S ROLE IN TAKING CARE OF PEOPLE

Taking care of our people begins with recruiting the best military and civilian airmen of tomorrow. In fiscal year 2023, the Active Duty component of the Air Force is projected to miss military enlistment requirements by about 10 percent, over three thousand individuals. The Air Guard and Reserve components are projected to miss their goals by even higher margins. To maximize our pool of eligible individuals and to recruit the best our Nation has to offer, we are working to reduce barriers and connect with young people and communities. While maintaining our established standards, we are reviewing and removing barriers to service and offering enhanced financial opportunities to those who wish to serve. Additionally, we are taking a targeted approach to open our bases to local communities to strengthen connections and help influencers and potential recruits see the many possible opportunities we have to offer for a rewarding career and personal development. We are also highlighting, particularly online, the positive experiences of Air Force veterans who have moved on to successful careers outside the military.

Once airmen join our team, the focus shifts from recruitment to retention. Congress provided critical retention tools to the Services last year with increases in basic pay, housing, and subsistence rates—providing a viable compensation package. Our focus on improving the quality of life for our airmen includes improving the childcare availability for our members. The fiscal year 2024 budget includes new CDC construction, existing CDC facility improvements, staffing initiatives, and additional childcare providers.

Military housing is another important way we have focused on retention. Our fiscal year 2024 budget includes funding for continued investment in DAF's government-owned and government-leased housing based on the need to support mission requirements, address health and safety concerns, and modernize housing for unaccompanied personnel. Our fiscal year 2024 budget also includes Family Housing Construction funds for prioritized investments in DAF's Military Housing Privatization Initiative (MHPI) portfolio to improve the safety, quality, and habitability of select privatized housing projects and ensure their long-term financial viability. We remain committed to providing continued oversight of the private sector MHPI companies that own and operate privatized housing projects on DAF installations to hold MHPI companies accountable for project performance, problems with property management, and inappropriate business practices. In addition, we will continue to engage with local civic leaders to increase the availability of affordable, quality off-base housing options for our servicemembers and their families.

Retention efforts must also ensure military members and families have access to the care and support they need—including mental health. As the Nation struggles with a shortage of mental health providers, we are employing various innovative means to provide this care to airmen and guardians. The Targeted Care program improves access to care by connecting people to the most appropriate resource given their needs. Additionally, we are implementing the recommendations of the Independent Review Commission on Sexual Assault in the Military, as approved by the Secretary of Defense, and leaning forward on exploring the co-location of victim support services. Furthermore, we are implementing groundbreaking military justice reforms to establish the Office of Special Trial Counsel, which will provide expert, independent, and specialized support for the investigation and prosecution of serious crimes such as sexual assault. We are also ready to begin implementation of the Department of Defense's Suicide Prevention and Response Independent Review Committee recommendations and have leaned forward on restructuring prevention training, increasing emphasis on lethal means safety and behavioral health workforce development.

Retention also requires that our talent management decisions are optimized for both the member and the Air Force. The Airmen Leadership Qualities we value must be reflected in our systems and transparent to our members. We are in the process of categorizing 161 specialties and approximately 19,000 functional skills to map flexible designs which align with the talent of our airmen and are adaptive to emerging technologies and threats.

To develop the airmen of tomorrow, our evaluation systems and supporting data systems must be modernized. Fiscal year 2023 saw the beginning of new officer and enlisted evaluation systems which will generate over 17 million data points to drive enhanced talent management decisions and reduce administrative burdens in the future. The new processes, enabled in part by the fiscal year 2024 investments into digital infrastructure and tech refresh, will increase agility and flexibility to build the talent management structure we need. Concurrently, we are also implementing a dual-track "Civilians We Need" career model identifying functional expert and enterprise leader tracks on a model designed to allow flexible career paths based on the members' evolving needs.

AIR FORCE'S ROLE IN SUCCEEDING THROUGH TEAMWORK

Teamwork for the Air Force begins within the DAF, where the Air Force relies upon and supports the Space Force. The Air Force and Space Force are inextricably linked through shared history, current activities, and future operations. The Air Force relies heavily on Space Force for the technical development and execution of each of the operational imperatives and other necessary capabilities. Neither the Air Force nor the Space Force alone has the situational awareness and decision support tools to close hundreds of kill chains on relevant timelines in all domains in a highly contested environment. We can only be successful through teamwork to provide survivable, long-range, persistent families-of-systems across multiple modalities and as a part of a full joint and combined force. The Air Force depends upon a ready, resilient, and effective Space Force.

Our teamwork extends to the entirety of the joint force and Combatant Commands. Each of the operational imperatives and our broader capability investments supports the joint force by providing the capabilities necessary to deter and, if necessary, defeat any challenger. We play a vital role in homeland defense through air domain awareness and the provision of Airpower. We are also leveraging the capabilities of the mission and system level cyber risk assessment components of the Strategic Cybersecurity Program, led by the Under Secretary of Defense for Acquisitions and Sustainment, to help inform investments in cyber risk mitigation. The joint force's ability to effectively mobilize, deploy, and sustain forces cannot be accomplished without the mobility assets we provide. This fiscal year 2024 budget includes $252 million of investment in support of the integrated priority lists of the Combatant Commands. All our platforms and airborne capabilities contribute to joint force combat power, and we remain committed to providing capabilities to the Combatant Commands in the execution of their missions.

Beyond the joint force, we are seeking to expand how we team with our international allies and partners. Investments in readiness, human capital, infrastructure, and relationships with allies and partners remain foundational to balance present-day demands and set conditions for the future. This budget request, coupled with support from our allies and partners, enables responses to imminent threats while also seeking to improve the teamwork and interoperability of the allied and partner forces to win the fight of the future.

To ensure maximum teamwork with our allies and partners, we are seeking to expand interoperability through an Integrated by Design process. Integrated by Design is not a replacement for our current security efforts, but it ensures that we collaborate and make decisions together on interoperability, resource investment, information sharing, force development, and strategy from the very beginning of our programs with the end State constantly in mind. Conversations with allies and partners about developing capabilities that are complementary instead of competitive will also better align us to face future challenges in unity. That unity will be a comparative advantage against threats that seek military, technological, or economic means to challenge our collective national security.

CONCLUSION

The Department of the Air Force fiscal year 2024 budget prioritizes defending the Nation, taking care of our people, and succeeding through teamwork by balancing the risk between maintaining current readiness, mid-term improvements, and longer-term modernization. Current readiness is being maintained at acceptable levels to support combatant commanders while investments are made in mid-and longer-term modernization that is critical to developing, building, and fielding the force needed for the future. The modernization efforts defined by the operational imperatives are not optional; they are called imperatives for a reason. No one can predict when a war with any potential threat may happen, and war is not inevitable. Nevertheless, the PRC, our pacing challenge, is actively and effectively developing the capabilities it believes are needed to defeat the American ability to project

power. The PRC is also expanding and improving its strategic forces and experimenting with destabilizing novel concepts. The DAF must move forward as quickly as possible, or we will fall behind. No one should doubt our current capabilities, which remain the strongest the world has ever seen. Nevertheless, we are in a race for technological and operational superiority more challenging than anything we have ever experienced. In this environment, timely and soundly balanced investments in current, mid-term, and longer-term Air and Space Forces are essential to our continued security. Our most sacred duty to our airmen and guardians is to provide them with the tools they need to be successful. We believe the budget we have submitted for fiscal year 2024 meets that need, but time is our most precious asset, and we urge Congress to move quickly to fund and authorize our proposed budget to enable the new starts, significantly rescoped program investments, and required capabilities that will allow us to keep pace with the threat.

Chairman REED. Thank you very much, General. I have been informed we have something more than just a microphone issue. We have a system issue. So, they are working on it right now.

But in the interim, we will have to share microphones. So, you can sit close together, or—let me begin my questioning by touching on a point that was raised by Senator Wicker. That is the E–7. All of my trips to the Pacific particularly have emphasized the importance of getting this system.

Last year, we were able to include $200 million extra to accelerate the production, and it was hoped that we would get one aircraft in testing by 2027. But Secretary Kendall and General Brown, what is the earliest point we think we can get the E–7 into testing?

Secretary KENDALL. We looked hard at trying to accelerate the program, Mr. Chairman, to move the initial stages faster. We didn't find a way to do that. So, I think we are basically on track with the same schedule that we showed you last year.

The one thing that could be done would be to add funding that would accelerate the production of the follow-on units, not the first one, but the follow-on ones. But we were not able to afford that in our budget.

Chairman REED. Now, there was, I think, a presumption that we would buy the Australian version of the E–7. They are already flying the aircraft. Have we abandoned that approach?

Secretary KENDALL. No, we are still using—there are some modifications that have to be made for use in U.S. airspace, to comply with some of our communications requirements and so on, but they are relatively modest. We are also working with the Australians on follow on upgrades to the E–7 that would enhance its capabilities.

Chairman REED. You are asking for $633 million this year, which will be, as you indicated, to acquire long lead time items and accelerate the production of succeeding aircraft. Again, I think this is absolutely essential program, given what I have heard out in the Pacific. General Brown, I think, would you concur?

General BROWN. I would, and one of the things I would highlight is that in our relationship with the Australians, we are going to be able to send here in June, close to 50 to 60 of our airmen to actually start training on the E–7s. When we do get the aircraft, we will have trained operatives and maintainers to help accelerate bringing the E–7 into our inventory.

Chairman REED. Very good. Another issue is the collaborative combat aircraft, which I think makes a great deal of sense. That essentially a manned aircraft would be operating unmanned aircraft.

One of the constraints I think we have is the number of missiles available for our aircraft right now, and creating this autonomous capability with multitudes of other aircraft would compound our missile problem. Can you just comment, Secretary and General Brown, on the missile issue?

Secretary KENDALL. We are trying to do a balanced set of investments, and that includes the weapons as well as the platforms. The budget request includes three multi-year requests for weapons systems, for missiles, for AMRAAM [Advanced Medium-Range Air-to-Air Missile], JASSM [Joint Air-to-Surface Standoff Missile], and LRASM [Long Range Anti-Ship Missile].

We are also trying to increase the production capacity that you have when we get it in production. We added, I think, about $1.5 billion for munitions procurement in this budget over last year's just for the reasons that you stated.

Chairman REED. Thank you, and General Brown, any further comments?

General BROWN. That extra funding will help the facilitate, so we actually—as we, you know, funding, we can actually increase the production rate not only for AMRAAM, but JATM, which is the follow on to AMRAAM, is also going to be important aspect to support the collaborative combat aircraft.

Chairman REED. This has sent a positive signal to the industrial base that you are here for the long run?

Secretary KENDALL. Absolutely.

General BROWN. That is correct.

Chairman REED. Thank you, Mr. Secretary. General Saltzman, you referred to this in your testimony, but can you give us a quick update on the status—and please try a microphone. I think——

General SALTZMAN. Did it work?

Chairman REED. Thank you. It was the Air Force and the Space Force that combined in a few seconds and fixed it, so, here we go. Question, tests and training ranges. You are at a point now where you have to develop them.

They will be quite different than hundreds of acres of land someplace in the Midwest or the far West. Can you give us an idea of where you are on your range and your infrastructure for range testing?

General SALTZMAN. Yes, sir. Thank you, Senator. We, of course, have simulators and we have some very nascent early models of what I will call "virtual ranges" to accomplish our training. I just don't think they are sufficient yet. Primarily because they don't replicate the threat effectively.

So, the budget proposal adds several hundred million, about $340 million across the FYDP [Future Years Defense Program] in order to increase the fidelity of our simulators and allow us to inject threats into the environment so that our crews can validate their tactics and validate their training against a thinking adversary.

Chairman REED. Thank you very much. Senator Wicker, please.

Senator WICKER. Okay. Thank you very much. Secretary Kendall, thank you for starting off with the MacArthur quote about too late. It does segue right into a number of things I mentioned in my opening statement, sir.

The ICBM replacement program could be delayed. That would cause us to fall further behind on nuclear modernization. Delays in the F–35 Block 4 upgrades. The T–17 trainer aircraft.

The Chairman has also—has already gone into the E–7 command and control aircraft, which would replace the 1975 era AWACS. What happened to the $200 million that we provided last year to accelerate this program, which ended up not getting accelerated?

Secretary KENDALL. Sir, are you referring to the E–7?

Senator WICKER. Yes, the E–7, command and control aircraft. I am sorry, did not make that clear.

Secretary KENDALL. That program has been moving as fast as we are able to move it. I did a personal review of the steps that are necessary to get it into the first phase of testing, and we couldn't find a way to do that. I am not sure about the $200 million that you are referring to and what was done with that——

Senator WICKER. All right, well, the Chairman mentioned in his question that at the Air Force's request we appropriated another $200 million above the President's Budget Request to accelerate this program. It did not get accelerated, and we wonder where the $200 million went.

Then there is a larger question that the Chairman alluded to, there is the E–7 Wedgetail that is being used by our allies in Australia. That is being used very effectively by them, and so, General Brown, do you know where the $200 million went?

General BROWN. Some of that aspect, the money went into the initial development and getting things on contract. So, you start—also the long lead items to develop the aircraft.

Senator WICKER. Okay. Well, now, Secretary Kendall was asked when this E–7 will now be ready, and I don't think we got an answer to that, Secretary Kendall. You said it would just still be on the original schedule. When would that be ready?

Secretary KENDALL. 2027, is the year we will be fielding, because it takes 2 years to build the new airplane. Then we have to take another 2 years, roughly, to modify it and put it into testing——

Senator WICKER. Okay, and why——

Secretary KENDALL.—so the first aircraft—2027.

Senator WICKER. Why is it necessary for an aircraft that is already functioning well for one of our allies?

Secretary KENDALL. Because we are getting new production aircraft. Their commercial aircraft but then modified to put the radar system and the command and control systems inside them.

In order to preserve airworthiness, you have to actually acquire the commercial aircraft and then open it up to insert the other things that you need to put in it.

Senator WICKER. Okay.

Secretary KENDALL.—and that whole process takes a period of time.

Senator WICKER. Okay. Well, it is a fact, though, that Congress at the request of the service provided an extra $200 million for acceleration, and we didn't get any acceleration. That is correct, is it not?

Secretary KENDALL. I think what General Brown indicated, what you got with that was some long lead items being purchased to reduce risk in the program.

Senator WICKER. We didn't get any acceleration, did we?

Secretary KENDALL. I would have to check that for the record. I am not aware that you got acceleration.

[The information referred to follows:]

Secretary KENDALL. The fiscal year 2024 budget requests a total of $228.2 million for the T–7 program; an increase of $165.8 million above the fiscal year 2023 request for $62.4 million. Specifically, the fiscal year 2024 budget request includes: $44.4 million in aircraft procurement funding for long-lead items; $77.3 million in Research, Development, Test & Evaluation; $49.7 million in Operations & Maintenance; $39.5 million of MILCON; $12.9 million of other procurement at beddown bases; and $4.3 million of MilPay. If authorized and appropriated, the fiscal year 2024 budget will fund T–7 program efforts to meet the revised projected Milestone C production decision in the first quarter of fiscal year 2025.

Senator WICKER. Okay. You get back to us on the record. Secretary Brown, how important is this T–7 air training aircraft and to what sort of a disadvantage are we at that this has been delayed once again.

General BROWN. The importance of the T–7 is to replace an aircraft for a 60's era T–38 aircraft. As we bring it on, one of our challenges is continue the maintainability of the T–38 or the delays that right now we have with the T–7.

It is a better aircraft, the T–7 is a better aircraft. I had a chance to personally fly it in a simulator to see how it operates, but that is going to help us reduce our pilots at a—because of a glass cockpit as well, at a better rate and to be able to transition to the current capabilities we have today.

Senator WICKER. Another delay. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Wicker. Senator Shaheen, please.

Secretary KENDALL. Could I clarify a point for Senator Wicker? When we have talked about acceleration of E–7, generally we have talked about getting more inventory sooner, not getting the first airplane sooner.

I think there may have been some confusion because of the way we have used the word accelerate. We get more inventory in the hands of people faster than we would have with the profile we initially proposed, but you don't get the first airplane faster.

Senator WICKER. Inventory. What do you mean by that?

Secretary KENDALL. We, instead of going a profile of one, two, three, for example, we go one, three, three. So, you get additional aircraft sooner than you would have otherwise. So, the total deliveries are accelerated, but not the first aircraft.

Senator WICKER. Thank you, sir.

Chairman REED. Thank you, Secretary. Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman. Secretary Kendall and General Brown—Secretary Kendall, you talked about timely authorizations and appropriations in your opening statement.

General Brown, you also referred to on time appropriations as being critical. What will happen to your role, the role of the Air Force and the Space Force, for that matter, if the United States defaults on its debt?

Secretary KENDALL. That is a very big question, Senator. I am not an economist. I am trained in business. For any creditors to default on their debt causes a number of reactions, right. It is more expensive for you to get money.

Your creditors aren't as willing to lend money. People are not as willing to lend money to you. All the economists that I have seen suggest that it would be an absolutely devastating impact.

When you have—the closest thing I have seen to this is the 2008 crisis, when the Congress was asked to pass several hundred billion dollars of funds to shore up the financial system. I remember watching the screen as the stock market completely collapsed as that bill was being voted down in the Congress.

That is the sort of thing that we are talking about. I think most people would predict a severe recession, at least. Then going forward, one of the biggest parts of our Federal budget is the interest on the debt.

If those interest rates go up, which is what happens to you when you default, if you can borrow money at all, then that expense becomes much greater and the interest on the debt is already roughly at the level of defense budget.

The short answer to your question is, it would be devastating.

Senator SHAHEEN. You talked about the threat from China, which I think we would all agree is our major competitor. What would China's reaction be to that kind of catastrophic financial outcome in the United States?

Secretary KENDALL. That is probably beyond my expertise to comment on intelligently. But obviously, anything that damages us would be a benefit to China.

Senator SHAHEEN. Thank you, so, it is probably not good for us to default on our debt.

Secretary KENDALL. That is a significant understatement, I think.

Senator SHAHEEN. Thank you. General Brown, during the recent appearance before the Appropriations Defense Subcommittee, we had a conversation about the deficiency with the KC–46's slow guidance system, and you said you had not heard anything about that. Have you had a chance to look into that? Do you have an answer for what the impact of that will be?

General BROWN. I regret that I haven't been able to dig into the details on that. But just in my conversations with our operators and also with AMC [Air Mobility Command], the aircraft is going fairly well right now despite some of the deficiencies that we are finding. As I think, I highlighted before, is operating and supporting all of our aircraft with the exception of the A–10.

[The information referred to follows:]

General BROWN. Air Force Operational Test and Evaluation Center submitted a Category I (CAT-I) Deficiency Report (DR) for multiple cargo issues in January 2022, many of which were tied to insufficient/complex weight and balance and cargo loading tools, manuals, and procedures. The load guidance system in question is referring to this multi-faceted cargo DR, which was adjudicated and downgraded to CAT-II in November 2022. Until the deficiencies are resolved, there is potential for delays in loading and unloading KC–46A missions. The Air Force and Boeing are currently working through short-and long-term solutions, providing incremental capability improvement and resolution.

Senator SHAHEEN. Well, I will continue to ask you, so hopefully you will be able to get an answer for how that is affecting the operations of the KC–46. General Saltzman, in Ukraine, we have seen the role of commercial satellite companies and how important those

are, and obviously that is going to continue to be critical in terms of the Space Force.

You talked a little bit about the training and how to incorporate dealing with those commercial satellites. Can you talk about how important it is to adapt our training and to really make use of the commercial innovation that is going on?

General SALTZMAN. One of the areas that I think is ripe for exploitation is the idea of virtual augmentation or virtual reality as we have seen it.

There is a lot of very promising technologies associated with how you could do virtually augmented reality training so that the operators can experience something that day to day they don't get to experience in space.

Sometimes the orbital mechanics are hard to visualize, but you can use these tools to help you understand proximity between spacecraft, proximity of how solar arrays are turned. There is a lot of exploitation that we can do with those kinds of technologies, and we are looking into those with commercial industry.

Senator SHAHEEN. Good. I have actually had one of those demonstrations. They are very impressive. You also, General Saltzman talked about the opportunities for full and part time availability in Space Force to bring private sector talent to the force.

As the co-chair of the National Guard Caucus, I know that the National Guard has a lot of interest in participating in Space Force in some capacity, and there is still a fair amount of confusion about how that is going to work. Can you talk about the progress that we have been—we have made on how we are going to incorporate the National Guard into Space Force?

General SALTZMAN. Well, it is two different things at this juncture. First is the legislative proposal that we have put forward that helps establish the Air Force Reserve space elements into the Space Force proper, a single component that would have both full time and part time.

We think that is a very innovative way to establish this career path flexibility that will have retention impacts for us. The second situation is the Space National Guard or the Air National Guard capabilities that are performing space, separate and distinct from the legislative proposal.

The most important thing to me is that we retain the capabilities that are currently in the Air National Guard. It is about a 1,000 people. It is seven different states with tremendous space capabilities that we rely on every day.

So, it is important that we maintain that expertise and those capabilities. What we have said is there is probably multiple ways where we can retain those, but we have to move away from the status quo because we have got this disconnect between my responsibilities for the mission, but General Brown's responsibilities to currently OT&E [Organize, Train and Equip] those space capabilities in the Air National Guard.

Where status quo causes problems, there are other ways to evaluate those, and we are going through all the costing and analysis to make sure that we can provide decisionmakers with the right balance between the two.

Senator SHAHEEN. Well, thank you. I look forward to hearing the outcome of those discussions. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Shaheen. Senator Fischer, please.

Senator FISCHER. Thank you, Mr. Chairman. Mr. Secretary, I want to ask you about an underappreciated but absolutely integral part of our nuclear enterprise, and that is NC3 [nuclear command, control and communications] modernizations. Senator King often refers to that as the fourth leg of our triad, and I agree with him on the absolute importance of that. Can you please describe how this budget request supports NC3 modernization and why it is so important that we get this effort right?

Secretary KENDALL. Thank you, Senator. The NC3 is an essential part of the triad. It actually has to be secure and resilient so they can function in an emergency. What we are doing is we are replacing and getting the next generation of AEHF [Advanced Extremely High Frequency] satellites for secure communications. We are investing in that.

We are also investing in the radios that are carried by some of our aircraft that are nuclear capable, and we are investing in some of our software systems that are used to manage nuclear functions.

We have fully funded investment accounts in each of those areas to make sure we stay current and provide the secure nuclear communications that are necessary.

Senator FISCHER. Would you say we are on schedule in that modernization? Do you feel pretty confident that we are where we need to be?

Secretary KENDALL. I am never 100 percent confident in schedules. Every new program, every development program in particular, entails risk. I am not aware of anything that—there is nothing that is keeping me up at night in that area right now.

Senator FISCHER. Okay. Good to hear. General Brown, I would like to ask you about the Sentinel program. The Sentinel in placement is one of the largest and most complex projects that the Department has undertaken in decades. What efforts are currently being undertaken to ensure that this program remains on schedule?

General BROWN. There are several things that we are doing to keep Sentinel on schedule. Part of that is the dialog between the Department of the Air Force with our industry partners. I meet with the CEO [Chief Executive Officer] on a quarterly basis where we walk through where they are.

One of the key aspects we are looking at is trying to be more proactive than reactive on this and really thinking ahead to ensure we are doing things to drive down risk as far as supply chains, workforce. To stay ahead of, and then on top of that, as we are working through right now for the land acquisition, our working that process as well.

Right now, I think the dialog is important and that is what is really helping us keep things on track. There are no surprises or minimizes surprises, and being able to engage and mitigate well in advance of any type of event that might impact the critical path.

Senator FISCHER. As you look ahead, and you are talking about mitigation on disruptions that can occur, what keeps you up at night?

General BROWN. Well, just the size of this particular program and the aspect of how important is to our strategic deterrence. Because of the size of the program and the time it is going to take, those are the things that concern me, because there is a lot of things going to happen between now and when we fully field. But our goal here is to stay ahead of those and ensure that we mitigate any type of challenge.

Senator FISCHER. Are we on track for that goal?

General BROWN. We are now, and that is part of the yard work between ourselves and industry partners.

Senator FISCHER. Okay, thank you. Secretary Kendall, I was with you on the rollout for the B–21 Raider. Can you provide us with any updates or new developments on that program?

Secretary KENDALL. There haven't been any fundamental changes since we were there, Senator. We are still, as far as I know, on track to have our first flight later this year.

Senator FISCHER. Can you tell me how the budget request this year is going to help to expand munitions production capacity?

Secretary KENDALL. Yes. We are asking for multiyear production for three systems, JASSM, LRASM, and AMRAAM. We are also entering production, hopefully for JDAM [joint direct attack munitions], the new air to air missile. We are going to be asking for funds to increase the size of that production line, the capacity of that production line from what we had originally planned.

Senator FISCHER. Okay, good. Also, Secretary Kendall and General Brown, I was pleased to see that there is full funding for the RC–135 program in the budget request for this year.

The RC–135 is highly capable ISR [intelligence, surveillance, and reconnaissance] platform that provides critical intelligence to decisionmakers and enables the United States to maintain a strategic advantage over potential adversaries.

We see those efforts and how important they are in Ukraine and also with our NATO allies. Thank you for getting that in there, and I expect to see continued full support for the RC–135 fleet in future years as well. Thank you both very much. Thank you, Mr. Chair.

Chairman REED. Thank you, Senator Fischer. Senator King, please.

Senator KING. Thank you. Secretary Kendall, which do you consider a more serious immediate threat to National Security, China, or the failure of this Congress to pass a budget and go with a 1-year continuing resolution?

Secretary KENDALL. They are not the same category, Senator, but I take your point. I mentioned time in my opening statement. It is the thing that I am most obsessed about. We can't get it back. That is irreplaceable.

Senator KING. How serious would it be if we had a yearlong continuing resolution instead of the passage of the budget?

Secretary KENDALL. It would be very serious. All the new starts that I talked about earlier, all the increased efforts that I talked about, all the work—we spent a year roughly working on what we called "operational imperatives," which were the seven operational

problems that we needed to solve given what the threat is doing, particularly China.

Senator KING. Would it compromise National Security?

Secretary KENDALL. Absolutely.

Senator KING. You mentioned earlier, and this is sort of in the same lane, in your testimony, in your opening statement about an advanced procurement or an advanced approval for some of the work that you are undertaking. Could you expand on that a bit?

Secretary KENDALL. Senator King, you are of an age similar to mine, I think, and when I make a reference to the movie Casablanca, you will know what I am talking about. But the movie starts——

Senator KING. I am shocked, shocked that there is——

Secretary KENDALL. There you go.

Senator KING.—going on.

Secretary KENDALL. The movie starts with a comment about refugees who come to Casablanca and wait and wait and wait. I am waiting right now. We spent the first year I was in office defining what we needed to do to stay ahead of the pacing challenge, ahead of China.

I had to wait a year to get that into the budget, get the budget submitted. Now I am waiting another roughly a year for, under normal circumstances, that budget to be passed. If there is a year continuing resolution, I will wait yet another year.

That is all time that we are giving away to someone who is racing to be ahead of us technologically and field the capability. We cannot afford that time.

Senator KING. You are proposing a technique——

Secretary KENDALL. What I am proposing is we wouldn't have to wait even the normal one, 1½ year. We will be able to do the low-cost initial stages of a program, do the system engineering, do the preliminary design work, do maybe a little risk reduction, maintain competition, make no long-term commitments, only go up to the point of preliminary design review, one of the earliest milestones.

All that is relatively inexpensive, but it takes time. Then Congress would have full authority to decide whether we could proceed beyond that point or not. We would probably use reprogramming for this and Congress would have authority over that.

There wouldn't be any real loss of the authorities that the Congress has over what we do, but we will gain a year and a half at least of time, lead time to getting things fielded.

Senator KING. We are headed for a markup of the National Defense Authorization Act (NDAA) in about a month. I hope that you will submit your suggestion so that we can consider it as part of that process.

Secretary KENDALL. It has been submitted, Senator. We came over from OMB [Office of Management and Budget]. It was approved by OMB.

Senator KING. You have it in our process. Thank you. General Brown, Senator Cramer and I submitted a letter some time ago to the uniformed leadership about the transition program in the military from Active Duty to veteran status. We got a response from the Secretary, but I view this as a uniformed issue.

I want the senior leadership to take this issue very seriously. Transition for veterans is an incredibly important situation because we have learned that suicide, for example, is most likely in the first 2 or 3 years after separation.

I hope I can have your commitment to pay particular attention to this process. We should be attending to be sure that our soon to be veterans have all the information and contacts that they need to reintegrate into the larger society.

General BROWN. You have my commitment, and, you know, I do take it very seriously because as you might imagine, I have a number of friends that have served, and at some point, I will also transition as a veteran.

The aspect of how we do a very smooth handoff in collaboration with the Veterans Affairs. But it is not only how we transition into new careers, it is also how they emotionally transition into a new life out of uniform, and I think that is a key aspect that helps. If we focus on that, I think it will also help us prevent the suicides of our veterans.

Senator KING. Thank you. I will be submitting a question for the record in the classified session with regard to GPS [Global Positioning System] denied environment. I think that is something we really need to pay close attention to.

The first step in any conflict is going to be an attempt to blind us, so I hope that—I have the same recommendation to the Navy that they will relearn how to use sextants. Space Guard, General Saltzman. Where does that stand? We have been discussing that on the Committee. What is your recommendation with regard to a Reserve Force or space guard to augment the capabilities of your organization?

General SALTZMAN. My recommendation at this point is to make sure we have good, validated numbers that can help us assess each of the various courses of action that would allow me to retain the kinds of capabilities that currently live inside the Air National Guard. Again, that is my most important point.

The expertise and the capabilities that are currently in the Air National Guard need to be harvested so we don't create an operational gap in any kind of transition. So, my recommendation is, make sure that the costing, the number of billets, all of that data is assessed and evaluated as we look at the course of actions.

Senator KING. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator King. Senator Cotton, please.

Senator COTTON. Gentlemen, thank you for your appearance here and your decades of service to our Nation. Secretary Kendall, you have spoken some about accepting near term risk to fund the future force. I have gone back and looked historically at Air Force budgets for about 20 years. Are you aware that the Air Force has received $1.3 trillion less than the Army since 2002?

Secretary KENDALL. I was not aware of that.

Senator COTTON. Almost $1 trillion less than the Navy since 2002.

Secretary KENDALL. No, I was not aware of that either, Senator.

Senator COTTON. That is after accounting for the so-called pass through budget, which I believe causes many people to include

Members of Congress to misperceive the Air Force's total budget. Could you share with us your thoughts about how that works?

Secretary KENDALL. The pass through budget is budget that is included in the submission under the Department of the Air Force, but it is money that doesn't actually go to the Air Force. It is about $40 billion.

For people who are familiar with the budget and used to working with it understand that they realize what that is. For people who are not as familiar, it can be a little confusing in terms of what our total budget is.

Senator COTTON. To be clear, this is pass through budget is not for Air Force classified programs, are not only for Air Force classified programs. It is simply your budget is used as the vehicle to fund these other programs.

Secretary KENDALL. That is correct. It goes to different Departments.

Senator COTTON. That is why I say, I think some people misperceive the top line Air Force budget, and I worry that that might be contributing in part to why your service has had to accept this near-term risk now to fund the future force. I think we as a Congress should try to address this situation to make sure this misperception doesn't continue.

Secretary KENDALL. Senator, what I look at is the adequacy of our budget to allow us to meet our missions. I am comfortable with the money that we are asking for this year to be able to do those functions. There is risk always, and we have tried to balance that risk, taking into account the pacing challenge in particular and trying to respond to that.

Senator COTTON. I want to return to both your opening statement and a question from Senator Reed about collaborative combat aircraft or CCAs. You called them an operational imperative. Can you discuss in a little more detail about how significant these CCAs are for both deterrence and your combat capability?

Secretary KENDALL. Our analysis shows that they are very cost effective. That they basically, by augmenting crewed aircraft with relatively inexpensive CCAs, you get a net combat capability, which is much more significant than if you tried to do it with all fully crewed aircraft.

Our current anticipation is that the cost with CCA will be a fraction of the cost of, say, an F–35. The other advantages for overall affordability, it can make the force much more affordable. You get a lot more combat power for the same total dollars that you might be committing. It has big benefits in both ways.

Senator COTTON. You said again today in your opening statement that the history of failure in warfare can almost always be summed up in two words, too late, a famous Douglas MacArthur quote, but I think you have said it enough that maybe one legacy of your tenure is that people think it is a Frank Kendall quote, and I think that is apt today as it was in MacArthur's time.

What would be the significance if China were to field such unmanned aircraft along with its manned fleet before the United States? How could delays in CCA funding impact that possibility?

Secretary KENDALL. China is aggressively trying to field the capability to defeat our ability to project power. They have been

working on it for at least 20 years. Their long range weapon systems targeting our airfields, our carriers, our satellites, et cetera, are a threat that we really have to cope with.

But they are also modernizing their air capability. I think, Senator Cotton, you have seen the classified briefing that we have been providing. I can't go to great details here, but they have analyzed carefully how we fight and what we fight with, and they have been thoughtful about what they need to invest in to try to circumvent that or defeat it.

That is the reason that I am so obsessed with getting on with the next generation capabilities. Holding onto things that are becoming obsolete over time just doesn't make any sense. We have got to get to the next generation.

Senator COTTON. It is my understanding that this fleet of unmanned aircraft would be a mix of aircraft with both weapons, kinetic weapons, let's say missiles, bombs, that sort of thing, but also other sensors or electronic warfare systems. Is that correct, Mr. Secretary?

Secretary KENDALL. Yes, that is correct. One way to think about it is that the pod or the weapon that might have been under the wing of a crewed aircraft is now flying in a separate aircraft and managed by the commander of that aircraft.

The analysis that we have done shows that the adversary has to honor each of those aircraft as it is a full threat. That gives you a great advantage relative to the cost of having those things in the air.

Senator COTTON. So, it creates a targeting problem for our adversary to have so many aircraft up in the air.

Secretary KENDALL. It both increases the targeting problem, but also gives them tactical dilemmas that he doesn't have to face right now. We can sacrifice one of these aircraft, put it well out in front, use it to draw fire and force the other side to expose itself and then be subject to engagement. So, they are—we call them attritable. They are not expendable, but we can afford to lose some of them operationally. There is nobody in them that we are going to lose. So, it changes our tactical options substantially.

Senator COTTON. While therefore enhancing survivability of our manned aircraft.

Secretary KENDALL. Exactly right.

Senator COTTON. Thank you.

Chairman REED. Thank you, Senator Cotton. Senator Hirono, please.

Senator HIRONO. Thank you, Mr. Chairman. The Joint Base Pearl Harbor-Hickam faces significant infrastructure challenges due to consistently deferred maintenance.

For the Air Force specifically, Hickam Airfield is in urgent need of almost $1 billion over the next several years to repair the taxiways our planes take off and land on. Secretary Kendall, is this budget request adequately prioritizing maintaining Air Force facilities in the Pacific?

Secretary KENDALL. We are prioritizing our facilities in the Pacific, largely because of the threat that we face out there. One of the operational imperatives was resilient forward basing.

So, the thing that we are prioritizing is improving the hardening and the equipage, if you will, of our bases so that we can make agile combat employment a reality. I believe that Hickam specifically falls under our Joint Base construct, which is operated by the Navy. We are working with the Navy to try to have our priorities funded.

Senator HIRONO. That is why I have a question for General Brown. Repairing the Hickam airfield will require support from the Navy and the Joint Base. Are there issues of prioritizing Air Force needs of the Joint Base?

General BROWN. Having served as the Commander of Pacific Air Forces and being stationary at the Joint Base, there has to be collaboration between the Air Force and the Navy.

We have been able to highlight more recently our real concerns with the airfield pavement, and so, it has gotten the attention of the Navy and other parts of the Department, so I think we are on a good path to actually ensure that aspect because it is going to help us project combat power.

Senator HIRONO. Thank you. The Agile Combat Employment Strategy requires the appropriate posture and supporting infrastructure at locations throughout the Pacific, like the islands of the Compact of Freely Associated States.

That will be Palau, Marshall Islands, Micronesia, Guam, and Northern Australia. Secretary Kendall, does the Air Force have the appropriate forward air basing it needs to execute agile combat employment?

Secretary KENDALL. We are working to increase that air basing in places that you mentioned, in Japan, wherever we are based in the Pacific. Our operational success out there depends on making the concept of agile combat employment a reality.

That includes, and it is a priority for us in the budget because it is something we can do fairly quickly relative to other things that we might want to do that would take a development program, for example.

We do have quite a bit of money in the budget focused on adding capability to support agile combat employment, including in the locations that you just mentioned, Senator.

Senator HIRONO. General Brown, what would be the impact to deterrence capabilities in the Pacific if dispersed infrastructure in the places that I am mentioning are not prioritized?

General BROWN. It decreases their options, and by having more and more options to be able to operate, that complicates the calculus for our adversaries. By having and being able to show different locations we can operate from, project combat power from, a credible combat force that adds to deterrence. Having that ability is important.

Senator HIRONO. I am sure both of you acknowledge the importance of the compacts of free association that we are currently concluding.

I just want the two of you to be aware that not only should we be funding the appropriate amounts to the compact nations themselves, but when their citizens come to our country and they are living in states throughout the United States, that they are able to access the social service programs that they should be entitled to,

and I would like those kinds of provisions to be included in the compact.

I am mentioning this to you because the compacts involve not just the DOD [Department of Defense], but Interior, as well as State. General Saltzman, the Department of Defense is increasingly turning to space-based systems for its ballistic cruise and hypersonic missile defense sensing needs. This is of particular interest to Hawaii.

So, what are you doing to ensure that these programs remain on time and on budget? Also, these space systems come with their own unique risks. How is the Space Force ensuring these capabilities are resilient in the face of disruption, whether through a cyber or kinetic attack?

General SALTZMAN. Yes, Senator, I think you will see that this particular budget submission addresses those concerns. First, the missile warning, missile tracking layer that we are pivoting to is a proliferated constellation, which means it is more resilient by design as there are more satellites performing the mission.

Because they are in lower Earth orbit, they are actually more high fidelity, so it is better tracking for some of the threats that we are seeing come out of our pacing challenge. Also, we are investing heavily in the cyber defense capabilities of the networks that are required to maintain and operate those systems as well. So, this budget definitely addresses your concerns.

Senator HIRONO. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Hirono. Senator Rounds, please.

Senator ROUNDS. Thank you, Mr. Chairman. Gentlemen, first of all, thank you all to you and to your families for your service to our country. I would also like to thank General Brown and Secretary Kendall for your most recent visit to Ellsworth Air Force Base.

Ellsworth is very excited to be the first bed down for the B–21 training squadron and the first operational squadron in the entire community. In fact, the entire State of South Dakota is very excited to see that coming their way.

I would also like to take this opportunity to recognize the Tigers of the 37th Bomb Squadron in their recent win of the STRATCOM's coveted Omaha Trophy. Shows that they are the best of the best and we are proud of them.

General Brown and General Saltzman, there have been efforts most recently regarding an attempt to utilize a part of the electromagnetic spectrum for purposes other than DOD purposes, and specifically the 3.1 to 3.45 gigahertz band or the S-band of the spectrum.

I would like for the record, if you could confirm for us that your forces do utilize that portion of the spectrum and that, at this unclassified level, could you share with us just how significant that part of the spectrum is to your forces regarding radar communications and so forth? General Brown.

General BROWN. Senator Rounds, we do use that part of the spectrum for our operational capabilities, and there is a number of weapon systems that operate within that band. I will just give you one example, our C–130 station keeping.

If that band was actually moved and we had to redesign, it would cost roughly about $2 billion just for that one platform. We have a number of platforms that operate within the S-band, so it is critical that we understand the impact on our security, not only for us to be able to operate, but also if we had to redesign systems, if we lost access to that part of the electromagnetic spectrum.

Senator ROUNDS. Thank you, General. General Saltzman.

General SALTZMAN. That particular band is a radar band that allows us to look into deep space. We currently have a developmental radar that is going to significantly enhance our ability to do space domain awareness.

If we were not able to use that piece of spectrum, not only would we lose the time that we have already invested in, as much as several hundred million dollars that we have already put into development, but it would also mean that we have to use a different portion of the electromagnetic spectrum, which isn't as capable in determining and discriminating capabilities in deep space.

Senator ROUNDS. Physics still count, don't they?

General SALTZMAN. They do, sir.

Senator ROUNDS. Thank you. General Brown, multiple independent studies, as well as at least one by the Air Force, indicate the numbers of bombers needed to meet requirements greatly exceed the minimum number currently being planned for.

In your professional military judgment, what is the approximate number of bombers needed to maintain a credible deterrent against two near-peer competitors?

General BROWN. Senator, the couple of things I think about is not only the number but also the capability of the bombers. The two bombers that we are—right now, the three bomber fleet, going to two bomber fleet, the B–21, as you highlighted that will start out at Ellsworth, but also as we upgrade the B–52, and so there will be 100 B–21s and 75 B–52s.

We will continue to do analysis. I mean, that is what we—the analysis we have right now, based on the threat. We will continue to pay attention to the threat, and that will also influence if we have to go beyond those numbers from a bomber capacity standpoint.

Senator ROUNDS. It sounds like a lot of bombers until you realize that not all of them are capable at all times. They are all undergoing maintenance at one point or another. What percentage of the bombers would you normally expect to be operational at that point?

General BROWN. Ideally, when we look at our day-to-day operations, not only for our bombers, but really all of our fleet, an 80 percent aircraft availability because you are going to have some aircraft down for maintenance, down for depot type operations. That is the goal of what we want to get to or above, not only for our bombers, but really across all of our platforms.

Senator ROUNDS. Thank you, sir. General Saltzman, as you know, I have concerns about the DOD's approach to providing space based, ground moving target indication capabilities to tactical DOD users following the divestment of the JSTARS platform.

Can you share with me how you are making sure that the JROC validated requirements are captured in the acquisitions process of

a platform whose acquisition is executed by the intelligence community? Will the DOD maintain milestone authority?

General SALTZMAN. Currently milestone decision authority, obviously that is acquisitions, and it will be a collaborative effort with the IC [Intelligence Community]. But Mr. LaPlante in USD A&S [Acquisition and Sustainment] does have that milestone decision authority, or portions of it.

From my vantage point, in terms of requirements and meeting those requirements, the Space Force is responsible for writing the capabilities development document, which documents those high-level requirements to make sure that the JROC validated requirements are satisfied in the program.

Then perhaps most importantly is the concept of employment. U.S. Space Force has responsibility to right that concept of employment to make sure that operationally it is a DOD mission that meets the warfighter requirements regardless of who develops the sensor.

Senator ROUNDS. Thank you, and Secretary Kendall, just one very quick comment. I hope that in the future, with the help of this Committee, when asked what keeps you up at night, I hope there will be a point here shortly where you can respond the same way that Secretary of Defense Mattis did, and said, "it is not things that keep me up at night. I keep other people up at night." I think that is our goal. Thank you.

Secretary KENDALL. I share that with you, Senator.

Senator ROUNDS. Thank you, sir. Thank you, Mr. Chairman.

Chairman REED. Thank you, Stand Rounds. Senator Ernst, please.

Senator ERNST. Yes, thank you, Mr. Chairman. Thank you, gentlemen, for your testimony and your service to our great nation. I want to continue the discussion about our bomber force and the future of it.

In a conflict with China, Air Force bombers will need to go after hundreds of targets over the vast distances of the Pacific. Yet today's Air Force is very much centered on fighters, with about 15 fighters for every one of our bombers.

If you look back to the 1960's, the Air Force had to deliver long range strikes against the Soviets, and the make-up of the Air Force at that time was about three fighters to every bomber. So, we just need to make sure that the mix is appropriate for today's fight. Again, if we are looking at a fight with China, we want to make sure that we are appropriately balanced.

General Brown, we will start with you. Tell us a little bit more about the critical role of the bomber in projecting power, especially as we are looking toward the east and a potential fight with China.

General BROWN. One of the key areas when you think about our bomber fleet, is that to be able to do—come from long distances away from where the airfields that you would take off from, would be under attack by and large.

The overall capacity of our bombers to do a number of missions, to be able to carry how long they will be able to stay airborne. So, it provides that capability to carry a number of long range standoff weapons in support of operations.

That is the viability of the bomber, and it is the capability that provides to be able to help us generate combat power.

Senator ERNST. Yes, very important. Thank you, sir. To the extent you can speak to it, how would the B–21 modular design allow the bomber to take on a wider range of missions, whether it is a strike, mission, ISR, or even electronic warfare?

General BROWN. I think one of the areas as we start going down the path of digital engineering and looking at how we do mission systems, many things are more software based today than they were back in history.

So that ability to be able to rapidly reprogram vis-á-vis the threat, to bring in additional capability from a weapon standpoint as well, that is a part of the modular aspect and how we are able to work the aspects of the engineering to bring in capability much faster than we have in the past.

Senator ERNST. Yes, exactly. I am intrigued by modular designs in this platform and many others as well. Secretary Kendall, with our major increases in the Air Force budget, then would increasing the B–21 buy require divesting legacy aircraft?

Secretary KENDALL. Senator, I share your concern about the future size and structure of the Air Force. I am not sure that the future Air Force will look all that much like the one we have today.

One of the things that may change, this shift in the balance that you talked about between shorter range tactical air capabilities and longer range strike capabilities the bombers provide. Within whatever constraint we have, we will probably end up, I think, at some point talking about adjustments to what the current ratio is.

We don't have many options to make those changes right now. We are preserving the bomber fleet pretty much as much as we can. We are fortunate that the B–52 was so robustly designed that we can keep it pretty much forever. So, we are using it as a bus, essentially, and we keep upgrading it, putting new engines on it, new radar.

The B–1 continues to service. It has got a lot of capacity. B–2s have been harder to maintain. B–21 is our option in the near-term to bring in new capability, and we are just starting to get it into production. Current number is 100. I don't know what it will end up being. It may be larger than that. I would not be surprised by that.

Senator ERNST. Secretary, thank you for that. Is there a way that the Air Force could control unit costs if it ramps up production of the B–21?

Secretary KENDALL. Cost and quantities are always connected, and you do reduce cost by increasing the production rate, definitely.

Senator ERNST. Okay.

Secretary KENDALL. The B–21 is being built on a line that was built for the development program and just be continued to use for production at a relatively modest rate. I think if we were going to significantly increase our production, we have to go relook at how we retool for manufacturing B–21. But that is not a near-term decision.

Senator ERNST. Wow. Well, I appreciate it, gentlemen. My grandfather built bombers in Middle America during World War II. It is

amazing that here we are all those years later, and yet we are still heavily reliant upon its capabilities. But thank you all very much for being here today. Thank you for your service.

Chairman REED. Thank you, Senator Ernst. Senator Cramer, please.

Senator CRAMER. Thank you, Mr. Chairman, and thank you to all of you for your service and for being with us today. Since bombers are the topic of the moment, General Brown, I want to talk a little bit about not so much bombers, but disbursement of bombers and taking advantage of some opportunities, particularly as it relates to BASE, or bomber agile combat employment, and the distribution of the nuclear capabilities.

As you know, of course, there used to be six big bases in the northern tier between Michigan and Montana. Today, there are two and one of them being Minot, the other one being Grand Forks in North Dakota.

The Grand Forks course was a bomber base. It had a 300-foot-wide runway. It has been reduced to 150-foot runway, based on the movement of the lights. It is due for improvement in 2025, and I am just wondering if you would be open to looking carefully at perhaps widening that runway for base type of use in the future.

Again, keeping in mind that in 2025, it is due for some improvements anyway. Because we are down to the last two in that tier.

General BROWN. Senator, we can definitely look at that. Particularly as you said that they are already going to be doing some modifications. Any time you are doing, it is probably a good time to take a look at and make sure we do not miss any options to provide us opportunities and capabilities in the future.

Senator CRAMER. Well, I always like it when my state's interests match up with common sense and the military. So, all I can ask is you take a good look at it. Thank you. General, I also want to talk to you about, you and I a couple of years ago talked about the deliveries of the MH–139A helicopter.

Secretary Kendall happened to be in Minot around Christmas time, and so he saw those drafty old, Vietnam era helicopters that our airmen, and particularly the security forces, have to use in Minot, and we couldn't go for a ride that day because of weather. Not uncommon in Minot.

The delay at that time, couple of years ago, the delay in delivery was due to FAA certification, as you no doubt recall and know. That is now done, but we see that there may be a delay again, and I am just wondering if you have some sort of an update on the MH–139As and when we might expect to see them?

General BROWN. Yes, we just finished up the production development phase and then in fiscal year 2024, we expected four of the MH–139s. They start their initial operational testing as well, so we will be beyond that FAA certification and then that will help us start to the path of a follow-on procurement to start fielding the aircraft.

Senator CRAMER. Well, is four enough? I mean, is there a way to escalate? Is there any chance we can accelerate that? I would even question whether the Hueys, the old ones, are mission capable at this point.

General BROWN. We will always take a look to see if there are ways to accelerate, you know, bringing on a capability and at the same time balance the rest as we bring that capability on to the force.

Senator CRAMER. I understand. Maybe one of the things that could help and inspire you would be a ride in February. But anyway, we will work on that another time. Thank you very much. Thank you, all three of you. Thank you, Mr. Chairman. I yield back.

Chairman REED. Thank you very much, Senator Cramer. Senator Tuberville, please.

Senator TUBERVILLE. Thank you, Mr. Chairman. Thanks for being here today, gentlemen, and your service. General Saltzman, U.S. policy is to have at least two space launch vehicles to launch DOD and NRO [National Reconnaissance Office] satellites. Space has changed a lot in 20 years. That law was written in 2004.

Meanwhile, the demand for launch vehicles, commercial, civil, and defense, has skyrocketed. Given the dramatic changes that have occurred in space, the increase in demand and the need for greater resiliency, redundancy, and responsiveness, what would be your best military advice for policymakers when it comes to space launch vehicles? Would you like to see at least three?

General SALTZMAN. Well, assured access to space is a critical capability that we have. The way I would characterize it is for me to say that we have assured access to space, I need at least two providers capable of putting satellites on orbit.

But it is to the advantage of the U.S. Government, it is to the advantage of the U.S. Space Force to have as many viable launch providers as possible. It creates a level of agility. It creates a level of resiliency that is important, which is why our NNSL, National Security space launch phase three contract that we have out for comments, is looking at two lanes.

One that maximizes the number of emerging launch providers to participate, while preserving that assured access that are our most highly risk averse mission sets. I think we have struck that balance appropriately.

Senator TUBERVILLE. Thank you. Secretary Kendall, the U.S. Air Force wants its next generation air refueler tanker KC-Z to reach additional operational capabilities by 2040. Clearly, that creates a gap in critical wartime capability. Where are we on the KC–46 Pegasus procurement to ensure we have full capabilities?

Secretary KENDALL. Senator, we have fundamentally changed our tanker acquisition strategy, where we need to move to a next generation taking capability which is resilient enough to survive against a pacing challenge.

So basically, the current plan is to go from the KC–46 into what we call the Next Generation Aerial Refueling System, or NGAS, which will be a new design, designed to be resilient enough to survive in the environment that we anticipate. We want to get to that design as quickly as we can.

So, there will be some gap between the currently contractual options that we have for KC–46, to when we can get the NGAS system into production. We would like to make that gap as small as possible. So, what we are requesting in this budget is the funding

to start down the road toward this program and do the analysis of alternatives to define that design and its requirements.

But we need to get on with this as quickly as we can. It is one of the areas in which time is very important to us. It won't be 2040. It is going to be much sooner than that. But we don't know—until we define the design and move it forward, we don't know exactly what that date will be. I am shooting for the early 2030's.

Senator TUBERVILLE. General Brown, your thoughts on that?

General BROWN. As the Secretary described it, you know, our tankers are very important to be able to generate that combat power. By changing the strategy to move things further left and get to next generation air refueling system is a way to move a bit faster to—that capability is going to be a bit more survival and to be able to create greater combat power.

Senator TUBERVILLE. Yes, especially for the Indo-Pacific. I mean, it is going to be a greater need, obviously. Secretary Kendall, it wouldn't be a hearing if I hadn't asked you about Space Command.

You and I have talked about this quite a bit. Are we getting closer? I would hate that this—we are on the verge in our lifetime of a dangerous world.

We might be fighting this thing from space if we don't watch it, and we want to make sure that we are doing the right things. I hope this thing doesn't get political. It looks like it is. We have been waiting for 2 years for a decision.

Give me your thoughts on what is going on with the Space Command. General Dickson said in his last hearing here that he needed a decision. So, what are your thoughts?

Secretary KENDALL. I don't have anything new to report today, Senator. I am really hopeful that we will be able to get a decision out as soon as possible, but I don't have any new information to provide.

Senator TUBERVILLE. None whatsoever? Are we even thinking about it or was this—we just—it just goes in and out? I mean, it is——

Secretary KENDALL. I just don't have anything more to provide.

Senator TUBERVILLE. But do you do you think it is important for us to have a permanent base?

Secretary KENDALL. Yes.

Senator TUBERVILLE. Yes. I think we all do. Nebraska, who is on the list, number two, and then San Antonio, number three, I think we all are kind of sitting around waiting to see what is going to happen.

But we sure would like to get this decision made and moved on down the road and have the opportunity to build on it instead of having guesswork. Thank you. Thank you very much.

Chairman REED. Thank you, Senator Tuberville. Senator Warren, please.

Senator WARREN. Thank you, Mr. Chairman, and thank you to our witnesses for your service. We often talk about the role of bombers and fighter jets in National Security, but our greatest strength as a Nation is our people.

The Senate approves thousands of military promotions every year, and typically this vote is a formality. But the Senator from Alabama has weaponized a policy disagreement about abortion to

politicize the military and place holds on all, all military nominations.

This brings the careers of nearly 200 officers, people who have served their country for decades, to a screeching halt. General Brown, can you explain what steps does a colonel or a brigadier General have to go through before the president sends a promotion over to the Senate for approval?

General BROWN. Well, each one of those offers goes through a thorough review that actually starts initially in the Department of the Air Force. We ensure there is no adverse information.

That same process gets repeated through the Joint Staff, through the Office of Secretary of Defense, over at the White House, before that member's record comes and is delivered to the Senate for promotion. It takes several months before it actually gets to here to the Senate.

Senator WARREN. Okay. So, you are not just sending these promotions over on a whim—it looked like a good idea. I take it that these individuals are being recommended for higher rank because they are our military's best, and they have proven themselves to the highest degree. Is that fair?

General BROWN. It does. It also shows that they have future potential.

Senator WARREN. Future potential as well. Now, recruitment has been a challenge for most of the military services, but retention levels have stayed quite high. The Air Force currently retains about 90 percent of its people at critical decision points.

That means that they complete a commitment, and the vast majority are choosing to re-enlist and stay with the Air Force. That is really good news. Secretary Kendall, does it worry you that if our men and women in uniform see that their promotions can get held up indefinitely because one Senator has an issue with one DOD policy, that that might hurt your ability to retain the best and the most qualified people in the Air Force?

Secretary KENDALL. Senator Warren, it does have an impact, definitely. I also want to mention it has an impact on families, too. We generally rotate people through the summer months and people need to plan for that.

They have to plan to get their children to schools, where they are going to be established and in their new homes. So, there is a very personal toll this takes as well. One of the things that motivates our people in terms of retention or not is how they feel that their families are being treated.

Things like childcare and education and health care are all very important factors. We ask our military families to move multiple times during their career. It is something that they accept. But when they are planning for that, and it is disrupted, it has very negative impact and it definitely impacts on retention as well.

Senator WARREN. Do you think these families want to be made a political football?

Secretary KENDALL. I know that they do not.

Senator WARREN. Secretary Kendall, what is the National Security impact of these holds for the Air Force?

Secretary KENDALL. The biggest impact is that people who should be coming into leadership roles don't arrive on time. So,

someone who is already there has to step up, either someone—Generally people, if they are going to retire, they are still going to retire. So, a junior person will step up and be acting for a period of time.

Those people are limited in what they can do. They generally are not going to make any major initiatives or make any major changes because they know they are not going to be there very long. They expect that they will be replaced very shortly.

So, they will keep the trains running, but they are not going to move the organization forward as much as they might be otherwise.

Senator WARREN. Well, the Senator from Alabama is holding up promotions across all of the services. But I took a look at the Air Force nominees in particular, and one thing that was really striking to me is that the vast majority of them studied at the Air War College in Alabama.

The State of Alabama has invested a lot in these leaders and the Senator from Alabama doesn't seem to care about that. So, Secretary Kendall, unlike many of the other services, the Space Force is meeting its recruiting goals.

The Space Force is obviously still very young. These are defining years for your service. What are the readiness impacts of these holds on Space Force?

Secretary KENDALL. I am not aware of any General officers that are being held for the Space Force at this time. But the same generic impact would happen there as would happen on the Air Force. The Space Force is meeting its recruiting goals because it is an exciting new opportunity for people, and it is relatively small, and it is relatively modest numbers that it is seeking.

Senator WARREN. Well, thank you very much. You know, holding the promotions of every single senior military nominee is not democracy, it is extortion, and this kind of extortion has serious consequences for our national defense.

This actively hurts our ability to respond quickly to threats around the world. As you point out, Secretary Kendall, this is really painful for military families who have already been called on to give so much. We need to lift these holds. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Warren. Senator Budd, please.

Senator BUDD. Thank you, Mr. Chairman. Again, thank you all for being here, for those behind you and those you represent as well. Considering the Senator from Massachusetts's remarks, Secretary Austin can solve this with a single stroke of the pen.

I was able to make that several weeks ago very clear. Change the policy, solve the problem. Secretary Kendall, based on the President's Budget, the Air Force is requesting $2.9 billion, or about $317 million more than last year to purchase 24 F–15EXs, and that is to replace the remaining C and D model F–15s. Does that sound about right? Thank you——

Secretary KENDALL. Yes, sir. It is replacing another incremental of F–15Cs.

Senator BUDD. Yes, sir. Thanks. I think the Air Force budget makes it very clear, so, again, I appreciate you clarifying that.

What is not clear to me is the Air Force's plan for the F–15E, Echo, fleet, including the squadrons at Seymour Johnson Air Force Base in North Carolina.

I know Ranking Member Wicker was able to spend time there during his service, though it is a special place for many of us. The Air Force just completed major upgrades to the F–15E fleet, including replacing the outdated radars.

This investment by Congress and the Air Force drastically improves the aircraft's air to air, and air to ground targeting capabilities. Does that sound about right?

Secretary KENDALL. Yes, sir.

Senator BUDD. Thank you. The Air Force is now in the process of adding the Eagle Passive Active Warning and Survivability System, or E-PAWSS, to these aircraft, which will offer improved defensive situational awareness and electronic attack capability. Correct?

Secretary KENDALL. Yes, Senator.

Senator BUDD. So now, reading from page 261, this is volume two of the aircraft—excuse me, the Air Force's Aircraft Procurement Justification book, which states that F–15 E-PAWSS procurement plans have been applied to the Air Force F–15E divestment plan and will result in 99 E-PAWSS modified aircraft.

Now, one can read this to mean, and it has been reported that the Air Force plans to shrink the size of the F–15E fleet from 218 aircraft to just 99 aircraft by fiscal year 2028. Is that a correct interpretation of the Air Force divestment plan for the F–15E?

Secretary KENDALL. I would have to check to confirm that, Senator, but I have no reason to believe it is not correct.

Senator BUDD. Thank you. I would ask you to check. Mr. Secretary, will you commit, after you check, to providing my staff a detailed briefing on the Air Force long term plan for the F–15E within the next 2 weeks?

Secretary KENDALL. I can promise to give you that. I can't assure you that it will be within 2 weeks. But I will do my best to do that.

Senator BUDD. As soon as able, thank you. So, in addition to the F–15E divestment, you want to divest 32 F–22s Block 20 aircraft, all of the U–2s, all MQ–9 Reapers, all RQ–4 Global Hawks of the Block 40 aircraft, and F–16 modernization would be cut. The F–15EX procurement objective was 144 aircraft, but now it is just 104 aircraft. Sound right?

Secretary KENDALL. Some of that is correct. I am not sure about some other parts. We are not divesting all the MQ–9s, for example.

Senator BUDD. Okay.

Secretary KENDALL. I believe your numbers on the EX were correct.

Senator BUDD. If you would check on those numbers, if you would, please. What is going to replace all these fighter aircraft in the ISR platforms? The question really is on what schedule?

Secretary KENDALL. Over the FYDP, we do come down about 14 percent in total number of fighters. The problem we have is that the oldest fourth generation fighters are just not capable against the threat. When they go up against fifth generation aircraft, they do not do well at all. We have got a lot of exercises that demonstrate that to us.

The F–15E, which you are concerned about, we are going to be keeping that for some time. As you mentioned, there is some upgrades still underway. We are not as with the numbers I think that you indicated.

As far as you mentioned, Seymour Johnson, I am not aware of any near-term plans to change anything at Seymour Johnson, but we can give you more details on that when I give you the details that you asked for.

Senator BUDD. The question, please. fiscal year 2028, if you would. Thank you.

Secretary KENDALL. I will let you know. Overall, we are trying to move toward a next generation set of capabilities. So F–35, NGAD [Next Generation Air Dominance] to replace the F–22s, and F–15EX, and F–16s, more modern F–16s are basically going to be the fighter fleet of the future. We are going to add to that the CCAs that we talked about earlier in the testimony.

Senator BUDD. Thank you. So, I understand the divesting to invest concept, but I am alarmed at the risk and the timing. Roughly you have about 5,100 aircraft and it is going to shrink to about 40—a little over 4,400 by 2028.

Most of those reductions are fighters. So, my concern is that this represents an invitation to China to be even more aggressive. Any comments on that or concerns?

Secretary KENDALL. We look at total combat capability of the fleet and we are increasing that as we buy fifth generation aircraft.

Senator BUDD. Thank you. I yield.

Chairman REED. Thank you very much, Senator Budd. Senator Rosen, please.

Senator ROSEN. Well, thank you, Chairman Reed, and thank you for all of you for being here, for your service to the Nation, and for everyone that works with you. I want to build on what Senator Warren was talking about a little bit, about our military families, about how much they sacrifice, how much they do to really keep us safe and protect us, and it is important that we take care of them, too.

Nellis Air Force Base in Southern Nevada, there is a housing shortage. General Brown, I have raised this before in Committee several time. Our wonderful junior enlisted airmen and airwomen stationed in Nevada's Nellis Air Force Base, their average only 12 months in the dormitories, being forced to move off base into very expensive private housing in the community due to these on-base housing shortage.

In Nellis, the dormitory master plan reflects a shortage of about 500 rooms. The base has identified a need for two more dormitories. I am really disappointed that neither a new dormitory is in the Air Force's fiscal year 2024 budget, or in the Future Years Defense Program, or even on your unfunded priorities list.

General Brown, how are you going to help our youngest service men and women here at Nellis, and of course at other places around the country, provide more support for them to do their jobs and serve our country?

General BROWN. Senator, as you highlighted, it is very important. We need to take care of our—most importantly, our junior airmen, because that actually impacts our retention. We do have two

dorm projects that were going through the initial stages for Nellis, in addition to money we are putting into renovating the many of the dorms that already exist.

Having been in Nellis several times, most recently in January, and the conversation on not only the dorm capacity but how we work as well with the community to find affordable housing. One of the areas that I would also highlight as we focused on not only affordable housing, but the difference in how we raised the basic allowance for housing for a junior airmen.

It was raised by about 21 percent. This is something we are paying close attention to, not only at Nellis, but I would say around the Air Force as we are seeing areas from housing standpoint, housing prices have gone up. But really working closely with the communities to try to find opportunities, particularly when we have a bit of a deficit in our dorms at specific locations.

But we are going to continue to work to put more energy into the dorms at Nellis to do those renovations, but also the couple of dorm projects that I mentioned.

Senator ROSEN. I would be remiss if I didn't say thank you in responding to our letters, for improving the speed and access for the base housing allowance when servicemen, airmen do transition to off base housing.

Getting that money quickly, faster. They are paid the least among everyone and they are often the youngest, so it is very challenging. So, I appreciate the cooperation and attention you have been paying to that. Then I want to move on to some of our military families that actually have children.

They need childcare. It is really important. Missions go 24 hours a day, 7 days a week, right. In the military, doesn't rest. Secretary Kendall, our airmen stationed at Creech Air Force Base just outside Las Vegas, now they do the MQ–9 Reaper program, amongst other things. They struggle to find adequate childcare because their shifts are often outside the normal business hours due to the drone programs and other things they do.

It is 24-hour support, and the DOD's new in-home childcare fee assistance pilot program, it was launched to help provide in-home childcare solutions for our servicemembers, especially in regions with high demand. I am happy to see that you extended this pilot program to Las Vegas. However, I am understanding now that the program has a lot of red tape, that it is really difficult requirements, and essentially is rendering in-home childcare reimbursement unavailable to Nevada's military families.

Secretary, can you commit to me to work to make this program better for Nevada families? They have to show up 24 hours a day, 7 days a week to complete the mission. We have to be there for their families. What can we do?

General BROWN. Senator, I couldn't agree with you more. I have made that commitment. I have driven from Nellis off to Creech, so I know what those people have to do, and I can really appreciate the childcare difficulties associated with having to provide childcare near your home and then make that commitment to go back and forth.

We have the pilot program, as you mentioned. I was not aware of the red tape issues until you highlighted them. But we will take

a look at that and see if we can do something to make it much more accessible to people.

Childcare is the problem that I hear most about from our families. There is a shortage of childcare staff around the country. We are trying to address that with a number of initiatives to improve our paying compensation, provide, in the case of the Air Force, free childcare for staff members, first child, and then deductions for the rest.

We are working hard to have more in-home childcare providers to increase the availability of childcare. We are doing a number of things in that area. I will take a specific look at the problem you mentioned about the pilot program and see if we can reduce the red tape.

Senator ROSEN. Perfect, thank you. We will look forward to following up. Thank you, Mr. Chairman. I yield.

Chairman REED. Thank you, Senator Rosen. Senator Schmitt, please.

Senator SCHMITT. Thank you, Mr. Chairman. I would like to, from the outset here, ask unanimous consent to submit for the record this Washington Post investigative story entitled, Pentagon Buries Evidence of $125 Billion in Bureaucratic Waste from 2016.

Chairman REED. Without objection.

[The information referred to follows:]

The Washington Post
Democracy Dies in Darkness

INVESTIGATIONS

Pentagon buries evidence of $125 billion in bureaucratic waste

By Craig Whitlock and Bob Woodward
December 5, 2016 at 6:47 p.m. EST

The Pentagon has buried an internal study that exposed $125 billion in administrative waste in its business operations amid fears Congress would use the findings as an excuse to slash the defense budget, according to interviews and confidential memos obtained by The Washington Post.

Pentagon leaders had requested the study to help make their enormous back-office bureaucracy more efficient and reinvest any savings in combat power. But after the project documented far more wasteful spending than expected, senior defense officials moved swiftly to kill it by discrediting and suppressing the results.

The report, issued in January 2015, identified "a clear path" for the Defense Department to save $125 billion over five years. The plan would not have required layoffs of civil servants or reductions in military personnel. Instead, it would have streamlined the bureaucracy through attrition and early retirements, curtailed high-priced contractors and made better use of information technology.

The study was produced last year by the Defense Business Board, a federal advisory panel of corporate executives, and consultants from McKinsey and Company. Based on reams of personnel and cost data, their report revealed for the first time that the Pentagon was spending almost a quarter of its $580 billion budget on overhead and core business operations such as accounting, human resources, logistics and property management.

The data showed that the Defense Department was paying a staggering number of people — 1,014,000 contractors, civilians and uniformed personnel — to fill back-office jobs far from the front lines. That workforce supports 1.3 million troops on active duty, the fewest since 1940.

The cost-cutting study could find a receptive audience with President-elect Donald Trump. He has promised a major military buildup and said he would pay for it by "eliminating government waste and budget gimmicks."

For the military, the major allure of the study was that it called for reallocating the $125 billion for troops and weapons. Among other options, the savings could have paid a large portion of the bill to rebuild the nation's aging nuclear arsenal, or the operating expenses for 50 Army brigades.

But some Pentagon leaders said they fretted that by spotlighting so much waste, the study would undermine their repeated public assertions that years of budget austerity had left the armed forces starved of funds. Instead of providing more money, they said, they worried Congress and the White House might decide to cut deeper.

So the plan was killed. The Pentagon imposed secrecy restrictions on the data making up the study, which ensured no one could replicate the findings. A 77-page summary report that had been made public was removed from a Pentagon website.

"They're all complaining that they don't have any money. We proposed a way to save a ton of money," said Robert "Bobby" L. Stein, a private-equity investor from Jacksonville, Fla., who served as chairman of the Defense Business Board.

Stein, a campaign bundler for President Obama, said the study's data were "indisputable" and that it was "a travesty" for the Pentagon to suppress the results.

"We're going to be in peril because we're spending dollars like it doesn't matter," he added.

The missed opportunity to streamline the military bureaucracy could soon have large ramifications. Under the 2011 Budget Control Act, the Pentagon will be forced to stomach $113 billion in automatic cuts over four years unless Congress and Trump can agree on a long-term spending deal by October. Playing a key role in negotiations will probably be Trump's choice for defense secretary, retired Marine Gen. James Mattis.

The Defense Business Board was ordered to conduct the study by Deputy Defense Secretary Robert O. Work, the Pentagon's second-highest-ranking official. At first, Work publicly touted the efficiency drive as a top priority and boasted about his idea to recruit corporate experts to lead the way.

After the board finished its analysis, however, Work changed his position. In an interview with The Post, he did not dispute the board's findings about the size or scope of the bureaucracy. But he dismissed the $125 billion savings proposal as "unrealistic" and said the business executives had failed to grasp basic obstacles to restructuring the public sector.

"There is this meme that we're some bloated, giant organization," he said. "Although there is a little bit of truth in that . . . I think it vastly overstates what's really going on."

Work said the board fundamentally misunderstood how difficult it is to eliminate federal civil service jobs — members of Congress, he added, love having them in their districts — or to renegotiate defense contracts.

He said the Pentagon is adopting some of the study's recommendations on a smaller scale and estimated it will save $30 billion by 2020. Many of the programs he cited, however, have been on the drawing board for years or were unrelated to the Defense Business Board's research.

Work acknowledged that the push to improve business operations lost steam after then-Defense Secretary Chuck Hagel was replaced by Ashton B. Carter in February 2015. Carter has emphasized other goals, such as strengthening the Pentagon's partnerships with high-tech firms.

"We will never be as efficient as a commercial organization," Work said. "We're the largest bureaucracy in the world. There's going to be some inherent inefficiencies in that."

'Dark matter'

Work, a retired Marine officer, became deputy defense secretary in May 2014. With the military budget under the most pressure since the end of the Cold War, he sought help from the Defense Business Board, an advisory panel known for producing management studies that usually gathered dust.

Work told the board that the outcome of this assignment would be different. In a memo, he directed the board to collect sensitive cost data from the military services and defense agencies that would reveal how much they spent on business operations.

Pentagon officials knew their back-office bureaucracy was overstaffed and overfunded. But nobody had ever gathered and analyzed such a comprehensive set of data before.

Some Defense Business Board members warned that exposing the extent of the problem could have unforeseen consequences.

"You are about to turn on the light in a very dark room," Kenneth Klepper, the former chief executive of Medco Health Solutions, told Work in the summer of 2014, according to two people familiar with the exchange. "All the crap is going to float to the surface and stink the place up."

"Do it," Work replied.

To turn on the light, the Pentagon needed more outside expertise. A team of consultants from McKinsey was hired.

In a confidential August 2014 memo, McKinsey noted that while the Defense Department was "the world's largest corporate enterprise," it had never "rigorously measured" the "cost-effectiveness, speed, agility or quality" of its business operations.

Nor did the Pentagon have even a remotely accurate idea of what it was paying for those operations, which McKinsey divided into five categories: human resources; health-care management; supply chain and logistics; acquisition and procurement; and financial-flow management.

McKinsey hazarded a guess: anywhere between $75 billion and $100 billion a year, or between 15 and 20 percent of the Pentagon's annual expenses. "No one REALLY knows," the memo added.

The mission would be to analyze, for the first time, dozens of databases that tracked civilian and military personnel, and labor costs for defense contractors. The problem was that the databases were in the grip of the armed forces and a multitude of defense agencies. Many had fought to hide the data from outsiders and bureaucratic rivals, according to documents and interviews.

Information on contractor labor, in particular, was so cloaked in mystery that McKinsey described it as "dark matter."

Prying it loose would require direct orders from Work. Even then, McKinsey consultants predicted the bureaucracy would resist.

"This is a sensitive exercise conducted with audiences both 'weary' and 'wary' of efficiency, cost, sequestration and budget drills," the confidential memo stated. "Elements of the culture are masterful at 'waiting out studies and sponsors,' with a 'this too shall pass' mindset."

Overstaffed chow hall

From the outset, access to the data was limited to a handful of people. A $2.9 million consulting contract signed by the Pentagon stipulated that none of the data or analysis could be released to the news media or the public.

Moreover, the contract required McKinsey to report to David Tillotson III, the Pentagon's acting deputy chief management officer. Anytime the Defense Business Board wanted the consultants to carry out a task, Tillotson would have to approve. His office — not the board — would maintain custody of the data.

"Good news!" Work emailed Tillotson once the contract was signed. "Time to cook."

In an Oct. 15, 2014, memo, Work ordered the board to move quickly, giving it three months to produce "specific and actionable recommendations."

In a speech the next month, Work lauded the board for its private-sector expertise. He said he had turned it into "an operational arm" of the Pentagon leadership and predicted the study would deliver transformational results.

In an aside, he revealed that early findings had determined the average administrative job at the Pentagon was costing taxpayers more than $200,000, including salary and benefits.

"And you say, hmmm, we could probably do better than that," he said.

The initial results did not come as a surprise.

Former defense secretaries William S. Cohen, Robert M. Gates and Chuck Hagel had launched similar efficiency drives in 1997, 2010 and 2013, respectively. But each of the leaders left the Pentagon before their revisions could take root.

"Because we turn over our secretaries and deputy secretaries so often, the bureaucracy just waits things out," said Dov Zakheim, who served as Pentagon comptroller under President George W. Bush. "You can't do it at the tail end of an administration. It's not going to work. Either you leave the starting block with a very clear program, or you're not going to get it done."

Arnold Punaro, a retired Marine general and former staff director for the Senate Armed Services Committee, said lawmakers block even modest attempts to downsize the Pentagon's workforce because they do not want to lose jobs in their districts.

Without backing from Congress, "you can't even get rid of the guy serving butter in the chow hall in a local district, much less tens of thousands of jobs," he said.

'Time to hunt!'

The Defense Business Board assigned five members to conduct the study alongside consultants from McKinsey. Scott Rutherford, senior partner at McKinsey's Washington office, declined to comment.

The team ran into resistance as several Pentagon offices delayed requests for data, according to emails and memos. Work and Tillotson had to intervene to get the data flowing. At one point, more than 100 people were feeding data from different sectors of the bureaucracy.

Laboring under its tight deadline, the team hashed out an agreement with Pentagon officials over which job classifications to count in their survey. The board added a sixth category of business operations — real property management. That alone covered 192,000 jobs and annual expenses of $22.6 billion.

On Christmas Eve, Klepper emailed Work and Tillotson to thank them for putting their muscle behind the project. Without it, he said, "this would all have been DOA and the naysayers would all have been right."

He hinted the board would make some eye-catching recommendations and expressed relief its work had not been torpedoed.

"I have to admit, with all the caution, negative reaction and pushback," Klepper said, "I had a bit of concern at the end of the analysis some form of censorship would stop us from showing the true opportunity."

Work replied that he could not be happier.

"Time to hunt!" he said in an email, adding that he was "very excited about 2015" and ready to make "some bold moves."

The year kicked off with promise. On Jan. 21, 2015, the Pentagon announced Stein, the private-equity investor, had been reappointed as the board's chairman and praised him for his "outstanding service."

The next day, the full board held its quarterly public meeting to review the results of the study. The report had a dry title, "Transforming DoD's Core Business Processes for Revolutionary Change," and was packed with charts and jargon. But it began plainly enough.

"We are spending a lot more money than we thought," the report stated. It then broke down how the Defense Department was spending $134 billion a year on business operations — about 50 percent more than McKinsey had guessed at the outset.

Almost half of the Pentagon's back-office personnel — 457,000 full-time employees — were assigned to logistics or supply-chain jobs. That alone exceeded the size of United Parcel Service's global workforce.

The Pentagon's purchasing bureaucracy counted 207,000 full-time workers. By itself, that would rank among the top 30 private employers in the United States.

More than 192,000 people worked in property management. About 84,000 people held human-resources jobs.

The study laid out a range of options. At the low end, just by renegotiating service contracts and hiring less-expensive workers, the Pentagon could save $75 billion over five years. At the high end, by adopting more aggressive productivity targets, it could save twice as much.

After a discussion, the full board voted to recommend a middle option: to save $125 billion over five years.

Hordes of contractors

Afterward, board members briefed Work. They were expecting an enthusiastic response, but the deputy defense secretary looked uneasy, according to two people who were present.

He singled out a page in the report. Titled "Warfighter Currency," it showed how saving $125 billion could be redirected to boost combat power. The money could cover the operational costs for 50 Army brigades, or 3,000 F-35 Joint Strike Fighters for the Air Force, or 10 aircraft-carrier strike groups for the Navy.

"This is what scares me," he said, according to the two people present. Work explained he was worried Congress might see it as an invitation to strip $125 billion from the defense budget and spend it somewhere else.

A few weeks later, Carter replaced Hagel as defense secretary. Carter sounded as though he would welcome the kind of revolutionary change the board was urging.

"To win support from our fellow citizens for the resources we need, we must show that we can make better use of every taxpayer dollar," Carter said in an inaugural message in February 2015. "That means a leaner organization, less overhead, and reforming our business and acquisition practices."

In briefings that month, uniformed military leaders were receptive at first. They had long groused that the Pentagon wasted money on a layer of defense bureaucracies — known as the Fourth Estate — that were outside the control of the Army, Air Force and Navy. Military officials often felt those agencies performed duplicative services and oversight.

But the McKinsey consultants had also collected data that exposed how the military services themselves were spending princely sums to hire hordes of defense contractors.

For example, the Army employed 199,661 full-time contractors, according to a confidential McKinsey report obtained by The Post. That alone exceeded the combined civil workforce for the Departments of State, Agriculture, Commerce, Education, Energy, and Housing and Urban Development.

The average cost to the Army for each contractor that year: $189,188, including salary, benefits and other expenses.

The Navy was not much better. It had 197,093 contractors on its payroll. On average, each cost $170,865.

In comparison, the Air Force had 122,470 contractors. Each cost, on average, $186,142.

Taking fire

Meantime, the backlash to the $125 billion savings plan intensified.

On Feb. 6, 2015, board members briefed Frank Kendall III, the Pentagon's chief weapons-buyer. Kendall's operations were a major target of the study; he oversaw an empire of purchasing agents and contractors that were constantly under attack from Congress for cost overruns and delays.

Kendall put up a stiff fight. He challenged the board's data and strenuously objected to the conclusion that his offices were overstaffed.

"Are you trying to tell me we don't know how to do our job?" he said, according to two participants in the meeting. He said he needed to hire 1,000 more people to work directly under him, not fewer.

"If you don't believe me, call in an auditor," replied Klepper, the board's restructuring expert. "They'll tell you it's even worse than this."

In an interview, Kendall acknowledged he was "very disappointed" by the board's work, which he criticized as "shallow" and "very low on content." He said the study had ignored efforts by his agencies to become more efficient, and he accused the board of plucking the $125 billion figure out of thin air.

"It was essentially a ballpark, made-up number," he said.

Still, Kendall knew that lawmakers might view the study as credible. Alarmed, he said, he went to Work and warned that the findings could "be used as a weapon" against the Pentagon.

"If the impression that's created is that we've got a bunch of money lying around and we're being lazy and we're not doing anything to save money, then it's harder to justify getting budgets that we need," Kendall said.

More ominously, board members said they started to get the silent treatment from the Pentagon's highest ranks.

Briefings that had been scheduled for military leaders in the Tank — the secure conference room for the Joint Chiefs of Staff — were canceled. Worse, the board was unable to secure an audience with Carter, the new defense secretary.

Stein, the board chairman, accused Carter of deliberately derailing the plan through inaction. "Unfortunately, Ash — for reasons of his own — stopped this," he said in an interview.

Peter Cook, a spokesman for Carter, said the Pentagon chief was busy dealing with "a long list of national security challenges." He added that Work and other senior officials had already "concluded that the report, while well-intentioned, had limited value."

The fatal blow was struck in April. Just three months after Stein had been reappointed as board chairman, Carter replaced him with Michael Bayer, a business consultant who had previously served on the panel and clashed with Stein. Bayer declined to comment.

A few weeks later, Klepper resigned from the board. The $125 billion savings plan was dead.

In an interview, Tillotson, the Pentagon's acting deputy chief management officer, called the board's recommendations too ambitious and aggressive. "They, perhaps, underestimated the degree of difficulty we have in doing something that in the commercial sector would seem to be very easy to do."

Yet he acknowledged that its overall strategy for scaling back the bureaucracy was sound and that, given more time, it would be possible to realize huge savings.

"If we had a longer timeline, yes, it would be a reasonable approach," he said. "You might get there eventually."

Ending the debate

Frustration, however, persisted in some corners over the Pentagon's unwillingness to tackle the inefficiency and waste documented by the study.

On June 2, 2015, Navy Secretary Ray Mabus delivered a speech at the American Enterprise Institute, a conservative think tank. He complained that 20 percent of the defense budget went to the Fourth Estate — the defense agencies that provide support to the armed forces — and called it "pure overhead."

He singled out the Defense Finance and Accounting Service and the Defense Logistics Agency, which together employ about 40,000 people, as egregious examples.

When a reporter in the audience asked whether he thought the agencies should be abolished, Mabus resisted the temptation to say yes.

"Nice try on getting me into deep trouble," he replied.

But trouble arrived in Mabus's email the next day.

"Ray, before you publicly trash one of the agencies that reports through me I'd really appreciate a chance to discuss it with you," wrote Kendall, the Pentagon's chief weapons-buyer, whose management portfolio included the Defense Logistics Agency.

He said that if Mabus had a complaint, he should raise it directly with their mutual bosses, Carter and Work, and copied the email to both.

In his interview with The Post, Kendall said he was "completely blindsided" by the Navy secretary's criticism, "so I sent him what I thought under the circumstances was a pretty polite note."

Mabus did not back down. In an emailed retort to Kendall, he referred to the ill-fated Defense Business Board study.

"I did not say anything yesterday that I have not said both publicly . . . and privately inside this building," he said. "There have been numerous studies, which I am sure you are aware of, pointing out excessive overhead."

That prompted a stern intervention from Work.

"Ray, please refrain from taking any more public pot shots," Work said in an email. "I do not want this spilling over into further public discourse."

Evelyn Duffy contributed to this report.

Senator SCHMITT. Thank you, Mr. Chairman. Secretary Kendall, I would want to ask you about this, because you play a starring role in this article, as it turns out. There was a report that the Pentagon actually commissioned in the business—or the Defense Business Board, as you are aware, as you are nodding here, identified over $125 billion worth of bureaucratic waste.

You were instrumental in burying that report, and I want to ask you about this, but before I do, and you deserve an opportunity to explain yourself here, but fundamentally, in this report or the reporting on the report that was buried, DOD employed—employs more than 1 million people in back-office positions, and we have 1.3 million troops on Active Duty.

That is almost a 1 to 1 ratio. The report also laid out that there was a clear path to saving over $125 billion in the next 5 years by trimming that bureaucracy. The greatest contributors to the savings are early retirements and reducing services from contractors.

But that $125 billion, whether it is $125 billion or some factor below that is a startling number, and just to put that in context, that amounts to 50 Army brigades, ten naval carrier strike group deployments, or 83 F–35 fighter wings for a full 5 years.

I want to ask you, what was your role in this? Is there anything to be learned from this report that never saw the light of day?

Secretary KENDALL. The report definitely saw the light of day. It was published, and nobody tried to suppress it, Senator. So, that is completely incorrect.

Senator SCHMITT. Well, there are some emails from you, actually, that you were very aggressive in making sure that this wasn't given any credibility.

Secretary KENDALL. It has no credibility.

Senator SCHMITT. Okay.

Secretary KENDALL. I am very familiar with that report. It was a very amateurish effort. It essentially made analogies between the Government and the Department of Defense, and companies that were selected in the commercial role, which had no real valid comparison.

Then it said that because these companies could save x percent of their cost, therefore, the Department of Defense must be able to save the same percentage. It was nonsense.

Senator SCHMITT. Okay. When you were in that procurement role—you are now Secretary of the Air Force. I want to ask you, let's just say you are right. Let's say that it has no validity, which I don't believe.

Whether it is 100 percent or 20, whatever that number is, what are you doing right now as the Secretary to cut out waste? Are you doing anything? If you identified anything, have you done anything?

Secretary KENDALL. We have set a number of management initiatives in place to try to introduce well-defined metrics for each part of the Air Force, each part of the enterprise—all the different functional pieces.

Senator SCHMITT. Have you realized any savings from this? Have you realized any savings from this?

Secretary KENDALL. Yes, we have.

Senator SCHMITT. Okay. I would like to followup then to find out exactly what that is.

Secretary KENDALL. Certainly.

Senator SCHMITT. Okay, and the reason why I am asking is we are clearly, whether you want to call it a pacing challenge or a chief adversary with China, they are not messing around.

I just don't think there is—we have to have a sense of urgency, I think, in making sure that every dollar the taxpayers are putting forward, and I am somebody that is going to be advocating for an aggressive posture here, that we are not letting any of that go to waste.

Sort of following up on that, in March, I sent a letter to Secretary Austin asking him some fairly simple questions about civilian workforce. There are recruitment issues. There is readiness challenges.

I was asking him specifically how many DEI [Diversity, Equity, and Inclusion] related positions exist in the Department of Defense. I want to ask you, how many DEI positions exist under your purview?

Secretary KENDALL. I would have to get you that for the record.

Senator SCHMITT. Okay. Will you be responsive? Secretary Austin has not been responsive, so I want to just find out what we are dealing with here, the number of jobs. I also want to ask you, how many mandatory DEI training sessions were conducted last year?

Secretary KENDALL. I would have to get that for the record also. Our DEI training sessions are prescribed by law. I think they are in the NDAA from 2019, if I remember. They are prescribed certain numbers of hours in different aspects of our training.

[The information referred to follows:]

Secretary KENDALL.

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	ACC	AIR COMBAT COMMAND (OL CS00)	$137,469	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	ACC	70 INTL-SURVEIL-RECON WING	$94,199	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	ACC	688 CYBERSPACE WING	$109,066	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL A1A1)	$86,693	GS12	RATED DIVERSITY IMPROVEMENT (RDI) PROGRAM ANALYST
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL A1A1)	$99,764	GS13	RATED DIVERSITY IMPROVEMENT (RDI) PRGRAM ANALYST
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL A1A1)	$116,390	GS13	RATED DIVERSITY IMPROVEMENT (RDI) PRGRAM ANALYST
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL CD01)	$125,750	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AF TAC	709 SUPPORT SQUADRON	$86,179	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	AFCCT	AF CIV CAREER TNG—FOA (OL FR)	$57,853	GS07	DIVERSITY & INCLUSION PROGRAM MANAGER/ CAMPUS LIAISON
USAF	AFMC	AF INST MSN SPT CENTER (OL DP00)	$126,366	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	AF MATERIEL COMMAND (OL A1)	$153,851	NH04	CHIEF, HQ AFMC EQUAL OPPORTUNITY AND DIVERSITY

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	AFMC	AF NUCLEAR WPNS CENTER (OL DPHL)	$115,320	NH03	DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	AF RESEARCH LAB	$146,722	DR03	DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	75 AIR BASE WING	$117,286	NH04	DIVERSITY, EQUITY AND INCLUSION CHIEF
USAF	AFMC	78 AIR BASE WING	$139,759	NH04	DIVERSITY, EQUITY AND INCLUSION CHIEF
USAF	AFMC	88 AIR BASE WING	$105,696	NH03	INSTALLATION DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	96 TEST WING	$52,185	NH02	DIVERSITY AND INCLUSION SPECIALIST
USAF	AFMC	96 TEST WING	$79,780	NH02	DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	96 TEST WING	$86,541	NH03	DIVERSITY AND INCLUSION SPECIALIST
USAF	AFMC	412 TEST WING	$153,010	NH04	DIVERSITY, EQUITY AND INCLUSION CHIEF
USAF	AFOSI	AF OFF SPEC INVEST—FOA	$145,604	GS14	DIVERSITY AND INCLUSION OFFICER
USAF	AFR	HQ AF RESERVE COMMAND	$128,031	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AFSOC	AF-SPEC-OPNS COMMAND (OL A100)	$108,345	GS13	CULTURE AND DIVERSITY SPECIALIST
USAF	AMC	MOBILITY COMMAND (OL CD00)	$130,889	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AMC	6 AIR REFUELING WING	$121,477	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AMC	60 AIR MOBILITY WING	$102,489	GS12	DIVERSITY AND INCLUSION COORDINATOR
USAF	AMC	62 AIRLIFT WING	$92,123	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	AMC	87 AIR BASE WING	$115,118	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	GLOBAL STRKE	AF GLOBAL STRIKE COMMAND (OL DS00)	$131,911	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	GLOBAL STRKE	377 AIR BASE WING	$144,941	GS14	DIVERSITY AND AFFIRMATIVE EMPLOYMENT SPECIALIST
USAF	HQ AFMOA	AF MD READINESS AGENCY—FOA (OL SG09)	$154,428	GS14	DIVERSITY AND INCLUSION PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$145,604	GS14	DIVERSITY AND INCLUSION PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$150,016	GS14	CIVILIAN DIVERSITY PROGRAM MANAGER (DIVERSITY & INCLUSION)
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$208,767	SES	DIRECTOR, OFFICE OF DIVERSITY AND INCLUSION
USAF	NASIC	NAT AIR-SP INT CENTER—FOA	$124,495	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	PACAF	PACIFIC AIR FORCES COMMAND	$121,059	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	US AFA	DIRCT OF ATHLETICS UNIT	$108,129	AD22	ADVANCED PHYSICAL EDUCATION INSTRUCTOR (DIVERSITY PROGRAMS)
USAF	US AFA	USAF ACADEMY—DRU	$110,092	GS12	DIVERSITY PROGRAM RESEARCH ANALYST

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	US AFA	USAF ACADEMY—DRU	$114,129	GS13	DIVERSITY AND INCLUSION ANALYST
USAF	US AFA	USAF ACADEMY—DRU	$149,307	GS15	CHIEF CULTURE CLIMATE AND DIVERSITY AND INCLUSION
USAF	USAFE	USAF IN EUROPE COMMAND (OL A100)	$106,568	GS14	SUPERVISORY, DIVERSITY AND INCLUSION OFFICER
USAF	USNORTHCOM	AFELM US NORTH COM (OL J1HP)	$119,000	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	USSOCOM	AFELM US SOCOM (OL CS00)	$105,062	GS13	DIVERSITY AND INCLUSION OFFICER
USAF	USSTRATCOM	US STRATEGIC CMD (OL J0CS)	$105,982	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USSF	HQ USSF	CHIEF OF SPACE OPS HEADQUARTERS (OL SF00)	$131,454	NH04	DIRECTOR, DIVERSITY AND INCLUSION
USSF	HQ USSF	CHIEF OF SPACE OPS HEADQUARTERS (OL SF00)	$137,460	NH04	DIRECTOR, DIVERSITY AND INCLUSION
USSF	USSF	HQ SPOC COMMAND (OL S1)	$127,111	NH04	CHIEF DIVERSITY AND INCLUSION OFFICER
USSF	USSF	1 SPACE BASE DELTA (OL A)	$93,155	GS12	DIVERSITY AND INCLUSION COORDINATOR
USSF	USSF	2 SPACE BASE DELTA	$91,753	GS12	DIVERSITY AND INCLUSION COORDINATOR
USSF	USSF	3 SPACE BASE DELTA	$99,102	GS12	DIVERSITY AND INCLUSION COORDINATOR
USSF	USSF	30 SPACE LAUNCH DELTA	$73,805	NH02	DIVERSITY & INCLUSION COORDINATOR
USSF	USSF	30 SPACE LAUNCH DELTA	$124,677	GS12	DIVERSITY & INCLUSION COORDINATION
USSF	USSF	45 SPACE LAUNCH DELTA	$89,031	NH03	DIVERSITY AND INCLUSION COORDINATOR.
USSF	USSF NON-HQ	1 SPACE BASE DELTA	$95,978	GS12	DIVERSITY AND INCLUSION COORDINATOR
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$117,891	GS14	DEPARTMENT OF THE AF DISABILITY PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$132,368	GS14	AIR FORCE AFFIRMATIVE EMPLOYMENT PROGRAM/SPECIAL EMPHASIS
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$145,604	GS14	DIVERSITY AND INCLUSION PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$150,016	GS14	CIVILIAN DIVERSITY PROGRAM MANAGER (DIVERSITY & INCLUSION)
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$208,767	SES	DIRECTOR, OFFICE OF DIVERSITY AND INCLUSION
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,277	36–TSGT	NCOIC, STRATEGIC OUTREACH
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$69,345	37-MSGT	SUPER, STRAT, GOV & POL
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$58,197	03–CAPT	EDUCATION & TRNG DEP BRANCH CH
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,196	04–MAJ	EXECUTIVE OFFICER, SAF/DI

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,196	04–MAJ	EXECUTIVE OFFICER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,196	04–MAJ	DEP CHIEF, STRATEGY/POLICY/GOV
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	DIRECTORS ACTION GROUP CHIEF
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	CHIEF, STRATEGIC OUTREACH
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	CHIEF, STRAT ENGAGEMENT & OUT
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	DEP DIV CHIEF, DATA ANALYTICS
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$92,030	06–COL	DEPUTY DIRECTOR

Diversity & Inclusion Training Courses (IAW DAF Instruction 36–7001)

Targeted Trainee	D&I Module Duration
Basic Military Training (BMT) trainee	3 hours total
Enlisted member on his or her first permanent duty assignment	1 hour
Airman Leadership School (ALS) student	2 hours
Non-Commissioned Officer Academy (NCOA) student	2 hours
Senior Non-Commissioned Officer Academy (SNCOA)	1.5 hours
Enlisted Professional Enhancement (PE) Course (NCO/SNCOPE) student	1 hour
First Sergeant Academy student	2 hours
Chief Master Sergeant	2 hours
New Installation/Center Commander(s) (director), Group Commander(s), Squadron Commander(s), Detachment Commander(s), Section Commander(s), Command Chief Master Sergeant(s)	1 hour
Officer Training School (OTS) trainee	3 hours
Reserve Officer Training Corps (ROTC) cadet	16 hours over 4 years
United States Air Force Academy (USAFA) Preparatory School cadet	2 hours total
USAFA cadet	16 hours over 4 years
Squadron Officer School (SOS) student	2 hours
Air Command and Staff College (ACSC) student	1 hour
Air War College (AWC) student	1 hour
New Flag or General Officer (F/GO) and SES personnel	1 hour
Recruiter as defined in DODI 1304.33	2 hours
Military Training Instructor (MTI)—when selected to become a training instructor)	2 hours
New Employee Orientation	1 hour
New Supervisor Orientation	1 hour

Diversity & Inclusion Training Courses (IAW DAF Instruction 36–7001)—Continued

Targeted Trainee	D&I Module Duration
Experienced Supervisor Training	1 hour
New Manager Course	1 hour
Experienced Manager Course	1 hour
Senior Manager Course	1 hour
D&I Program Manager or Chief Diversity & Inclusion Officer	On-going

Senator SCHMITT. Okay. We would like to get those materials actually too. We have had a hard time actually getting those materials.

Secretary KENDALL. We can get that for you.

Senator SCHMITT. Okay. Thank you, and then Secretary Kendall and General Brown, last, I do want to ask, I saw today actually it was reported that the Air Force announced that the Davis-Monthan (DM) Air Force Base will be fielding a new special operation wing that will offset the impact of the loss of the A–10 mission there.

I know you mentioned the A–10 in your introductory comments, Mr. Secretary. You are aware that the 442d fighter wing out of Whiteman Air Force Base in Missouri houses some of the best and most experienced fighter pilots and maintainers in the world, yet we and they have yet to learn what their follow-on mission will be once the A–10 is divested.

Given the ongoing pilot shortage and recruitment challenges we have, it is important to ensure that the 442d get a follow-on mission. Secretary Kendall, do you agree it makes sense to leverage those existing talents, the fighter aircraft experience, the fighter pilots, the maintainers at the unit, the 442d, as you divest from the A–10?

Secretary KENDALL. Senator, our approach to divesting the A–10 is to try to replace fighter mission—another fighter mission, if possible. If not, then a flying mission, and if we can't do that, there are a number of other missions that are very important to the Department.

We have talked about electronic warfare here. Cyber is another one. ISR, intelligence. All of those things matter. So, in every case where we are taking aircraft out, we are trying to make sure that a viable long term mission replaces that mission.

Senator SCHMITT. When do you expect to announce that follow on mission for the 442nd?

Secretary KENDALL. I would have to get that for you. I don't know when——

Senator SCHMITT. Okay. We are very interested in that. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Schmitt. Senator Kelly, please.

Senator KELLY. Thank you, Mr. Chairman. Secretary Kendall and General Brown, General Saltzman, good morning. Thank you for being here. For Secretary Kendall and General Brown, I want

to thank you for your continued collaboration as we secure a long-term future for the Davis-Monthan Air Force Base in Tucson.

I have lost count of all the meetings that we have had, but I think our work together has brought real progress, and I am encouraged by the current plan to bring new, enduring missions to Davis-Monthan that would keep the base at the center of our National Security for years to come, as it should be.

The new plan would bring in additional search and rescue presence and brand-new electronic warfare platforms to DM that are important as the Air Force modernizes. The electronic warfare platforms, which is the new Compass Call aircraft, would be entirely based at DM, and the new Special Ops power projection wing would bring additional new flying missions and some exciting capabilities to DM under this plan.

General Brown, can you comment on this wing's importance in the context of the Air Force's overall strategy?

General BROWN. Sure, Senator. Just as the name implies, the aspect of power projection. With our SOF [Special Operations Forces] force from Air Force Special Operations Command, that will be part of the base, in addition to the electronic warfare capability from the EC–37B, helps us be able to execute that power projection aspect.

I think the other beauty of coming into Davis-Monthan is being able to bring special operation capability out to the Southwestern United States, and the range capability, and the ability—they are able to train in the Western United States, not only in Arizona, but in other parts of the United States, will also help us with that power projection.

Senator KELLY. Yes, thank you. We have a very unique kind of weather situation, combination of weather and ranges. Also, this plan does have important aspects for our National Security.

Importantly, it retains the same number of quality, high paying jobs in Tucson, and I am glad to see that the site activation task force has now begun its work at DM to make preparations for these new missions, and I know you requested some site and environmental review funding in the budget request.

For my part, I will be working to ensure that that gets over the finish line in this Committee, as well as strong funding to advance the procurement of our new electronic warfare aircraft for DM and other assets in this plan.

Secretary Kendall, this plan is ambitious, and I support that, but bringing this new mission and modernizing the others has a lot of moving parts here. What assurances can you provide me that you will be able to manage all these elements and stick with the timeline?

Secretary KENDALL. I can assure you that we will be paying a lot of attention to this and doing everything we can to assure that it happens as planned. I was just at Davis-Monthan. Got some great people there, and we want to make sure we do what we have laid out in order to support them.

Senator KELLY. Anything specifically that you are doing to avoid any potential delays?

Secretary KENDALL. I think we are working with all the affected organizations right now to make sure that that planning is in

place. I know the Special Operations people in particular are leaning forward to try to be prepared for this. We talked about the E–37s earlier and what is going on there. So, I think we are in generally good shape, Senator.

Senator KELLY. Full transparency is very important for me. Could you please make sure you highlight any potential issues to Congress, to this Committee, as soon as they are encountered? That would help us get through this as expeditiously as possible.

Secretary KENDALL. I will do that. General Brown, are you aware of anything that is—?

General BROWN. No particular issues, and having just finished the first SAG activation task force, I think we will be able to identify if there is any critical aspects that we need your support on. Also, we also appreciated the opportunity to meet with the community leaders as well. That happened roughly about the same timeframe.

I think a good dialogue, and we want to continue that dialogue, and work—collaborate to make sure we make DM successful.

Senator KELLY. Right. Thank you. I look forward to working with you both through this process and making sure we stay on track. I also want to flag a totally separate issue in the SOUTHCOM region that I think could become a serious problem.

China is looking to sell fighter aircraft to Argentina, potentially use that sale to create a foothold for future military basing in the Western hemisphere, and I think we need to be very vigilant on this.

We can counter their pitch here by facilitating the transfer of Danish F–16s to Argentina. That is a possibility. This is not just a transfer of aircraft. It has real geopolitical and strategic importance.

I just want to make you aware of this and just get your thoughts. I am already over my time, but I have had a series of conversations about this with U.S. Southern Command, with a number of our allies, and I think the Air Force has a real role to play here.

If I could just get another 30 seconds, if Secretary Kendall or General Brown can comment.

Secretary KENDALL. I am aware of the case, Senator Kelly, and I agree with you that it is important. I think it is working its way through the interagency process right now. But I think there is an understanding of the importance of it for the reasons that you said.

Senator KELLY. All right. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Kelly. Senator Scott, please.

Senator SCOTT. Thank you, Chair. Secretary Kendall, can you just want to talk about what you do, you know, every day to try to save money and how the process works and—because I assume it is part of what you have to do every day, because you have you probably have a lot of requests. So how do you go through the process?

Secretary KENDALL. We try to discipline ourselves, obviously, about how we operate. Generally speaking, we are operating the current force at what I would call an acceptable level, and we look at things like sustainment and readiness and so on.

There is no place that I can think of, frankly, where we are fat. The number that was mentioned earlier, if I could just find—it assumed there was a $25 billion saving per year over the 5 years to get the $125 billion. If I could find $5 billion, I would be thrilled.

We had to work very, very hard to find the $5 billion that we put in with the operational imperatives. The Department of Defense is not sitting there with a lot of excess cash lying around waiting to be found. That is not the way we are operating. I don't think there is any part of the Department that isn't operating on the edge of where it would like to be.

I know General Brown or Saltzman may talk about that, but when you look at weapons systems sustainment accounts, you look at facility sustainment we are doing, I think, reasonably well by our people. In terms of compensation, we have got the pay increase and I don't think anyone should fault us for that.

That comes first. But we are operating in a way which is designed to use our funds as efficiently as we possibly can. We are constantly looking for efficiencies and savings, but when we find them, there are many uses for those funds that are immediately available in a reasonable priority.

The perception that there is a lot of waste in the Department and there is money laying around to be found is just simply not valid. I would let my colleagues comment if they would.

Senator SCOTT. Do you guys want to add anything?

General BROWN. What I find is we have more requirements than we have on resources.

Senator SCOTT. It is like running a company. Same thing.

General BROWN. Same—and this is the part where the Secretary, myself, and General Saltzman spend a lot of time with our staff determining how best to apply those resources to get us to not only take care of airmen, guardians, and their families, but the broadest, the most combat capability that each of those dollars will buy.

Senator SCOTT. Yes.

General SALTZMAN. I would just add, it is a continuous process to scrub requirements, whether that is hardware software requirements, whether that is personnel requirements, whether that is policy requirements.

We are in a continuous evaluation of those, and one thing I will give Secretary Kendall for is we don't show up to his conference rooms without data to support our decisionmaking process.

I think that has been valuable as we have—as we look at different alternatives or different ways of doing our day to day business, we have to show up with data to make sure we get it right.

Senator SCOTT. Thanks. Secretary Kendall, first off, I appreciate what you said about A–10's, so hopefully we are making progress on that. I think it is the right thing to do for the country. Can you talk about Homestead? I guess there are rumors that there is an interest in closing Homestead. Is there anything happening on that?

Secretary KENDALL. I have not heard that rumor, Senator Scott. I am not aware of any—Homestead.

Senator SCOTT. All right. If there is, if somebody would just call me and let me know. It is a big deal, as you expect. It is a big deal for Florida, right. Next, could you guys just talk about, do you have

adequate resources to deter just two things if you want, and I know we don't have a lot of time, so two things.

Do you have adequate resources to deter China? All right. When you talk to your friends and try to explain why we should help Ukraine and why should we be in position to deter China and Taiwan, what do you say to them?

The global order doesn't sound very interesting to people. So, how do you say it to the just a layperson.

Secretary KENDALL. The answer to the first question is yes, but we are being challenged. I have not seen as aggressive or as capable a strategic competitor ever and that includes the Soviet Union. I had 20 years as a cold warrior.

We have got to stay ahead of China, and our deterrence in the region depends upon our relative capabilities. China has been pretty smart about their investments and trying to attack what they see as our dependencies.

As far as Ukraine is concerned, China is watching Ukraine, and they are watching to see if Russia can get away with naked aggression and if there is a united response against it that is effective or not.

They are watching the economic consequences. They are watching how the alliance plays out in terms of its solidarity and other support. I have a litany of things that I think Xi Jinping that I would like him to learn from the Ukraine experience.

One is that the short war you expect may not be the war you get. One is that your military may not be as good as they think—as they are telling you they are. Another is the economic consequence of aggression may be more than you can stand.

I hope those are all lessons he is getting, but we are not through this yet. We have a ways to go, and I think it is admirable that the NATO [North Atlantic Treaty Organization] alliance is now stronger rather than weaker. That is not what Mr. Putin expected to have happen, and we need to continue down that path.

It is definitely being watched by China very carefully, and we want them to get the right lessons from this.

Senator SCOTT. Anybody else want to add anything?

General BROWN. Senator, I think we just take a look at history, and you think about the global order. It was in the interwar years and into World War II. Small events of any type of crisis can start a firestorm and this is something we have got to pay attention to.

This is why it is important for our own security, for economic security, and our National Security, that we pay attention to what is going on around the world.

It is probably, as the Secretary highlights, probably the most complex environment we have been in, in a number of years.

General SALTZMAN. Just very quickly, I would add, as Secretary Kendall mentioned, that it is one of the asymmetric advantages of the United States that it can build a coalition of like-minded nations. It is a tremendous power, strength, and showing a demonstrated commitment to our allies and partners, and I believe China is taking notice.

Senator SCOTT. Right. Thanks for what you guys do.

Chairman REED. Thank you, Senator Scott. Senator Peters, please.

Senator PETERS. Thank you, Mr. Chairman. Secretary Kendall, during Operation Desert Storm, the Air Force fielded 139 fighter squadrons spread out across the entire service, 49 of those squadrons belonged to the National Guard.

According to Air Force numbers, the total fighter fleet has been reduced now to 81 squadrons, with the Air Guard only fielding 26 of those. That means that over the past 30 years, we have seen nearly a 50 percent reduction in Air Guard fighter fleet.

This comes at a time when global tensions are at their highest in 50 years, and as we just heard from your answers to the previous Senator, the complexity is significant.

We have a hot war in Eastern Europe. We have a looming threat of conflict in the Pacific. So bottom line, I am concerned about the fact that we have a declining fighter plane fleet, and we are at a time where we need every single plane that we can possibly get our hands on. We have let our fighter fleet shrink significantly and are now continuing to reduce the number of fighters in order to, "divest to invest."

As you are aware, Selfridge Air National Guard Base is home to A–10's that will be divested by the end of the decade with no replacement mission yet stated. You and I have spoken considerably about this issue and will continue to do that in the future. But my question is a little broader about procurement and actually having aircraft that will be stationed in various places, and certainly related to modernization.

I have a specific question. How is the Air Force actually budgeting for the procurement of aircraft across the service necessary to ensure the full recapitalization of the Air National Guard fighter fleet? What support specifically do you need from Congress in order to accomplish that procurement budgeting that you are working on?

Secretary KENDALL. Thanks, Senator Peters. I was in the Pentagon for the first Gulf War, and what we had at the time was a legacy force essentially left over from the cold war. So, the numbers were quite a bit higher than they ultimately came down to be.

The way we are budgeting is to try to balance the near, mid, and long term capabilities of the Air Force. What we look at is total combat capability. What we are trying to get to is the next generation of capabilities as quickly as we can, while we sustain the current force which is adequate to meet our needs.

The A–10 in particular is an aircraft that has been—it is over 40 years old now. It was a fantastic aircraft in its day, but it is aging out and we are going to have to replace it. We are working with you and the other communities to try to do that in a way which has a minimal impact and preserves some of our capabilities.

You mentioned the Guard. I have had a job opportunity now to visit a lot of Guard units, including yours in Michigan. They are highly capable units, and they are very important and cost-effective part of the force. We want to sustain the right balance between Active Guard and Reserve and have the right mix of mission capabilities.

That mix is changing over time, and as war becomes more about information dominance than it does necessarily about kinetic power, we need things like ISR [intelligence, surveillance, and re-

connaissance] and intelligence and cyber and EW, electronic warfare.

We are trying to move toward that world and get that mix right. the recapitalization of the fighter fleet, if you will, is one part of a much deeper and richer fabric of things that we are trying to do.

We also, of course, have the Space Force, which introduces a whole new set of capabilities as well. In some cases, space capabilities are going to be taking over for some of the traditionally air capabilities that we have had. Areas like communications and surveillance, for example.

That is the picture that we are dealing with, and we are trying to get to the new capabilities that we want to field in greater numbers in the future as quickly as we can. That is a priority for us. While we sustain a reasonable sized current fleet. Does that help?

Senator PETERS. It is. Thank you. Secretary, for more than 13 years, the Air Force has been investigating PFAS [Per- and Polyfluoroalky Substance] contamination at the former Wurtsmith Air Force Base in Oscoda, Michigan.

As a result of the contamination, the Michigan Department of Health and Human Services has issued five separate public health warnings to the community. Unsafe fish, venison, small game, as well as for unsafe shoreline foam—and foam, as well as unsafe drinking water. However, there is still, still no cohesive cleanup plan in place, and the residents of Oscoda are understandably frustrated at what they perceive as being unnecessarily dragged-out process on the part of the Air Force rather than dealing with the problem directly.

So instead of waiting for additional studies to be completed by either the Air Force or the EPA [Environmental Protection Agency], and before seeing any progress, the community is right now seeking urgent action to stop the flow of PFAS contaminated groundwater into the public waterways in the Oscoda area.

These are called interim remedial actions, and there is a plan that has been submitted by the State of Michigan and local experts outlining exactly what needs to happen. My question for you, sir, is, can I get your commitment to taking these interim remedial actions now, now without any further delays?

Secretary KENDALL. Senator, I would have to take a look at that plan. I am not aware the details of it. What we have been doing with PFAS is, first of all, making sure people have safe water to drink. We have had a program to make sure that that was the case. In some cases, providing bottled water to people.

We have stopped the use of PFAS for the most part. We are getting it out of all of our installations where it has been a fire suppressant. We haven't found a replacement for PFAS to put out fires yet, aqueous firefighting foam, but we are still doing research on that.

As you know, I think EPA has come out with what we think will be a final criteria, four parts per trillion, which would then be the basis for cleanup efforts. In the meantime, we have been trying to understand the extent of pollution around our bases so that we could fully appreciate the depth of that as far as a health hazard, but also so that we could do cleanup effectively.

We are making progress, even though it seems very slow. I am not aware of the interim plan that you described, but we will take a look at that. If there is an Air Force responsibility there, we will meet that responsibility.

Senator PETERS. Could you make a commitment to look at that plan so that we can have another discussion in the near future?

Secretary KENDALL. I will look at it and have a followup conversation with you, yes, sir.

Senator PETERS. Thank you.

Chairman REED. Thank you, Senator Peters. Senator Sullivan, please.

Senator SULLIVAN. Thank you, Mr. Chairman. Gentlemen, thank you for your testimony. General Brown and Secretary Kendall, I want to just get your assessment. I am going to do a little bragging here on behalf of the Active Duty and Guard Forces in Alaska, with the spy balloons and the Russian bear bomber incursions, and the rescue mission, and the search and rescue mission on some really challenging weather events where they are saving lives.

Our Air Forces in Alaska have just been, in my view, doing exceptional work over the last several months. They do it all the time. These are hard missions, right, going to intercept a spy balloon or unidentified aircraft in the middle of the night over the North Slope of Alaska.

It takes a lot of work in darkness and crummy weather. Can you talk to the importance of how they are doing, and including the JPARC [Joint Pacific Alaska Range Complex] training ranges and the future you see for them in the Air Force?

Secretary KENDALL. I have had a privilege to visit Alaska bases multiple times in my tenure, and I am incredibly impressed by the quality and capabilities up there. I also hear about missions people do, and as you mentioned, in extreme conditions to do rescues and to do intercepts and so on.

It is an enormously effective part of our force. Alaska's strategic position matters a great deal, too. You have got good access to a lot of parts of the globe that are very important to us. Your forces participate in some key missions, both for homeland defense and to support in the Indo-Pacific region.

So Alaskan JPARC in particular, is a range kind of capability that we don't have anywhere else in the U.S. So, all very, very valuable to us. We are investing in these capabilities. There are investments in our budgets to improve JPARC, to make it more effective as a training range.

I am looking forward to coming up there in the summer and being there for one of those exercises.

Senator SULLIVAN. Good. Thank you, Mr. Secretary. General, do you want to talk—any lessons learned on—maybe you can't do it in the hearing right now. But, you know, our Active Duty Forces were quite busy, the F–22s, the F–35s, with these bare bomber incursions, which are kind of normal. But the Russian—the spy balloons and things like that. Any lessons learned that you can reveal right now or maybe in the closed session?

General BROWN. Senator, what I would like to, and you have you have already addressed it in some of your comments here, just the value of the teamwork across the force, because it is not just the

fighter mission, but it is also our maintainers that get the aircraft in some pretty tough weather conditions, as well as our early warning with the E–3 and how all that command and control comes together to be able to execute the missions.

You know part of that skill set comes from their day to day training they are able to get on JPARC, a very, you know, capable range that we continue to invest in. So, it is a combination of all those together that provide us that capability, that is in a very important part of the country.

Senator SULLIVAN. Right. Thank you. Let me turn to kind of a related question. This year's budget includes a request for 72 new fighters, 48 F–35As, 24 F–15 Eagles. We have over 100 5th Gen fighters in Alaska, F–22s, F–35s.

In the event of a conflict with the PRC [People's Republic of China], probably most, if not all of those aircraft, would be deployed there under the INDOPACOM's control, currently INDOPACOM Commander's control. This would require other aircraft to backfill the homeland defense mission in Alaska, which we just saw was so important.

How will the Air Force fighter acquisition plan improve homeland defense, and what risks will the Air Force incur if the procurement timeline is interrupted, given that scenario I just kind of talked about?

General BROWN. Senator, it would—as we have looked at not only the procurement aspect but also how we would execute the mission. I do think we are on a good path for procurement for this particular budget.

It is something we want to continue to pay attention to, not only the aspect of the aircraft themselves, but also the capabilities that support and complement those aircraft, whether it is munitions, whether it is command and control.

As we have operational scenarios that is the beauty of air power, the flexibility that we would have to do in order to move some of our 5th Gen capability and munitions to combat our adversaries.

At the same time, how we would flex our total force to take care of the Homeland mission, the Homeland defense mission as well. So, this is where, you know, I think we have pretty good capability to be able to be responsive in a crisis with air power.

Senator SULLIVAN. Thank you, and, Mr. Chairman, just a real quick final question for General Saltzman. General, you know, Alaska is also the cornerstone of America's missile defense in terms of ground-based missile interceptors at Fort Greely, and the radar systems that we have throughout the State.

Recently, NORTHCOM completed its testing of the long-range discrimination radar (LRDR) system at Clear Space Force Station in Alaska. Can you talk to the Committee about how this LRDR system has dramatically improved our missile defenses and domain awareness? Is it on track, the way in which you want it to be?

General SALTZMAN. Well, it is a very important radar in a very important location. It is highly discriminating in terms of target. It produces high fidelity it tracks, that enable our missile defense system and secure the homeland from missile threats.

Day to day, it also will be capable of supporting the space domain awareness mission, which I am heavily invested in, and so,

the number of tracks from that part of the sky is a significant contribution to our overall space domain awareness.

Senator SULLIVAN. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Sullivan. Senator Duckworth, please.

Senator DUCKWORTH. Thank you, and good morning to each of our witnesses. I had a very engaging 20 whole minutes, actually, thanks to the Subcommittee Chairman Kelly discussion with—on Air Force design at the Airland Subcommittee hearing last week. As the entire Joint Force reorganizes and modernizes, Congress has to play an active role in oversight to ensure that the DOD is equipped for competition with the best weapon systems and the most effective organization of our troops.

The Marine Corps published a Force Design 2030 document, which provides a detailed roadmap and vision of what its future force will look like. The Navy published its Force Design 2045 document, which looks—which goes through its shipbuilding aspirations.

I understand from today's testimony that the Space Force is also working on a force design effort, though it doesn't sound like that has been completed quite yet. In contrast, the Air Force published its future operating concepts, which does not feature the level of detail that the other services have articulated.

Mr. Secretary, I know that the Department of the Air Force has operational imperatives to help orient it to services' investments, but if neither service has an explicit roadmap for force design, the Air Force or Space Force, what is informing recruiting and retention goals, or specific RDT&E [Research, Development, Test and Evaluation] investments? Mr. Secretary, is your Department truly organized for competition?

Secretary KENDALL. That is a great question, Senator. The short answer is yes, but we have basically limited maneuverability over the next few years in terms of what the ultimate force structure will be. But there are some efforts—General Brown and I have talked about this several times, and I have had a similar conversation with General Saltzman.

We need to be thinking about the long-term future and what the future looks like given the strategic competitors that we have, particularly China. As you can see from the initiatives we started with the operational imperatives, we are moving toward modernization that will be effective against that threat, but that is a dynamic threat. It is constantly changing. It will respond to what we do.

We need to think very carefully about the future, what our future posture might look like, and create some options at this point that will be fleshed out as we move further along. We also need to look at how we are structured.

I have asked my scientific advisory board to take a look at this. The posture the Air Force has evolved into over time is one that was essentially derived from the kinds of operations it was conducting, which were largely counterinsurgency, with a lot of deployments overseas for people, and a certain kind of tactical combat operations.

That is not what our future looks like. We have got to look at how we are training the R–4 Generation. The R–4 Generation

model that General Brown is using is a piece of that to get us to a better cycle for how we utilize the force and how we prepare for more stressing operations.

But we have also got to look at how we are structured to do acquisition. We are not transitioning science and technology as quickly in the products as we should be, or as efficiently as we should be. There are a number of things that we need to take a look at.

On my list of to do is at this point in time is to work with my teammates here to try to define the structure we are going to need for the long-term strategic competition we are in, and that is a work that we really haven't completed yet.

I am very comfortable with where we are going over the next few years, but we need to posture ourselves for a longer-term competition.

Senator DUCKWORTH. So, there will be some sort of a document in the future, because you understand, we have to do our jobs here, right. At some point, decisions are required to shape these investments going into the future. For example, the Marine Corps says that they required 31 amphibious ships.

Congress and this Committee can authorize and advocate for those ships and hold leaderships at all levels accountable. I do think that Air Force and Space Force needs to work constructively with Congress to appropriately allocate the resources and measure its modernization success.

But how can we do that if neither the Air Force nor the Space Force has an explicit modernization roadmap based on some sort of future looking force design effort?

Secretary KENDALL. There is a well-known aphorism, Senator that plans are nothing and planning is everything. We have started the planning work, but we don't have the plan yet. But I think, I agree with you that would be a valuable document to have, to lay out where we are going to go.

We will be working on that for our own purposes, but I agree with you that it will be valuable probably for the Congress as well.

Senator DUCKWORTH. Thank you. I am going to followup on this and keep at it, just so you know. I wanted to also talk about recruiting, retaining, and effectively leveraging the organic talent within the services.

For example, we have the ability for servicemembers to test out on a language and say, I am a native Spanish speaker, I am a native Thai speaker, I speak French, and you can actually get that designation by taking the language test and then the force knows that you have those airmen—those guardians that have those resources, those capabilities.

But I believe that we risk overlooking the skills of servicemembers, particularly those in the Reserve component, who have critical digital skills from their civilian careers. I introduced the Managing Active and Reserve Tech Talent Effectively Act—it is a mouthful, I know—to fix that.

My bill directly directs the services to establish career field policies and processes to identify members across the total force who have skill sets in advanced technology areas such as computer programing, coding, AI [artificial intelligence], ML [machine learning].

It gives the Department discretion and flexibility to figure out the best way to do that. But my bill requires that the Reserve component servicemembers be able to use their skills and experiences from their civilian jobs to qualify for these military career fields.

General Brown, General Saltzman, I would like to hear from each of you about the benefits to your services that come from leveraging the digital skills of its total force servicemembers, particularly those in the Reserve component who have tech skills from their civilian careers.

General BROWN. They are very important. There are a couple of programs that we are looking at to deal—one was out of DIU [Defense Innovation Unit] back in December entitled GigEagle. It is an aspect of identifying those who have those specific skill sets that you can bring on for a short period of time to work for you. A complex issue because of their civilian expertise.

The other part we are also looking at is how we get better visibility on their certifications, and how we use that information and for promotion boards and other areas. Not just your academic degrees, but you are certified in areas that don't require an academic degree.

How we have better visibility on those and how we track that particular talent with the special experience identifiers so we can tap into and provide those opportunities for those outstanding servicemembers that can help us in areas, just because of the work they do in the civilian sector.

Senator DUCKWORTH. Thank you.

General SALTZMAN. I agree, they are critical. In fact, they are so critical, I am trying to make sure that the Space Force has a Reserve, has the part time workforce integrated into it, so that we can continue to leverage it.

One of the things I have found is that those part time guardians, airmen now, guardians in the future, would be able to stay at the highest levels of those competencies because they are integrated into the commercial sector, and they can bring those skills readily in when we need them. So, it is a critical effort that I support.

Senator DUCKWORTH. I mean, you need to know where all you're MCSCs or CCNAs are, and know how many you have and say, hey, I need that guy. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Duckworth. Mr. Secretary, General Saltzman, and General Brown, thank you for your testimony and for your service. At this point, let me, for the benefit of my colleagues, remind them there is a vote ongoing. We will reconvene at 12:15 p.m. in SVC–217 for the closed session. With that, I will adjourn the open session.

[Whereupon, at 11:47 a.m., the Committee adjourned.]

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

COMPASS CALL

1. Senator SHAHEEN. Secretary Kendall and General Brown, the war in Ukraine has shown the importance of modern electronic warfare systems, and this is why I applaud the Air Force's development of the latest Compass Call aircraft. What role do you see for Compass Call in terms of conducting electronic warfare alongside our combat aircraft in a modern contested environment?

Secretary KENDALL and General BROWN. While we can't get into many specifics of the Compass Call here, it is designed to be a rapidly adaptable electromagnetic spectrum (EMS) dominance aircraft and to provide commanders with asymmetric advantages in targeting enemy communication, navigation, data links, Unmanned Aerial Vehicles (UAVs), and advanced radar systems.

The Compass Call's principal mission is to manipulate the EMS through precision Airborne Electronic Attack (AEA) allowing other forces to accomplish their missions. Its primary responsibility is to minimize the effectiveness of adversary threat systems while maximizing the effectiveness of our own. The EC–37B supports both defensive and offensive counter air by providing a safe space from which friendly forces can operate, while also defending lines of communication and denying the adversary the ability to effectively carry out air and missile operations. The new airframe offers increased performance in range, speed and altitude, power generation, and sustainability for an overall lower operating cost. We view the Compass Call as a very capable, survivable, and essential force multiplying asset and a key player on the modern contested environment.

2. Senator SHAHEEN. Secretary Kendall and General Brown, following last year's appropriations bill, Congress has now funded ten Compass Call aircraft. Are the 10 Compass Call aircraft funded by Congress sufficient to meet the challenges in Europe and the Indo-Pacific?

Secretary KENDALL and General BROWN. The additional four (4) EC–37B Compass Call aircraft added into fiscal year 2023 appropriations bring our current program of record number up to 10 aircraft. The 10 aircraft in our initial program of record was what the Air Force could support and utilize at the time and will provide great capability for the USAF in supporting Joint Force solutions to challenges in both Europe and the Indo-Pacific theaters.

I initiated an Electromagnetic Spectrum Operations (EMSO) Cross-cutting Operational Enabler (COE) Team to provide a holistic assessment of EMS capabilities and capacity necessary to support my seven Operational Imperatives and win in the EMS. The 10 EC–37B Compass Call aircraft are part of the solution. An assessment of the future number and mix of assets is ongoing.

3. Senator SHAHEEN. Secretary Kendall and General Brown, will you provide an update on the status of developmental testing of the EC–37 Compass Call aircraft?

Secretary KENDALL and General BROWN. [Deleted.]

ADDITIVE MANUFACTURING

4. Senator SHAHEEN. Secretary Kendall and General Brown, as you know, the Air Force stood up its Rapid Sustainment Office under Air Force Materiel Command in 2018. Its purpose is to address sustainment issues, including supply chain shortfalls that negatively affect fleet readiness. In particular, I understand many challenges exist with acquiring parts for our older aircraft. I am pleased, however, that the Air Force has been an early leader in adopting additive manufacturing to address these challenges. Can you discuss how the lack of available parts affects the readiness of our aircraft?

Secretary KENDALL and General BROWN. The Air Force Fleet has an average age of 29 years, with some of our aircraft being more than 60 years old. As aircraft age, the original equipment manufacturers may discontinue support or even go out of business, making it very difficult for Air Force personnel to find replacement parts in a timely manner. Delays in acquiring parts directly impacts maintenance schedules, ultimately reducing the mission capable rates of the affected aircraft fleets.

5. Senator SHAHEEN. Secretary Kendall and General Brown, is the issue of the lack of parts magnified at overseas bases and smaller bases?

Secretary KENDALL and General BROWN. The Air Force does not specifically differentiate between small bases and large bases in terms of readiness and parts support. Rather we measure parts availability by average stocking and issuing effectiveness. Parts availability is an average of 8 percent lower among smaller supply accounts. Overseas supply support is comparable to CONUS bases, with 2 percent higher average issuing and stocking effectiveness (77.0 percent for overseas bases vs. 74.7 percent for CONUS bases) and is not magnified in comparison to smaller parts supply accounts.

It is also important to note that parts availability is directly related to the Air Force and Office of Secretary of Defense readiness priority designations, which are used to increase parts availability at locations specifically outlined in the National Military Strategy objectives.

6. Senator SHAHEEN. Secretary Kendall and General Brown, how do you envision using additive manufacturing to solve some of these problems?

Secretary KENDALL and General BROWN. Additive Manufacturing (AM) is an effective tool that provides substantial design and manufacturing flexibility. The Air Force is using A to mitigate diminished manufacturing sources of supply and long lead time supply chain shortfalls associated with our legacy aircraft fleets. Additionally, AM empowers our airmen to create innovative solutions for the myriad of sustainment challenges they face.

7. Senator SHAHEEN. Secretary Kendall and General Brown, can you describe any successes with using additive manufacturing?

Secretary KENDALL and General BROWN. The Air Force has achieved many successes using additive manufacturing. Recent examples of these successes include:

C–5M Super Galaxy Blocks and Wedges: The Advanced Manufacturing Program Office, in coordination the C–5 System Program Office out of Robins AFB, Georgia, recently modified an aerodynamic fairing (an aerodynamic fairing is a structural element that helps to reduce drag on an aircraft) for a C–5M Super Galaxy by incorporating printed 3-D polymer blocks and wedges made using an "Antero 800NA" printer. The repair process involved completely removing the old parts from the plane, and re-bonding the new 3D printed blocks and wedges to the aircraft. Integrating 3-D printing technology has expedited C–5M Super Galaxy repair cycle times and reduced costs. Three aircraft to date have been upgraded with the new 3-D printed parts.

B–1 Fairing Slip Joints: The Centralized Air Force Manufacturing Center (CAFMC) at Ellsworth AFB has generated huge advancements in Cold Spray repairs, 3-D printing, and locally developed technological improvements that not only enable increasingly agile maintenance for all platforms, but also extend the service life of legacy platforms while reducing their maintenance and operating costs. The team recently developed a first-ever on-aircraft Additive Manufacturing Cold Spray restoration for a B–1 aircraft over wing fairing slip joint that resulted in a savings of over $500,000 and 8 weeks of Non-Mission Capable time.

QUESTIONS SUBMITTED BY SENATOR MAZIE K. HIRONO

SPACE NATIONAL GUARD

8. Senator HIRONO. Secretary Kendall and General Saltzman, Hawaii has one the few Air National Guard units with a space aligned mission. I am concerned that by not making a definitive decision on how these units will fit within the National Guard, these critical units will fall by the wayside as their facilities and training needs are prioritized below those of the Space Force and the wider Air National Guard. For both of you, what is the best way to ensure the long-term success of these space aligned National Guard units?

Secretary KENDALL and General SALTZMAN. Today, the USSF relies on the space capabilities in the Air National Guard. These units are an important part of our space capabilities and highly valued. The Air Force continues to organize, train, and equip ANG units, however, the primary responsibility for the missions those units support has moved to the Space Force. This arrangement is not sustainable over the long term, therefore the best way to ensure long-term success is to align these space units more directly to the USSF. We recommend enacting the Space Force Personnel Management Act while transferring the ANG missions to the Space Force, without establishing a Space National Guard.

9. Senator HIRONO. Secretary Kendall and General Saltzman, the final decision to base Space Control Squadrons 4 and 5 in Hawaii has been released. Squadron 5 was originally intended to be stationed at Anderson Air Force Base. What was the reason to change the basing from Guam to Hawaii?

Secretary KENDALL and General SALTZMAN. Based on the increased threat and the scope of military capabilities resident on Guam today, our need to ensure resilient warfighting capabilities across the joint force led me to determine that Joint Base Pearl Harbor-Hickam is the most suitable location for Space Control Squadron 5.

10. Senator HIRONO. Secretary Kendall and General Saltzman, how will these two units engage with existing space mission units on Hawaii, like the Air National Guard's 293d Space Control Squadron?

Secretary KENDALL and General SALTZMAN. The 293d Space Control Squadron, recently re-designated as the 293d Electromagnetic Warfare Squadron (EWS), is one of two EWS units standing up under the HIANG in partnership with USSF Space Delta 3, which is responsible for the space electromagnetic warfare mission, and in direct support of U.S. Space Command and U.S. Indo-Pacific Command objectives. These units will interact with Space Delta 3 to coordinate training, mission system sustainment, and other responsibilities.

MAINTENANCE VERSUS MODERNIZATION

11. Senator HIRONO. Secretary Kendall, I have also heard that for the many projects on the Air Force's facility repair backlog it will be more cost-effective to replace these buildings than to continue to repair them. The Marine Corps is taking this approach for the use of their Facilities Sustainment, Restoration and Modernization funds. Would it be useful for the Air Force to adopt the use of the Marine Corps' readiness maximization tool?

Secretary KENDALL. The DAF is evaluating the United States Marine Corps' (USMC) Facilities Sustainment, Restoration and Modernization (FSRM) optimization model to see how we may be able to incorporate aspects of it to improve our processes, but at this time we do not intend to adopt it full scale.

The USMC and Department of the Air Force (DAF) models differ based on fundamental employment of installations and the associated operational risk. While both models utilize data to predict asset condition over time in a similar manner, the DAF approach empowers operational commanders to a greater degree, which is critical to the success of air and space missions.

The DAF is confident in our current methodology, and that a fully funded FSRM mix of sustainment, restoration, and modernization dollars, coupled with divestment/demolition will significantly reduce our deferred maintenance and repairs (DM&R) backlog and improve mission resiliency and quality of life.

12. Senator HIRONO. Secretary Kendall, to do this, would the Air Force need additional authorizations to re-capitalize its facilities in this manner?

Secretary KENDALL. Legislation to authorize replacement of facilities with Operations and Maintenance funds would provide the DAF with needed flexibility, and we welcome your support of the DOD Legislative Proposal to accomplish this. There are various examples where replacement of a failed facility is more economical than repair/renovations to bring the antiquated facility up to current life, health, and safety codes. For example, we have many assets over 50 years old across the enterprise which are in failing condition that would benefit from a modification to existing authorizations, which would provide a more optimized and economical solution than repair.

Support and enactment of the Legislative Proposal would provide DAF and sister services the capability to maximize taxpayer dollars and simultaneously optimize facilities and infrastructure to address future challenges from peer adversaries.

E–7 PROCUREMENT

13. Senator HIRONO. General Brown, INDOPACOM has identified the urgent need for E–7 fielding as soon as possible. Yet, the Air Force included advanced procurement for the E–7 in its unfunded priorities list. Will the E–7 be late to need without this additional funding?

General BROWN. Gaps in the Airborne Moving Target Indicator (AMTI) capability exist today. The E–3's failing engines with diminishing sources of supply and aging radar technology can no longer be mitigated by upgrades. The Air Force funded two E–7 prototypes in fiscal year 2023/fiscal year 2024. If the fiscal year 2024 E–7A Unfunded Priority List (UPL) is funded, long-lead items for two E–7A production aircraft would begin production in fiscal year 2024 pulling delivery on those first two production aircraft forward into fiscal year 2028 and posturing the DAF to further mitigate the current AMTI capability gap.

DELIVERY OF THE NEW AERIAL REFUELING AIRCRAFT (KC–46)

14. Senator HIRONO. General Brown, the Air Force continues to struggle with recapitalizing its tanker fleet. Though the KC–46 has made some milestones this year it still has not met all its operational requirements, and analysis already suggests the need for a next-generation air refueling platform. When can we expect the KC–46 to reach full mission capability? How have you prepared your respective commands for the defense of U.S. bases and territories against the possibility of hypersonic missiles?

General BROWN. The KC–46A Pegasus has been meeting the warfighting needs of combatant commanders since August 2021. Air Mobility Command (AMC) is confident in the KC–46A's ability to project and connect the Joint Force. The KC–46A provides lethality and additional options to the Joint Force with its ability to extend reach and increase battlespace awareness. The KC–46A acquisition presents challenges, but there are fixes underway, and aircrew and maintainers are developing proficiency and confidence in the aircraft.

Starting in Summer 2021, through its Interim Capability Release (ICR) Process, AMC progressively made KC–46As available for employment and tasking as operations with receiver aircraft were adequately tested and evaluated. Through this effort, AMC has cleared KC–46As to carry out operational refueling on nearly all required aircraft, except for the A–10 Thunderbolt II and other receiver aircraft without an approved technical compatibility assessment.

In September 2022, the AMC commander approved KC–46A for worldwide use in support of combatant command taskings, including combat operations. This is a major milestone on the road to declaring Full Operational Capability (FOC). That said, AMC is not planning to declare FOC until after the solutions for the current Remote Vision System (RVS) and "Stiff Refueling Boom" deficiencies have begun fielding. These solutions are currently expected to begin fielding in fiscal year 2026.

The DAF will continue to rely on the U.S. Army, Joint Force, and Allies to provide ground based air defense, particularly against emerging hypersonic threats. In accordance with the Agile Combat Employment scheme of maneuver and Operational Imperative 5, the USAF will complicate the adversary's ability to target our bases by distributing operations to dispersed locations and will enhance the resilience of base infrastructure against attacks through selective hardening, rapid airfield damage repair, prepositioning of fuel and war reserve materiel, agile communications, and development of expeditionary multi-capable airmen.

15. Senator HIRONO. General Brown, will the need for a next-generation tanker affect KC–46 acquisition?

General BROWN. The DAF is currently in the process of completing its acquisition of 179 Program of Record KC–46As. To date, the Air Force has awarded contracts to procure 128 KC–46As and has delivered 69 aircraft to five bases. The final KC–46As are being procured in fiscal year 2027 with deliveries in fiscal year 2029. The need for a next-generation tanker and the DAF's plans for continuous KC–135 tanker recapitalization will not affect the remainder of the current KC–46A acquisition program.

In the fiscal year 2024 budget, the DAF initiated and accelerated the next-generation tanker program, known as the Next Generation Air-refueling System (NGAS), by funding an Analysis of Alternatives (AoA). Once completed, the AoA will influence NGAS technology maturation and requirements development. Meanwhile, the DAF will continue uninterrupted tanker recapitalization during the gap period between the end of the KC–46A contract and NGAS with a program called Tanker Recapitalization. The DAF's goal is to use Tanker Recapitalization to replace up to 15 KC–135s per year as they retire and until the NGAS solution is ready to field. The DAF intends on buying fewer commercial derivative, air-refuellable tankers than previously envisioned due to NGAS's acceleration.

QUESTIONS SUBMITTED BY SENATOR TIM KAINE

UNACCOMPANIED HOUSING

16. Senator KAINE. Secretary Kendall and General Brown, current USAF policy defines unaccompanied housing as specifically designated for airmen E1 to E3 and E4s with less than 3 years of service. As of 2021, there was not enough unaccompanied housing to support this policy at Joint Base Langley-Eustis (JBLE), and in March 2021 the Air Force signed a record of decision assigning an F–22 Formal Training Unit to JBLE, which further adds to this problem. Brand new airmen are currently asked to seek housing off-base after just 9 months at JBLE. What is the Air Force's plan to provide sufficient unaccompanied housing at Langley AFB?

Secretary KENDALL and General BROWN. We anticipate a 565-bed deficit at JBLE. We currently have a MILCON project for a 144-room dormitory that is already 35 percent designed and we are looking to program into a future MILCON FYDP year. An on-going update to the Dormitory Master Plan will provide additional recommendations to address the deficit requirements through future planning and programming. The Dormitory Master Plan will be complete by November 2023 and will address the remaining 421 room deficit at Langley AFB. Currently, the installation

has two dorms under renovations in fiscal year 2023 and fiscal year 2025, both pending funding. Unaccompanied airmen are not being asked to seek off-base housing after their first 9 months. The installation moved its most senior airmen into a converted lodging facility and helps them graduate to off-base housing accommodations when ready, which can take approximately 9 months.

HVAC CHILLER REPLACEMENT STANDARDIZATION PROJECT

17. Senator KAINE. Secretary Kendall, in 2019 the Air Force Civil Engineering Center (AFCEC) issued a class justification and authorization (Class J&A) for other than full and open competition titled the HVAC Chiller Replacement Standardization Project. The Class J&A limits chiller purchases to a single company on each Air Force installation, eliminating competition for new purchases through the end of fiscal year 2024. In response to a provision included in the Senate Armed Services Committee Report (SASC) to accompany the Fiscal Year 2023 NDAA, the Air Force completed both a Category Intelligence Report (CIR) and congressionally Requested Report (CRR) on this project. Both indicate that the Air Force intends to continue the Class J&A for another 5–10 years, even without performance metrics or collected data to prove that limiting competition is generating total cost of ownership (TCO) savings. Furthermore, the Air Force approach to calculating TCO does not appear to include a methodology for comparing the cost of initial chiller and ancillary equipment under the Class J&A with the cost of initial chiller and ancillary equipment with competition. The CIR acknowledges that the Air Force has not yet developed the metrics and data to support the TCO model, although it suggests that initial purchase price is one factor the Air Force is considering. What is the Air Force's methodology for comparing the cost differential between initial procurement costs of chillers and ancillary equipment with and without competition?

Secretary KENDALL. The Category Intelligence Report (CIR) from 2018 analyzed procurement cost from fiscal year 2012 to fiscal year 2016 contract data. Metrics and data to support the Total Cost of Ownership (TCO) model have not yet been fully developed, including comparing the cost differential between initial procurement costs of chillers and ancillary equipment with and without competition.

However, the DAF is committed to developing metrics and tracking mechanisms that inform the TCO for its chiller inventory. There are three current initiatives in place to begin acquiring real time data supporting chiller TCO: improving inventory data in the BUILDER Sustainment Management System (SMS) to provide standardization progress (fiscal year 2023 to fiscal year 2024), implementing and assessing a mobile device pilot program at five installations allowing technicians to accurately record near real-time maintenance and repair history (started in fiscal year 2023), and centrally funded vendor training (started in fiscal year 2021).

18. Senator KAINE. Secretary Kendall, it is my understanding that the greatest cost drivers in a TCO model for chillers are likely to be operating costs (i.e., energy usage) and the initial procurement of chillers and ancillary equipment. However, in the CIR, the Air Force states that 80 percent of TCO is attributable to sustainment costs. How did the Air Force arrive at this figure and what is the methodology for calculating sustainment costs?

Secretary KENDALL. The Category Intelligence Report (CIR) from 2018 found Heating Ventilation and Air Conditioning (HVAC) Facility Related Services (sustainment) accounted for 80 percent of HVAC spending. This figure came from analyzing Air Force contracting data and work management history of maintenance and repair activities from fiscal year 2012 to fiscal year 2016. The CIR further defines HVAC "Services", as maintenance, repair, and other sustainment activities performed by a trained workforce.

19. Senator KAINE. Secretary Kendall, in the CIR on the HVAC Chiller Replacement Standardization Project, the Air Force states that advanced training on HVAC systems cannot be delivered virtually. Please explain why the Air Force believes this training cannot be completed using a blended learning approach?

Secretary KENDALL. The HVAC Chiller standardization coupled with commercial off the shelf training greatly enhances the workforce's technical competencies to service HVAC systems. This manufacturer instructed advanced training is predominantly performance-based (troubleshoot/repair) tasks on HVAC equipment. While blended learning offers advantages, the hands-on experience and equipment specific training received is very difficult to duplicate in a virtual environment.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH WARREN

ACQUISITION WITHOUT CONGRESSIONAL APPROVAL

20. Senator WARREN. Secretary Kendall, in April of this year, you called for a policy that would allow the Pentagon and Air Force (USAF) to start initial phases of an acquisition program without prior congressional approval. If this policy change is enacted, oversight processes, reporting to Congress, and reporting to the public will be put in place to assess the effectiveness?

Secretary KENDALL. The intent for these "quick-start" programs is to leverage the successful notification and oversight mechanisms currently in use for DOD's Rapid Acquisition Authority (RAA). Congressional defense committees would be notified by the Service Secretary within 15 days of the determination by the SecDef or DepSecDef to exercise the authority. The Service Secretary would include information such as a description of the high priority effort, rationale for prioritizing the effort, and an explanation as to why source funds are available for this higher priority effort. The Service would also identify RAA-funded (and sourced) efforts in subsequent budget exhibits and briefings provided to the congressional defense committees in support of DOD budget requests. The ability to assess and react to new information or threats within the year of execution via open dialog with Congress is critical to meeting the pacing challenge.

21. Senator WARREN. Secretary Kendall, if Congress approved the Department's rapid response to emergent technology advancements or threats proposal how much does the Air Force expect to spend each year over the next 5 years?

Secretary KENDALL. This proposal would modestly expand existing authorities to respond to and act upon emergent development requirements in the year of execution. There is no precise estimate for the exercise of this proposed authority in the future. The $300 million DOD threshold among the Services was set to accommodate unique situations where multiple Services may have emergent requirements that require prompt action in the year of execution. The scope and scale of individual efforts is likely to be limited since the work being pursued would be entirely pre-Preliminary Design Review (PDR) authorities.

22. Senator WARREN. Secretary Kendall, would there be any requirement to produce a cost estimate or schedule for programs approved under the rapid response to emergent technology advancements or threats proposal?

Secretary KENDALL. Consistent with existing regulations for RAA, to the extent that it is readily available at the time of a request under this authority, cost and schedule information would be included in the request submitted for consideration by The Secretary of Defense.

23. Senator WARREN. Secretary Kendall, would you recommend programs approved under the rapid response to emergent technology advancements or threats proposal be implemented through other transaction agreements or FAR-type contracts?

Secretary KENDALL. The Air Force will consider all contract types and other transaction agreements available and evaluate them on a case-by-case basis to identify the most effective means to allow for the rapid response to an emergent threat or technology. The type of arrangement would be chosen in accordance with the nature of the vendor, the urgency of getting work underway, and the nature of the work.

24. Senator WARREN. Secretary Kendall, programs approved under the rapid response to emergent technology advancements or threats proposal include requirements for companies to produce cost or pricing data when requested by the government?

Secretary KENDALL. Like the existing RAA, the activities performed under this authority will be executed in full compliance with all applicable laws, rules, and regulations.

25. Senator WARREN. Secretary Kendall, would programs approved under the rapid response to emergent technology advancements or threats proposal need a sound business case prior to approval?

Secretary KENDALL. Like the RAA, the activities performed under this proposed expansion of RAA will be executed in full compliance with all applicable laws, rules, and regulations. The early nature of the work being performed pursuant to this authority means that many elements of formal programmatic review will come as the effort is subject to the regular budgeting and approval processes.

26. Senator WARREN. Secretary Kendall, would programs approved under the rapid response to emergent technology advancements or threats proposal need a plan to off-ramp capabilities when needed to prioritize schedule?

Secretary KENDALL. This proposal would allow for system development and demonstration activities to be resourced and conducted up to Preliminary Design Review (PDR). This enables a level of maturity that would be warranted just prior to entry into a milestone B program initiation decision. The early work performed under this authority would enable exploration of multiple options, consider tradeoffs, perform risk reduction activities, and inform decisions to off ramp initially desired capabilities potentially.

27. Senator WARREN. Secretary Kendall, how will the Air Force provide reporting to Congress on other program details including cost and success under the rapid response to emergent technology advancements or threats proposal?

Secretary KENDALL. Like the existing RAA, the congressional defense committees will be notified of any actions under this authority within 15 days of approval by the Secretary of Defense. The Services will actively engage the Congress on the long-term plans to transition the effort to the normal budget and appropriations process.

DEFENSE INDUSTRY MERGERS

28. Senator WARREN. Secretary Kendall, how have defense industry mergers and acquisitions affected contracts within the Air Force?

Secretary KENDALL. Recent defense mergers and acquisitions have generally had a marginal impact on companies that competed for DAF contracts. When performing reviews of defense mergers and acquisitions, we consider past contracts and potential competition concerns. We continue to see that competition exists in almost all instances with DAF equities. However, growing the defense industrial base is key to our long-term success against the pacing challenge and acute threats. We are working to expand the defense industrial base through various means, including attracting new small business entrants via our AFWERX efforts and promoting establishment of vendor pools early in acquisition programs to stimulate competition and increase long-term flexibility. Further, we continually monitor and take steps to address the health of our defense industrial base. For example, DOD is investing in trusted domestic printed circuit board manufacturing through the Defense Production Act (DPA) Title III Program to counter contraction in the circuit board market.

29. Senator WARREN. Secretary Kendall, would there be any benefit to reviewing past mergers and acquisitions to inform future recommendations for remedies or anti-trust agencies' decisions on whether to approve mergers and acquisitions?

Secretary KENDALL. The DOD has successfully worked with the Federal Trade Commission and Department of Justice to provide insight on the national security implications of potential mergers and acquisitions, and to challenge them when necessary. Our focus is on how the defense industrial base is poised to support the execution of our missions, including the work of the Operational Imperatives.

30. Senator WARREN. Secretary Kendall, how many Air Force personnel support merger and acquisition reviews?

Secretary KENDALL. The DAF has a robust workforce to manage all aspects of the defense industrial base including coordination with experts from across the DOD and the interagency to assess and address the national security implications of mergers and acquisitions.

31. Senator WARREN. Secretary Kendall, do you think DOD has sufficient authority and access to information in the process to review mergers and acquisitions?

Secretary KENDALL. The DOD has sufficient authority to review mergers and acquisitions. The information needed to conduct our review is readily available. When needed, the DOD can enter confidentiality agreements to access further details on a potential transaction to better assess the near-term and long-term implications to national security. Additionally, the DOD continues to successfully work with the Federal Trade Commission and Department of Justice to challenge mergers and acquisitions.

32. Senator WARREN. Secretary Kendall, do you still view the consolidation of defense contractors to be an issue of national security?

Secretary KENDALL. The consolidation of defense contractors is an issue of national security because of its potential effect on competition and innovation. Over

the years, prime contractors and aircraft and engine manufacturers have established robust teaming and supplier relationships with their lower tier suppliers. We are monitoring for contraction in opportunities for competition that requires action. For example, in some rapidly contracting markets, such as the printed circuit board market, the DOD is taking steps to bolster it via DOD authorities, policies, and regulations. Specifically, the DOD is investing in trusted domestic printed circuit board manufacturing through the Defense Production Act (DPA) Title III Program.

FUTURE USE OF UNFUNDED PRIORITIES LISTS (UPLS)

33. Senator WARREN. General Brown and General Saltzman, do you agree that if funding is needed for a project, it should be a part of the command/service budget?

General BROWN. Referencing DODD 7045.14 Planning, Programming, Budgeting, and Execution (PPBE) Process, Services shall develop and execute the programs and budgets necessary to achieve national objectives. If a project has been deemed a requirement that supports the Joint Force in meeting national objectives, we do believe it should be funded and executed with its respective command/Service budget. Further, as we modernize to prepare for a potential conflict against People's Republic of China, our budgets have numerous competing priorities and some of the priorities cannot be funded. In accordance with Title 10, U.S.C., section 222a, a list of top Service unfunded priorities included in the President's Budget is provided to Congress. The projects/bills listed on the Unfunded Priority List (UPL) are valid requirements and provide Congress with the ability to direct funding to expand or accelerate programs to meet mission needs and take care of our airmen and guardians.

General SALTZMAN.

34. Senator WARREN. General Brown and General Saltzman, historically, have previous UPL items been included in the following year's base budget? Have UPL items from fiscal year 2023 been included in the fiscal year 2024 base budget? If yes, please provide detail including the requested item, funding amount, and vendor executing the effort. If no, why not?

General BROWN. Yes, when possible. The Department of the Air Force (DAF) sends the Office of the Secretary of Defense (OSD) Director, Cost Assessment and Program Evaluation a list of unfunded but priority items that cannot be included in the DAF budget for that fiscal year. Items on the regrets list that are not funded by OSD are the starting point for developing the required Air Force UPL to Congress. UPL items from one fiscal year are evaluated and may be added to the next fiscal year budget request aligned with are DAF priorities to support the current National Defense Strategy against the evolving threats. The Air Force is happy to provide more details on the specific examples.

General SALTZMAN. Yes, some requirements included in the UPL have been included in the following year's base budget. In the case where a capability is funded over multiple budget years and the capability can be accelerated, it may be included on the UPL and in the following year's base budget. Funding the UPL allows for additional capabilities to be funded in the outyears. In the case of DCO-S, it is included in both the UPL and the budget year baseline because we are prioritizing the acceleration of this capability to reach FOC sooner. Due to the nature of the certain space programs in the fiscal year 2023 UPL, the Space Force would be happy to provide additional information in a classified setting.

35. Senator WARREN. General Brown and General Saltzman, do you agree that Federal agencies should be required to work within the confines of base budget process?

General BROWN and General SALTZMAN. The DAF Force utilizes the PPBE Process outlined in DODD 7045.14 guided by strategy to develop the Program Objective Memorandum (POM) for each fiscal year encompassed in the FYDP for the Service. We formulate our budget request and submit to the Office of the Secretary of Defense (OSD). The DAF provides solutions to fulfill National strategic priorities as articulated in the NDS within fiscal constraints. The DAF, along with the other service departments, provide solutions to National challenges. The civilian leadership at the White House and in the Congress determine the amount of funding that the Nation can spend on defense.

36. Senator WARREN. General Brown and General Saltzman, Secretary of Defense Austin supports legislation that would repeal the requirement for individual leaders to submit unfunded priority lists under 10 U.S.C. 222a. He stated this publicly in a Senate Armed Services Committee hearing on March 28, 2023 and in a letter that

Under Secretary Michael J. McCord sent on behalf on Secretary Austin to me on March 20, 2023. Do you plan to continue to submit unfunded priority lists?

General BROWN and General SALTZMAN. The Chief of Staff of the Air Force (CSAF) and the Chief of Space Operations (CSO), in accordance with Title 10, U.S.C., section 222a, submit their respective UPLs to the Secretary of Defense (SecDef), Chairman of the Joint Chiefs of Staff (CJCS), and congressional defense committees, as required by law. It is important for SecDef and CJCS to have awareness of the CSAF and CSO UPLs and we will continue to submit to both offices. We will follow the law and congressional guidance on delivering the USAF and USSF UPLs to the congressional defense committees.

37. Senator WARREN. General Brown and General Saltzman, if you plan to submit unfunded priority lists in the future, why are you doing so despite Secretary of Defense Austin's support for the repeal of these required lists?

General BROWN and General SALTZMAN. The Chief of Staff of the Air Force (CSAF) and the Chief of Space Operations (CSO), in accordance with Title 10, U.S.C., 222a, submit their respective UPLs to the Secretary of Defense (SecDef), Chairman of the Joint Chiefs of Staff (CJCS), and congressional defense committees to ensure some of the urgent but unfunded programs are considered for funding. It is important for the SecDef and CJCS to have awareness of the USAF and USSF UPLs and we will continue to submit shortfalls to both offices. However, we will follow the law and congressional guidance on whether to deliver the UPL to the congressional defense committees.

INFORMATION ON UPLS

38. Senator WARREN. General Brown and General Saltzman, what was the cost of putting together this UPL list?

General BROWN and General SALTZMAN. Creating the UPL is one of the many duties of Federal employees and military personnel in the Air Force and Space Force during budget preparation. It emerges as part of our normal budgeting process. No additional personnel were hired, and no additional work outside standard duty hours was required to create the UPL, therefore the financial cost of creating this list is essentially zero.

39. Senator WARREN. General Brown and General Saltzman, for each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The seven programs included in the Space Force's fiscal year 2024 unfunded priorities list represent critical research and development efforts focused on providing the Space Force with the capabilities necessary to address new emerging threats and developments that could not be addressed within the regular budget process. What follows are responses to your specific questions to the Space Forces' unfunded priorities list for the one unclassified program included on the list, Defensive Cyber Operations Capabilities Space (DCO-S).

Due to the nature of Programs A-F, I would be happy to provide additional information in a classified setting.

40. Senator WARREN. General Brown and General Saltzman, please provide a detailed description of this UPL?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The fiscal year 2024 UPL funds requested accelerate the delivery of defensive cyber operations capabilities to protect the network enclaves of USSF mission systems. The urgency of these funds is driven by commander's requirements from various combatant commands and require protection from evolving threats and changes to the cyber environment.

Delta	Fiscal Year 2024 (SM)
Labor	$32.33
SW Dev Total Costs	$18.55
SW Dev Costs—Manticore	$18.03
# of FTEs	46
SW Dev Costs—Kraken	$0.52
# of FTEs	1
MD & S Total Costs	$13.78
Mission Deployment Team—Manticore	$2.37
# of Manticore FTEs	8
Mission Deployment Team—Kraken	$2.08
# of Kraken FTEs	7
Mission Deployment & Support (MD&S TS Collateral)—Manticore	$1.60
# of Manticore FTEs	4
Mission Deployment & Support (MD&S TS Collateral)—Kraken	$1.60
# of Kraken FTEs	4
FIT Team (CDET3)—Manticore	$3.07
# of Manticore FTEs	11
FIT Team (CDET3)—Kraken	$3.07
# of Kraken FTEs	11
Initial Buys/HW Tech Refreshes/SW Renewals	$0.64
SW Dev Costs—Manticore (SW, AWS, P1)	$0.19
SW Dev Costs—Kraken (SW, AWS, P1)	$0.19
HW/SW Initial Buys—Manticore	$(0.34)
# of Manticore Deployments	-1
HW/SW Initial Buys—Kraken	$0.60
# of Kraken Deployments	0
Manticore HW Tech Refreshes/SW Renewals—Mission Systems	—
# of Manticore HW Tech Refreshes	0
Kraken HW Tech Refreshes/SW Renewals—Mission Systems	—
# of Kraken HW Tech Refreshes	0
Other Costs (Acq Supp, Facilities, Taxes/Withhold)	$8.15
Total	$41.12

41. Senator WARREN. General Brown and General Saltzman, what does the UPL purchase?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The UPL will be used to accelerate and expand software development and mission deployment teams to increase the rate in which product line suites are integrated with mission partner mission systems, to include the following prioritized mission sets: Protected Communications, Missile Warning, Military Strategic Communications (MILSATCOM), Position Navigation and Timing (PNT), Ballistic Missile Command and Control, Space Domain Awareness (SDA), Nuclear Command Control and Communications (NC3), and Command and Control Satellite Operations (C2 Sat Ops).

42. Senator WARREN. General Brown and General Saltzman, please include detail on all end items with quantities, contractor FTEs, etc.

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The FTE Breakout below is based on POM Option: Balance of Development & Fielding w/ O&M Costs

- Software Development = 47 FTE
- Mission Deployment and Support = 45 FTE
- 2 Acq Support Team

Delta	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Fiscal Year 2028	Fiscal Year 2029
Labor	138	94	137	157	160	187	157
SW Dev Total FTES	97	47	59	80	80	103	95
MD&S Total Costs	39	45	76	75	78	82	61
Acq Supp	2	2	2	2	2	2	2

43. Senator WARREN. General Brown and General Saltzman, what specific capability will the UPL provide?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. Fiscal year 2024 UPL funds are requested to accelerate delivery of defensive cyber operations capabilities to protect the network enclaves of USSF mission systems. The urgency of these funds is driven by the list of prioritized mission systems identified by the Space Operations Command Center. Additionally, commander's requirements from various combatant commands require protection from evolving threats and changes to the cyber environment.

44. Senator WARREN. General Brown and General Saltzman, what gap will this fill that is not in the base budget?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The UPL will provide the manpower to accelerate and integrate the DCO-S Hardware that was within the base budget as well as increase software development to keep up with the growing requirements of Delta 6.

45. Senator WARREN. General Brown and General Saltzman, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. DCO-S directly supports the National Defense Strategy (NDS), National Military Strategy (NMS), and the National Security Strategy (NSS) by contributing to the security and resilience of the cyber and space domain in support of the Joint Force. Per the NDS, a key defense priority is to

achieve deterrence of strategic attacks through resilience. Further the cross-cutting NDS priority missions direct the DOD to gain and maintain information advantage, particularly in cyberspace, space, and the electromagnetic spectrum. Through the introduction of the notion of joint combined arms, the NMS directs the Joint Force and its leaders to be as comfortable fighting in space or cyberspace as they are in the other three traditional domains of land, sea, and air. And finally, the NSS designates securing cyberspace as a global priority. DCO-S supports all these directives and priorities by:

- Enhancing USSF's ability to secure mission networks adhering to DOD Instruction 5000.90, "Cybersecurity for Acquisition Decision Authorities and Program Managers," December 31, 2020, and JP 3–12, "Cyberspace Operations," December 19, 2022.
- Supporting the USSF Cyber Strategy by directing protection for network enclaves of USSF mission systems, to include their associated computer systems, software applications and sensitive operational information against unauthorized intrusion, corruption, and/or destruction.
- Enhancing USSF's ability to close the gap on key USSPACECOM and USINDOPACOM commander cyber priorities.

46. Senator WARREN. General Brown and General Saltzman, what is the operational requirement? How does this UPL support current or future operations?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. This UPL accelerates software development work and advances prototyping of cyber capabilities that protect the network enclaves of USSF mission systems, to include their associated computer systems, software applications and sensitive operational information against unauthorized intrusion, corruption, and/or destruction. This UPL accelerates the deployment and integration timeline of critical DCO capabilities that provide Space Delta 6 with protect and defend capabilities for: launch and early warning, positioning, navigation, and timing, protected/survivable MILSATCOM/NC3, and satellite control networks.

47. Senator WARREN. General Brown and General Saltzman, what is the operational impact if this UPL is not funded in fiscal year 2024?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. If not funded, the timeline will be delayed by 12 months for critical USSF assets to gain mission assurance from a cyber perspective. The space missions impacted include all USSF missions.

48. Senator WARREN. General Brown and General Saltzman, are there plans to include this item in the fiscal year 2025 base budget?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The Service is currently prioritizing fiscal year 2025 budget requirements including DCO-S.

49. Senator WARREN. General Brown and General Saltzman, why was this UPL not included in the Fiscal Year 2024 President's Budget submission?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The requirements within the Fiscal Year 2024 President's Budget submission were met to a certain extent. However, the high demand for cyber capabilities has increased the rate in which mission partner systems are connected and need to be protected against cyber threats. This is increasing the need to accelerate development and delivery of cyber capabilities across the USSF.

50. Senator WARREN. General Brown and General Saltzman, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN.

Requirement	Organization	APPN	Type	Option	PoP
Cyber Ops Suite Development					
Cyber Ops Suite Development (P1 BOA)	SSC/SZYO	3620	FFP	Base	1 Jul 2022– 30 Jun 2023
Cyber Ops Suite Development (Digital Bloodhound)					TBD
AFRL Cyber R&D (CNF)	AFRL	3620	FFP	OY6	Ends 28 Sep 2023
Agile Release Train (Karthik)	SSC/SZYO	ALL	FFP	OY2	9 Jul 2022 – 8 Jul 2023
FIAR TO29 (Deloitte)	AFMC/FM	3620/3410	FFP	OY3	1 Feb 2023 – 31 Jan 2024
NIWC Engineers	SSC/SZYO	3620/3410	FFP		Agreement ends 28 May 2025
CloudOne (AWS)	AFLCMC/HNIK	3620			21 Sep 2022 – 20 Sep 2023
PlatformOne	AFLCMC/HNCKP	3620			30 Mar 2023 – 29 Mar 2024
Product Line Integration					
Hardware/Software Licenses	SSC/SZYO	ALL	BPA		
SE&I (ENSCO)	SSC/SZYN	ALL	CPFF	OY5	1 May 2023 – 30 Apr 2024
CDET 3 (FIT Team)	SpOC	3410			1 Jun 2023 – 30 May 2024
Systems Line Integration/Accreditation					
LCDC (ISSE)	EGS	3620	FFP	OY4	5 Aug 2022 – 4 Aug 2023
Test					
Development Test	47th Test Squadron	3620	FFP		1 Oct 2022 – 30 Sep 2023
FFRDC					
Aerospace	SSC/ENT	All	FFP	OY4	1 Oct 2022 – 30 Sept 2023
CMU/SEI	AFLCMC/AZS	3620	FFP		1 Oct 2022 – 30 Sept 2023
MITRE	AFLCMC/AZS	3620/3410	FFP	OY3	1 Oct 2023 – 30 Sept 2024
A&AS					
SAFS II	SSC/ECRN	3620/3410	FFP	OY4	21 Feb 2023 – 20 Feb 2024
Catalyst Campus	AFRL	3620	FFP		01 Oct 2022 – 30 Sep 2023
SLISS–2 (CISF) (Apogee)	SSC Det 5	3410	FFP	OY3	1 Mar 2023 – 28 Feb 2024

51. Senator WARREN. General Brown and General Saltzman, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. I do not participate in the acquisition decisionmaking process for the Space Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Space Force UPL for fiscal year 2024.

52. Senator WARREN. General Brown and General Saltzman, what is your history with this vendor? Please detail when the relationship began, the number of con-

tracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. I do not participate in the acquisition decisionmaking process for the Space Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Space Force UPL for fiscal year 2024.

53. Senator WARREN. General Brown and General Saltzman, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. I do not participate in the acquisition decisionmaking process for the Space Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Space Force UPL for fiscal year 2024.

54. Senator WARREN. General Brown and General Saltzman, in which city/State will the UPL be executed?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The UPL be executed in Colorado Springs, Colorado.

55. Senator WARREN. General Brown and General Saltzman, is this requirement on an existing contract? If so, with who? What is the history of the contract?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. This requirement is on a variety of existing contracts, we also plan to put this requirement on the upcoming Digital Bloodhound contract.

Digital Bloodhound Scope—The contractor will support all software development capabilities included in, but not limited to, the Defensive Cyber Software Solutions development and support activities. The support provided will include, but will not be limited to, the development of the cyber capabilities of the application suites, mission deployment activities, documentation and agile software deliveries, material management within the confines of the change control board, deployment of required hardware to mission systems, and continued support of the program office. Software solutions shall be intuitive for users, allowing for the mission to be conducted using applications on computing systems, i.e., tablets, desktops, or connected devices, to simplify mission execution and maintain mission success. The contractor shall collaborate across the various agile software efforts to test, integrate, and deliver developed software to the USSF.

56. Senator WARREN. General Brown and General Saltzman, what is the anticipated contract award date if the UPL receives funding?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The UPL will be executed through various existing contracts and the projected award date of Digital Bloodhound is August 2023.

57. Senator WARREN. General Brown and General Saltzman, what funding lines are associated with this UPL?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The following funding lines are associated with this UPL:

APPN 3620, PE 1203040SF, R–1 Line #56 and APPN 3410, PE 1203040SF, SAG 13C.

58. Senator WARREN. General Brown and General Saltzman, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.
General SALTZMAN. The UPL requests only RDT&E appropriation to fund this portion of the requirement.

59. Senator WARREN. General Brown and General Saltzman, how much was enacted and obligated (or expended for RDT&E) in fiscal year 2022 to 2023 for this requirement?
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.
General SALTZMAN. The following was enacted and obligated (or expended for RDT&E) in fiscal year 2022 to fiscal year 2023 for this requirement: $6.156 million in fiscal year 2022, $28.16 million (Budget) in fiscal year 2023.

60. Senator WARREN. General Brown and General Saltzman, how much was requested in fiscal year 2024 for this requirement?
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.
General SALTZMAN. The following was requested in fiscal year 2024 for this requirement: $172.202 million in the fiscal year 2024 President's Budget, $76.003 million in RDT&E, $96.199 million in O&M.

61. Senator WARREN. General Brown and General Saltzman, is there a tail associated with this UPL?
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.
General SALTZMAN. No, there is not a tail associated with this UPL.

62. Senator WARREN. General Brown and General Saltzman, is any tail funded in the future years defense program?
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.
General SALTZMAN. No, there is not a tail associated with this UPL request. This request is specifically to fund manpower to integrate the systems procured in Fiscal Year 2024 President's Budget.

63. Senator WARREN. General Brown and General Saltzman, please describe how much the requirement will cost per year for the next 5 years.
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.
General SALTZMAN. The following table is based on the Fiscal Year 2024 President's Budget Request: Balance of Development & Fielding w/ O&M Costs for current baseline program ($M).

Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Fiscal Year 2028	Fiscal Year 2029
172.202	158.812	154.971	161.186	146.856	149.793

64. Senator WARREN. General Brown and General Saltzman, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or UPL.
General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. The details of previous funding requests and enacted funding for this requirement is as follows:

All RDTE ($M):

Fiscal Year 2022:
- Request $2.150
- Reprograming $4.006

Fiscal Year 2023:
- Request $28.162
- Congressional General Reduction $–0.075

Fiscal Year 2024:
- Request $76.003

65. Senator WARREN. General Brown and General Saltzman, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. DCO-S is included in the FYDP; adjustments will be considered as needed during the Service's budget review process.

66. Senator WARREN. General Brown and General Saltzman, please provide photos of this requirement for visual aid.

General BROWN. To address the series of questions regarding the Air Force's unfunded priorities list, Attachment 1 (please see Appendix) has been developed to provide responses to each of the questions.

General SALTZMAN. N/A.

SEXUAL ASSAULT IN THE AIR FORCE AND SPACE FORCE

67. Senator WARREN. Secretary Kendall and General Brown, I am deeply concerned and disturbed that reports of sexual assault in the Air Force increased by 13 percent in fiscal year 2022 and is at the highest level in the history of the Air Force Sexual Assault Prevention and Response program. What recommendations from Independent Review Commission on Sexual Assault is the Air Force implementing and when does it expect implementation to be complete?

Secretary KENDALL and General BROWN. We are implementing all the recommendations of the IRC. The Department of the Air Force's IRC Task Force convenes monthly to track the status of the 47 IRC requirements that are in progress with no issues; seven have been completed to date and are listed below:

- 1.6—Expedite processing of proposed Executive Orders regarding military justice, including those currently awaiting issuance related to sexual assault, sexual harassment, and other special victim crimes.
- 1.7c—The Joint Service Committee on Military Justice has drafted a proposed Executive Order to establish a preponderance of the evidence standard for nonjudicial punishment.
- 2.2b—USD(P&R) should develop a professional credential for the prevention workforce.
- 2.5a—The Services and the NGB should institute a pilot program to link servicemembers with resources and support.
- 3.4a—Elevate and standardize the gender advisor workforce
- 4.1c—Explore the co-location of SAPR and SHARP with other special victim services, such as FAP, to improve coordination, collaboration and consistency in victim support.
- 4.2e—Amplify victims' rights and services in the post-trial period.

By the end of 2023, we will have 31 recommendations completed, with eight additional recommendations completed in 2024, and the remaining recommendations on track to being completed through 2028.

Our primary initiative is a significant investment in creating sustainable integrated prevention and response workforce structures. DAF is adding 324 pre-

vention personnel, 197 victim advocates and an Independent Office of Special Trial Counsel (IOSTC). Together, they will drive data-informed, evidence-based and victim/survivor centered decisions. Meaningful change relies on a complex systems approach with robust evaluation and analysis efforts to identify root causes, intended outcomes, and effectively address individual and systematic harms. The IRC lines of effort inform DAF strategies and sexual assault prevention and response priorities, engaging a holistic and multi-disciplinary approach to address sexual assault.

68. Senator WARREN. Secretary Kendall, the Government Accountability Office released a report in March 2022 on "Sexual Assault: DOD and Coast Guard Should Ensure Laws Are Implemented to Improve Oversight of Key Prevention and Response Efforts." The recommendations for the report included (1) the Secretary of the Air Force ensuring all required information is included in the annual reports; (2) the Secretary of the Air Force reviewing and updating guidance and setting a timeframe for the completion of requirements relating to command climate information required under Section 508 of the fiscal year 2015 NDAA; (3) ensuring compliance with Section 535(a)-(b) of the fiscal year 2018 NDAA; and (4) ensuring that the Superintendent of the Air Force takes steps to document actions taken in accordance with Section545(a)-(c) of the fiscal year 2019 NDAA. I appreciate that DOD has concurred with these recommendations. Please provide an update on their status and expected time of completion.

Secretary KENDALL. The DAF has completed all corrective action plans pertaining to the GAO recommendations: (1) the DAF developed an internal NDAA tracking mechanism that ensures that the annual report includes all of the required information and adds any missing requirements, if necessary (Completed July 1, 2022); (2) Command climate information was added back into DAFI 36–2406, Officer and Enlisted Evaluations and commander's evaluation require a statement regarding whether the commander has conducted the required command climate assessments (Completed March 16, 2022); (3) Air Education and Training Command developed training that included sexual assault response, prevention, and instruction on the proper use of social media to all enlisted members under the delayed entry program (Completed December 1, 2022); and finally, the Superintendent of the United States Air Force Academy has put processes in place to ensure dissemination of the SAPR Resource Guide (completed April 15, 2022).

69. Senator WARREN. Secretary Kendall and General Brown, in the sexual assault cases that DOD received in fiscal year 2022, out of the unrestricted reports that were filed commanders only had "sufficient evidence to take disciplinary action in 66 percent of the accused members' cases." What were the challenges to gathering sufficient evidence, and what steps are the Air Force and Space Force taking to address these gaps?

Secretary KENDALL and General BROWN. There are a number of reasons why a case may not have sufficient evidence to proceed to trial by court-martial. Victims may not wish to engage with a criminal investigation or participate in a court-martial proceeding and, by DOD and DAF policy, the victim's preference is respected to the maximum extent possible. Even with victim participation, the lack of corroborating evidence, the presence of contradictory testimonial, documentary, or digital evidence, or presence of affirmative defenses may also preclude the government's ability to secure and sustain a conviction.

While the DAF can and does take challenging cases to trial, the interests of justice and the well-being of all parties are best served by declining to prosecute when the evidence is insufficient to obtain and sustain a conviction. In some cases, accused individuals may be punished for related misconduct by lesser forms of discipline when the State of the evidence does not warrant trial by court-martial for sexual assault.

Steps:

The DAF endeavors to reduce barriers to victim participation through a range of initiatives.

The DAF has instituted a "Safe to Report" policy whereby sexual assault victims are shielded from punishment for minor misconduct they may have committed related to an incident of sexual assault (e.g., underage drinking).

Additionally, the DAF has implemented a "No Wrong Door" policy, (an IRC recommendation) ensuring that victims will receive a warm handoff between helping agencies after a report of sexual assault. This policy is intended to ensure continuity of care and minimize the number of times a victim must recount their story.

Finally, the DAF provides Victims' Counsel as soon as possible after the report of a qualifying offense, ensuring victims receive independent and confidential legal advice throughout the entirety of the military justice process. Endearing trust with victims encourages early reporting, which allows criminal investigators to obtain and preserve forensic evidence that is often critical for successful prosecutions of sexual assault cases.

The DAF as of 1 July 2023 has stood up the Office of Special Trial Counsel (OSTC), which is comprised of the DAF"s most experienced and specialized prosecutors. They will guide investigations of certain victim-centric offenses and serve as the lead prosecutor when such offenses go to trial. The OSTC will implement Investigation and Prosecution Support Teams (IPST), which are designed to integrate senior prosecutors with investigators and installation judge advocates at the inception of an investigation to increase the discovery of corroborating evidence. Through the use of IPST, the DAF aims to enhance criminal investigations and victims' trust in the process.

70. Senator WARREN. Secretary Kendall, General Brown, and General Saltzman, the percentage of sexual assault reports that remain restricted has been increasing since fiscal year 2017 and almost 45 percent of reports remained restricted at the end of fiscal year 2022. What trainings does Air Force and Space Force provide to commanders and servicemembers regarding supporting a command climate that supports reporting on sexual assault and creates a zero-tolerance climate for sexual misconduct?

Secretary KENDALL, General BROWN, and General SALTZMAN. The DAF mandates Initial Wingman Intervention Training (IWIT), which is a mandatory foundational course focused on the prevention of sexual assault, sexual harassment and domestic violence. The course is required for all airmen and guardians, to include newly hired civilians, at their first duty station and/or accessions training. This 60-minute module is designed to equip participants with the necessary skills to establish positive norms and develop wingman intervention behaviors. After this initial training, airmen and guardians receive mandatory annual training to address sexual assault and sexual harassment prevention.

As airmen and guardians progress in their careers, the DAF ensures our members are receiving relevant education and training at each stage. In each of the DAF's Professional Military Education (PME) courses, to include accessions schools, learning objectives are designed to provide prevention and response skills and knowledge and is tailored to the individual's responsibilities and rank. Additionally, based on IRC requirement 4.4c, the DAF is updating PME by September 2025 to ensure leaders are equipped to deliver informed prevention messages in formal and informal settings, training that better resonates with today's airmen and guardians, and education on cyber—harassment and technology-facilitated sexual harassment and sexual assault.

Commanders at all levels (MAJCOM/FLDCOM, Wing, Delta, Group, and Squadron) receive individual and group training from SAPR personnel which addresses response, victim advocacy services, and tools for creating environments that are supportive of sexual assault reporting.

Additionally, Article 137(c), UCMJ, requires that all new commanders receive training on certain aspects of military justice. By service regulation, the Article 137 training covers the role of commanders in all states of military justice in connection with sexual assault. This includes training on ensuring sexual assault victims are protected from the offender, can obtain all available assistance, and are protected against retaliation for reporting. It also includes specific training on the role of commanders in maintaining a healthy command climate in connection with reporting sexual assault.

71. Senator WARREN. Secretary Kendall, General Brown, and General Saltzman, I am alarmed by the gap between servicemembers reports to DOD and the number of servicemembers who experienced unwanted sexual contact according to surveys. What protocol does the Air Force and Space Force follow if commanders do not take action toward a report if a commander was told about an incident of sexual assault, sexual harassment, or other sexual misconduct?

Secretary KENDALL, General BROWN, and General SALTZMAN. Commanders are bound by DAF policy to take affirmative action to ensure investigation and disposition for every report of sexual assault, sexual harassment, and other sexual misconduct is taken in accordance with DOD policy and the law. Commanders who fail to fulfill their obligations, whether imposed by statute or policy, are subject to potential administrative discipline, up to and including punitive ac-

tion, for dereliction of duty under the Uniform Code of Military Justice, as well as potential removal from command.

Likewise, Commanders are also obligated to ensure victims of these crimes are protected from retaliation. Retaliation against any person for reporting a criminal offense is specifically actionable under Article 132, UCMJ.

72. Senator WARREN. Secretary Kendall, General Brown, and General Saltzman, there are concerns regarding incidents of sexual assault being linked to incidents of hazing within the military. What steps is the Air Force and Space Force taking to prevent hazing incidents and how many incidents of hazing did the Air Force and Space Force find during fiscal year 2022?

Secretary KENDALL, General BROWN, and General SALTZMAN. In fiscal year 2022, there were 17 (16 Air Force and 1 Space Force) complaints of hazing that were processed though the DAF Equal Opportunity (EO) Office. Any allegation of hazing that includes a sexual assault component, would be reported as a sexual assault rather than hazing. The Department of Defense Sexual Assault Incident Data base (DSAID) does not have a mechanism to identify these allegations separate from the sexual assault.

The DAF EO Program provides awareness-based training on harassment, to include hazing, for servicemembers and civilian employees at their first permanent duty assignment and as a refresher training at each of their subsequent duty stations. These trainings provide information about the DAF EO Program, definitions of unlawful and prohibited discrimination and harassment (including hazing), and complaint processes. Commanders (installation, group, squadron) and senior enlisted leaders, including Space Force equivalents, also receive a key personnel briefing that addresses specific leadership roles and responsibilities within the EO program, complaint processes, and identified command climate trends at their local level.

73. Senator WARREN. Secretary Kendall and General Saltzman, how many of these hazing incidents involved elements of sexual assault or harassment?

Secretary KENDALL and General SALTZMAN. Of the fiscal year 2022 hazing complaints processed though the DAF EO Office, only one complaint involved or referenced elements of sexual assault or sexual harassment. Per DOD and DAF policy, sexual assault allegations are not handled or investigated by DAF EO and are referred to the military criminal investigation organizations for investigation. Any allegation of hazing that includes a sexual assault component would be reported as a sexual assault rather than hazing. The DOD Sexual Assault Incident Data base does not have a mechanism to identify these allegations separate from the sexual assault.

SEXUAL ASSAULT IN MILITARY ACADEMIES

74. Senator WARREN. Secretary Kendall, in the 2021 to 2022 Academic Program Year, out of the 155 cadets/midshipmen survivors who reported a sexual assault incident during military service, 57 of these were at the U.S. Air Force Academy. The total number of formal reports of sexual assault that DOD received for this academic year is expected to be missing hundreds of unreported incidents, with an anonymous, mandatory survey finding that 21.4 percent of female students and 4.4 percent of male students experienced unwanted sexual conduct in the past year. This indicates that over 1,100 students were victims but only 14 percent of them reported the incident. How is the Air Force and engaging with students to hear further information on reporting impediments and what immediate actions is it taking to address a climate and culture that causes students to feel they cannot come forward?

Secretary KENDALL. The DAF and specifically the U.S. Air Force Academy (USAFA) are taking several actions to address reporting impediments and culture. These efforts will amplify the SecDef actions announced this past March when the reports were released. In April 2023, the USAFA Commandant of Cadets signed and put into place an "Encouraged to Report" policy building off the NDAA-mandated Safe to Report policy, (which originated at USAFA). Encouraged to Report provides commanders discretion in addressing collateral misconduct for cadets who witness a possible sexual assault or report an instance of hazing, harassment, or bullying as a witness or victim and hazing. The original Safe to Report policy applied to victims of those offenses and the updated policy extends consideration for both witnesses and bystanders. Last year, USAFA conducted training for commanders, cadets and staff about both policies

and will continue to train on the policy and publicize it. In addition, SAPR personnel and Victims' Counsel discuss the policies during their intake process.

More broadly, over the past months, the USAFA Superintendent created the "Let's Be Clear" campaign as a culture reset with several lines of effort to drive down the prevalence of Sexual Harassment and Unwanted Sexual Contact. The design and execution of the "Let's Be Clear" campaign is based on a cross-functional approach made up of external/internal Subject Matter Experts (SMEs), academy leadership, and professors, cadets, alumni, etc. to understand the data, cultural issues, and chart a way forward focused on improved outcomes.

Finally, USAFA continues to provide cadet-specific training throughout their time at USAFA including, but not limited to: Sexual Assault Prevention and Response; Interpersonal and Self-Directed Harm/Violence Prevention; Bystander Intervention; Diversity, Equity, and Inclusion; and Healthy Relationships Education (HRE). HRE teaches the dynamics of relationships with parents, roommates, friends, teammates, superiors, co-workers, romantic partners etc., to build skills and reduce sexual assault and other interpersonal and self-directed harm/violence risk factors. Training will also include information developed in coordination with the Office of Special Trial Counsel, concerning the importance of recent military justice reforms and how this impact castes and USAFA personnel.

75. Senator WARREN. Secretary Kendall, this same report found that there are decreasing levels of trust among both men and women that the military would "protect their privacy and treat them with 'dignity and respect' after an alleged incident." What protocol does the Air Force follow if a commander violated the privacy of the survivor after reporting an incident?

Secretary KENDALL. USAFA treats the privacy of any survivor with the utmost seriousness, ensuring we take the appropriate steps to guard against improper release of information. A commander who violates the privacy rights of a survivor is subject to potential administrative discipline, up to and including punitive action, for dereliction of duty under the Uniform Code of Military Justice, as well as potential removal from command.

76. Senator WARREN. Secretary Kendall, is the Air Force aware of any instances in the past 10 years of commanders violating the privacy of survivors after they reported an incident? What disciplinary actions were taken as a result?

Secretary KENDALL. USAFA is unaware of any military criminal report or military administrative investigation complaint of a violation of a survivor's privacy rights by a commander in the last 10 years.

77. Senator WARREN. Secretary Kendall, what protocol does the Air Force follow if a student has expressed concerns that no action was taken even after telling a commander or authority that an incident of sexual assault, harassment, or other sexual misconduct has occurred?

Secretary KENDALL. USAFA commanders consider all appropriate options before making a disposition decision on an allegation of sexual assault in accordance with the Rules for Courts-Martial, Secretary of Defense's Non-Binding Disposition Guidance, and applicable service regulations. For sexual harassment cases, complaints are processed in accordance with 10 U.S.C. § 1561 and Department of Defense Instruction 1020.03, Harassment Prevention and Response in the Armed Forces.

In sexual assault cases and certain other sexual misconduct cases, survivors also have the option to request civilian authorities with jurisdiction review and potentially prosecute their case. In every case of sexual assault related offenses, the survivor is notified of this option and provides an election regarding whether they would prefer the Air Force or civilian authorities to exercise jurisdiction.

For sexual assault cases, the Staff Judge Advocate advises the Special Courts-Martial Convening Authority (SPCMCA), who is the initial disposition authority over sexual assaults and certain other sex-related offenses. If the SPCMCA considers taking no action or disposition by means other than a court-martial, the SPCMCA will solicit the victim's input before making a final decision. If the allegation is not referred to trial by court-martial, other options such as a Board of Inquiry, Nonjudicial Punishment, Administrative Action, and/or Letter of Notification discharge processes are considered. For sexual assault cases, if "no action" is taken, this information is provided to the Victims' Counsel (if the victim is represented) to relay to the survivor and a Judge Advocate from the base legal office offers to meets with the survivor to answer any questions they might have. SPCMCAs are also required to provide written notice of initial disposition

of sexual assault offenses to their superior general court-martial convening authority (GCMCA) within 30 days.

For sexual harassment cases, pursuant to DAF regulations, the commander makes final notification of the results of the commander directed investigation to the survivor, in writing. The survivor will also be notified of the measures taken to resolve the matter, subject to applicable privacy laws, regulations, and policies, including the Privacy Act of 1974. In addition, the survivor will also be informed of the availability of an executive summary of the response to the allegation of harassment. If a survivor is unsatisfied with the final determination, a request for further review may be made to the command.

Currently, after the investigation, all sexual assault related, and sexual harassment allegations are reviewed by the servicing Staff Judge Advocate who advises command on appropriate actions. In accordance with Fiscal Year 2022 NDAA, beginning with offenses committed on/after December 28, 2023, all sexual assault-related offenses will be reviewed by the Office of Special Trial Counsel (OSTC), which is separate from the chain of command and reports directly to the Secretary of the Air Force. Specially trained attorneys will review cases and make binding disposition determinations. Beginning in 2025, OSTC will also have exclusive authority to make prosecution decisions concerning formal and substantiated reports of sexual harassment.

Finally, any cadet can ask the next commander in their chain of command should they have concerns regarding non-action. This was recently addressed by the Commandant of Cadets to the Cadet Wing permanent party to re-emphasize the importance and ability for all cadets to understand their rights within the chain. The Superintendent and Commandant of Cadets are also available to speak with the survivor, to answer any questions, and address their concerns.

78. Senator WARREN. Secretary Kendall, the report found that those identifying as "lesbian, gay, or bisexual cadets and midshipmen were significantly more likely to experience unwanted sexual contact than their heterosexual peers." What steps is the Air Force taking to support the LGBTQ+ community in preventing experiences of unwanted sexual conduct and what plans does it have to improve this support at the U.S. Air Force Academy?

Secretary KENDALL. The USAFA Integrated Prevention and Response office is actively engaged with the USAFA Diversity and Inclusion office and the Cadet Spectrum (LGBTQ+) club to conduct feedback and incorporate the LGBTQ+ perspective in the Sexual Assault and Violence Prevention efforts at USAFA. The USAFA Superintendent recently conducted a listening session with the cadet LGBTQ+ community to better understand the issues and concerns. USAFA leadership is examining disparities specifically impacting the LGBTQ+ community of cadets as part of USAFA's holistic "Let's Be Clear" campaign to reduce sexual assault.

79. Senator WARREN. Secretary Kendall, the report also found that Hispanic women and men identifying as some other race were "more at risk for unwanted sexual conduct than their Non-Hispanic White peers." What steps is the Air Force taking to prevent experiences of unwanted sexual conduct among communities of color and what plans does it have to improve this support at the U.S. Air Force Academy?

Secretary KENDALL. The USAFA Integrated Prevention and Response office is actively engaged with the USAFA Diversity and Inclusion office to combat unwanted sexual conduct, especially in our communities of color. As an example, the Integrated Prevention and Response office is actively engaged with the USAFA Diversity and Inclusion office and the Cadet Hispanic Heritage Club to conduct feedback and incorporate the Hispanic Community perspective in the Sexual Assault and Violence Prevention efforts at USAFA. USAFA leadership is examining those disparities specifically impacting the Hispanic/Latino cadet community of cadets as part of USAFA's holistic "Let's Be Clear" campaign to reduce sexual assault.

QUESTIONS SUBMITTED BY SENATOR GARY C. PETERS

PFAS CONTAMINATION

80. Senator PETERS. Secretary Kendall, the former Wurtsmith Air Force Base in Oscoda, Michigan is the first DOD installation in the country at which PFAS contamination was publicly reported—back in 2010. In past statements to the

local community, Air Force officials have expressed reluctance to take swift cleanup actions at Wurtsmith for fear of setting precedents at other PFAS-contaminated installations around the country. Last August, Air Force officials testified at a field hearing that I held in East Lansing, Michigan and committed to taking a new direction at Wurtsmith. Will you commit to making Wurtsmith a model that demonstrates how PFAS clean-ups are an urgent priority for the Air Force?

Secretary KENDALL. As stated at the August 2022 field hearing, DAF is committed to collaborative clean-up with enhanced community engagement at the former Wurtsmith AFB. Our partnership with the Michigan Department of Environment, Great Lakes and Energy (EGLE) resulted in many successes. We installed multiple pump and treat systems to remove PFAS from groundwater and removed PFAS impacted soil at a former fire training area. These actions removed approximately 72lbs of PFAS material. A series of onsite engagements with EGLE, Restoration Advisory Board and community members resulted in enhanced data sharing and positive feedback.

Additionally, our 2023 remedial investigation plans include a PFAS fingerprinting initiative with Battelle as well as an innovative "organo clay-mat" study at "three pipes drain" focused on treating impacted groundwater at the groundwater / surface water interface.

Wurtsmith AFB clean-up is a top priority. We are committed to expediting interim remedial actions while maintaining consistency with EPA and DOD guidance. The DAF shares your commitment to protecting human health and the environment at Wurtsmith, and we look forward to working together and continuing our efforts for environmental stewardship and building community confidence and trust.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN

OPERATIONAL ENERGY JOINT WORKING GROUP

81. Senator MANCHIN. General Brown, thank you for speaking with me last week. I wanted to followup on the program I mentioned from last year's NDAA. Specifically, Section 320, created a Joint Working Group for Future Operational Energy Needs of the Department of Defense. This joint working group is instructed to limit their investigation to energy sources and technologies that only increase our readiness, and specifically calls out small nuclear reactors and hydrogen. Is this joint working group something you and Secretary Kendall are working with your counterparts in the Services and the Secretary of Defense's office to complete?

General BROWN. The DAF has been holding bi-weekly working group meetings with the other Services and OSD to develop a response that addresses the Section 320 language.

82. Senator MANCHIN. Secretary Kendall and General Brown, I cannot overState the need for energy security of our military installations and forces both at home and abroad. In a recent briefing we were told that fuel per servicemember had increased almost tenfold between the Vietnam War and the Global War on Terror. Can you both commit to making the report from this Joint Working Group a top priority?

Secretary KENDALL and General BROWN. Yes, we are committed to making this report from the Joint Working Group a priority.

SPACE NATIONAL GUARD

83. Senator MANCHIN. Secretary Kendall, in your testimony to the House Armed Services Committee last week, you stated "the guard elements in the Space Force are not going anywhere, they are an essential part of the Space Force and we are going to keep them. The argument we are having is about what label we are going to put on them. They are definitely going to stay". What are the current options in moving these Air National Guard personnel who are conducting space missions?

Secretary KENDALL. The CSO recommends enactment of the SFPMA, while transferring the ANG missions to the Space Force, without establishing a Space National Guard. This ensures unity of command over all Department of the Air Force (DAF) space forces, maximizes flexibility for organize, train, and equip

(OT&E) and operational responsibilities, and ensures access to part-time forces for surge capacity. The total transfer would be modest.

84. Senator MANCHIN. General Saltzman, in your previous testimony you have expressed that the Air National Guard space capabilities are critical must haves. With regards on how to organize those space capabilities, you recommended choosing the option that "minimizes the operational impact in any kind of transition" and "maintains the operational capabilities that are currently there". What are the estimated costs associated with the two options that you are considering? (establishing a space national guard or rebuilding those missions in the Space Force)

General SALTZMAN. My strongest possible recommendation is to enact the SFPMA, while transferring the ANG missions to the Space Force, without establishing a Space National Guard. This ensures unity of command over all Department of the Air Force (DAF) space forces, maximizes flexibility for organize, train, and equip (OT&E) and operational responsibilities, and ensures access to part-time forces for surge capacity. The total transfer is modest, and was not driven by costs.

85. Senator MANCHIN. General Saltzman, do both those options maintain the same level of readiness for these troops?

General SALTZMAN. My strongest possible recommendation is to enact the SFPMA, while transferring the ANG missions to the Space Force, without establishing a Space National Guard. This ensures unity of command over all Department of the Air Force (DAF) space forces, maximizes flexibility for organize, train, and equip (OT&E) and operational responsibilities, and ensures access to part-time forces for surge capacity. The total transfer is modest and would include 734 positions (of which only 242 are full time) across 6 states and 11 units. The transfer would also include the resources associated with the ANG space missions (funding, billets, equipment, and facilities). I would be happy to walk through the resourcing details with you if you would like.

DELAYED BUDGET AND CONTINUING RESOLUTIONS

86. Senator MANCHIN. Secretary Kendall, General Brown, and General Saltzman, I have repeatedly asked the Pentagon for as concise a number as possible to put a figure on the damage these delays are causing to our national security, but have so far only received an estimate from General Brown in the Air Force who just told me that a Continuing Resolution would see the Air Force and Space Force lose $9 billion in purchasing power. Can I have each of your commitments to encourage your counterparts in the other Services and the Secretary of Defense to get Congress as accurate an estimate as possible on the financial impact of previous and future continuing resolutions to our national security?

Secretary KENDALL, General BROWN and General SALTZMAN. I will encourage my counterparts in the other Services and the Secretary of Defense to get Congress as accurate an estimate as possible on the financial impact of previous and future continuing resolutions.

The Department will continue to message the impact of Continuing Resolutions on our progress in modernization and readiness, while our Pacing Challenge faces no such impediment. For fiscal year 2024, the Department's lost purchasing power in a year-long CR would be over $11.3 billion when accounting for fiscal year 2023s $1.4 billion Ukraine supplemental and further exacerbated by potential impacts of a 1 percent reduction in defense spending limits called for in the Fiscal Responsibility Act of 2023.

We make significant modernization investments in the Operational Imperatives in fiscal year 2024. A long-term CR stops 19 efforts, costing $4.8 billion, that close key capability gaps, accelerate development, and assure U.S. advantage against pacing challenges. It hinders investments critical to the high-end fight such as Kill Chain Automation, CCA development, Moving Target Engagement and Joint Strike Missile. Finally, a long-term CR stalls Space Force acceleration, canceling $2.8 billion in new space architectures, survivable, long-range, persistent sensors and kill chain automation tools necessary for the success of the Joint Force in a contested environment.

DAF's operational success depends on timely congressional action to pass a budget.

CYBER INTEGRATION WITHIN AIR FORCE PROGRAMS

87. Senator MANCHIN. Mr. Kendall, the past few years have demonstrated very publicly the threat posed to our critical infrastructure from malign cyber actors, and part of that critical infrastructure is our defense industrial base. I see that there has been a significant increase in the Air Force's cyber defense funding request for fiscal year 2024. How does the budget reflect your plans to integrate cyber security measures into each new and legacy system within the Air Force?

Secretary KENDALL. The Department of the Air Force has initiated action to address cyber security measures identified by mission assurance and self-initiated assessments. The funding request is indicative of the needs to address the areas identified and to update our review standards and procedures for legacy system maintenance, upgrades, and replacement as appropriate. We have also put requirements into new systems to integrate into enterprise cybersecurity systems, and for legacy to upgrade their measures (IT infrastructure, crypto, etc.) as appropriate.

CYBERSECURITY POSTURE

88. Senator MANCHIN. General Brown, there has been a considerable increase in the fiscal year 2024 Air Force budget request in cyber defense funding compared to the enacted budget in fiscal year 2023. Can you go into detail on how this significant increase in cyber defense funding will improve the Air Force's cybersecurity posture?

General BROWN. The requested plus up in Defensive Cyber funding in fiscal year 2024 provides urgently needed defensive cyber capabilities to Department of the Air Force operators and provides key cyberspace situational awareness to local Commanders and Higher Headquarters.

The funding develops a cloud-based, containerized, integrated capability including modular interoperable sensors for collecting, transporting and analyzing relevant data from information systems, weapon systems, and control systems for enhanced situational awareness and cyberspace defense.

The new resulting Defensive Cyber architecture provides common data availability and increased interoperability between Cybersecurity Service Provider, Security Operations Center, Cyber Protection and Mission Defense Team operators, enabling data integration, increased automation, more efficient training pipeline and modular, common Hardware/Software for efficient sustainment.

89. Senator MANCHIN. General Brown, in your testimony you mention "MeshOne" that is a $151 million effort to modernize and secure the Joint Force Wide Area Network, do you believe this system will strengthen our cybersecurity posture enough to give us an edge against our adversary's attacks in the coming future?

General BROWN. Yes, the meshONE program will strengthen our cybersecurity posture to the level required by our adversaries. As part of the DAF BATTLE NETWORK, meshONE integrates zero trust capabilities, network redundancy, and mission prioritization, which are all key to operating in a contested and degraded environment. The design mirrors that of our existing cybersecurity units, enabling integration into USCYBERCOM defensive cyber operations.

QUESTIONS SUBMITTED BY SENATOR TAMMY DUCKWORTH

FORCE DESIGN

90. Senator DUCKWORTH. Secretary Kendall, General Brown, and General Saltzman, I'm concerned that, without an explicit roadmap for force design, your two Services may be at a disadvantage. The Congress relishes an opportunity to advocate for and support modernization efforts for the Air Force and Space Force. I find these efforts difficult however when the Services' future force design and force presentation goals are opaque. Can the Services provide a brief (up to TS) for me and my staff to better understand the end goal for force design?

Secretary KENDALL, General BROWN and General SALTZMAN. Yes. We welcome the opportunity to brief you on the force design guidance, concepts, and attributes the Air Force and Space Force have developed to maintain a competitive advantage, as well as the associated process and analyses informing that work.

QUESTIONS SUBMITTED BY SENATOR JACKY ROSEN

C–130J RECAPITALIZATION

91. Senator ROSEN. Secretary Kendall, the Nevada Air National Guard's 152d Airlift Wing in Reno flies its legacy C–130's in some of the hottest temperatures, highest elevations, and in the most challenging mountainous environments of any C–130 unit. Critical to their mission is flying the Modular Airborne Fire Fighting System (MAFFS) in support of the U.S. Forest Service. Upgrading the Nevada Air National Guard's C–130H fleet with C–130Js would have a substantial impact on their readiness and firefighting capabilities in Nevada and the western United States, where every year we are plagued by devastating wildland fires. I appreciate your commitment to me to update the basing criteria to now include specialty missions like MAFFS and am excited that Reno is under consideration for the latest round of basing decisions. Can I have your commitment to work with me to ensure that the 152d Airlift Wing receives C–130Js so that it can better carry out its dangerous firefighting mission in Nevada and throughout the western United States?

Secretary KENDALL. Reno is one of four Air Reserve Component units that performs the firefighting mission. The 152d Airlift Wing has been critical to the U.S. Forest Service and the interagency wildland fire management community, broadly. We appreciate the hard work and dedication of the men and women of the 152d in performing this mission.

Regarding the C–130J, the Air Force currently has a basing action to recapitalize four Air National Guard C–130H squadrons with eight aircraft each. The 152d Airlift Wing at Reno, NV is one of eight candidate locations, and as a C–130H unit performing the firefighting mission it will be given additional consideration under "Mission Criteria." The candidate locations for this basing action were approved in March 2023, and I am committed to ensuring the 152d Airlift Wing receives due credit for performing this special mission.

I look forward to working with you as this action moves through the strategic basing process.

COMMUTING ASSISTANCE FOR CREECH AIRMEN

92. Senator ROSEN. Secretary Kendall, I'd like to ask about a problem facing airmen stationed at Creech Air Force Base and servicemembers stationed at other rural or remote installations who have to commute many miles to base from where they live. Creech has very limited housing nearby, so the vast majority of airmen live in Las Vegas, which is about 45 miles away. It's an even longer commute for those who have to drop off their kids at the child development center or utilize other services at Nellis Air Force Base, which is on the opposite end of town. Does the Department of the Air Force have the existing authorities to provide these airmen with a gas stipend or something similar to make their commute less expensive as they deal with rising costs? Or is this something the services would need help from Congress to address?

Secretary KENDALL. The Department has various mechanisms to compensate individuals for their assignment location. For example, potential assignment incentive pay or other pays (e.g.-increased Basic Allowance for Subsistence) if warranted based upon specific circumstances. With respect to this specific location, Nellis AFB does provide daily round trip shuttle bus service from Nellis to Creech AFB. There is no current authority to provide a gas stipend or other type of transportation allowance for the purpose of routine commuting from a member's home to their duty location. This would require congressional support if pursued.

NEVADA TEST AND TRAINING RANGE MODERNIZATION

93. Senator ROSEN. Secretary Kendall and General Brown, Nevada is proud to host the "Crown Jewel" of the Air Force, the Nevada Test and Training Range, which provides the largest air and ground military training space in the lower 48 for testing and evaluation of weapons systems, tactics development, and advanced air combat training—without interference from commercial aircraft. The Air Force has identified NTTR modernization as one of its top priorities to ensure our high-end training keeps pace with current and emerging threats and capabilities. Each of you has emphasized the escalating threat from China to the U.S. military, especially as you continue to modernize the Air Force. Can you discuss the importance of modernizing the Nevada Test & Training Rang for training our fighter pilots to meet the threats identified by the National Defense Strategy?

Secretary KENDALL and General BROWN. DOD capabilities and those of peer, near-peer, and potential adversaries are advancing at a rate that challenges our ability to provide relevant and realistic training. We must maintain a qualitative advantage through superior training in multi-domain, full-spectrum employment. It is a DAF imperative to train as we intend to fight by constructing a relevant training environment that allows weapon systems and operators to interact in a highly dynamic, realistic manner including multi-domain command and control.

We are modernizing the Nevada Test and Training Range (NTTR) to enable warfighters to train for the peer fight in an all-domain contested environment against relevant and realistic threats with training assets that can be continually upgraded at the pace of our adversaries.

The Department has substantial, planned investments during the next FYDP to sustain, modernize, and add training infrastructure to achieve this capability in the 2030 timeframe. The effort establishes requirements for threats, targets, adversary air, multi-domain integration, and airspace capable of providing training to counter a peer adversary.

- Advanced Digital Array based Class Representative Threats
- Non-proprietary open architecture threat systems
- Software defined solutions allow iterative/evolutionary equipment use
- C, S, X, UHF, VHF, L, KU, KA, and Long Wave Infrared Bands
- Next Generation Airborne Instrumentation Pods (P6 Combat Training System)
- Live Mission Operations Capability (LMOC)
- Multi-range Distributed Integrated Air Defense System

One critical need to execute the modernization plan at NTTR is the passage of Legislative Proposal 404 which clarifies and allows the Department of Defense to conduct specific activities at NTTR. These activities include emergency response, gravel equipment pads that would be used to hold mobile threat emitters to better train to the pacing threat, and use and maintenance of existing roads to allow for the placement and movement of the threat emitters. The provision would also clarify the membership and role of the Interagency Committee and Intergovernmental Executive Committee, which are both integral to the safe modernization of NTTR.

The DAF is approaching Operational Training and Test Infrastructure at NTTR holistically across all domains and spectrums in the modernization of NTTR to replicate a peer adversary environment, to include development of the Nellis Virtual Test and Training Center (VTTC) for level 4+ high-end advanced training and tactics development in the synthetic environment. AF is integrating the Joint Simulation Environment, a simulation environment for test and training, into the VTTC. This will enable 5th Gen warfighters the capability to present complex, multi-domain, peer-adversary scenarios for integrated warfighter training, tactics development, and capability tests.

Most of the infrastructure required for Level 4, including version 1 of the Advanced Radar Threat System (ARTS), will be in place by fiscal year 2026. The final step to achieving Level 4 is fielding the ARTS v3. While the ARTS v3 will provide significantly greater capability, it is not projected to field until –fiscal year 2030.

The Department also recognizes that an airspace expansion is required at NTTR to fully achieve Threat Matrix Framework Level 4 training. An analysis is ongoing to determine airspace requirement shortfalls and assess impacts with a simultaneous effort to conceptualize a potential expansion. Efforts to expand the airspace normally takes 5+ years and in this instance will prove more challenging since FAA heavily uses the airspace surrounding NTTR.

94. Senator ROSEN. Secretary Kendall, the fiscal year 21 NDAA authorized the establishment of Intergovernmental Executive Committees (IEC) to help facilitate the exchange of views, information, and advice relating to the management of resources at NTTR with Federal, State, local, and tribal stakeholders. Can you speak to the Air Force's efforts to advance the NTTR modernization plan through the IECs? For example, what has worked and what hasn't when using the IECs as a forum to resolve differences with stakeholders?

Secretary KENDALL. The USAF recently used this forum to brief tribes and stakeholders on the NTTR's modernization needs and requirements and will continue to do so, taking into consideration the opinions, concerns, and knowledge of various stakeholders to ensure natural and cultural resources are part of the USAF"s proposal shaping and decisionmaking.

Participants at the April 4, 2023, IEC meeting included staff from your office, the Center for Biological Diversity, Friends of Nevada Wilderness, and the Fraternity of the Desert Bighorn. Through coordination in the IEC, the Friends of Nevada Wilderness, expressed thanks for the USAF sharing its proposal and expressed their interest in finding a way forward that addresses USAF's needs and congressionally designates the proposed wilderness in the Desert National Wildlife Refuge. The Friends of Nevada Wilderness offered to "help this process move forward so that there can be a win for everyone."

Although this is a positive note and the IEC does provide a venue for NGO's, tribes and others to contribute to the shaping of USAF proposals, the IEC is not a decisionmaking body.

We regularly invite the non-governmental members, but we do not have authority to mandate participation. Therefore, all tribes with equity are regularly consulted and coordinated with through Nellis AFB's Tribal Meetings and through Government-to-Government consultation to ensure we engage with these important stakeholders.

Last, the IEC does provide an additional venue to have reinforcement discussions on topics such as cultural and natural resources management and consultation under the National Environmental Policy Act.

95. Senator ROSEN. Secretary Kendall, do you think there are other forums that could be better utilized to find innovate solutions to existing NTTR land management issues?

Secretary KENDALL. The DAF is currently involved in several forums that address land management issues at the NTTR. These include the Intergovernmental Executive Committee (IEC), Interagency Committee (IC), the Nevada Joint Military Affairs Committee (JMAC), and the Civilian Military Council (CMC). These bodies are comprised of representatives from DOD, DOI, tribal governments, State agencies, civilian organizations, and the public.

The DAF does not believe additional forums are necessary to effectively manage land at the NTTR, but the DAF is working with and through stakeholders to strengthen existing forums, particularly the IEC and the IC, to enhance their membership and utility. As these bodies are congressionally mandated, we look forward to working with Congress on these initiatives.

QUESTIONS SUBMITTED BY SENATOR MARK KELLY

SPACE NATIONAL GUARD/RESERVE COSTS

96. Senator KELLY. General Saltzman, you have testified before HASC, SASC, and SAC-D about the critical capabilities that are provided by Air National Guard members supporting the space mission. While I understand that the Space Force is still evaluating the best course of action for organizing Air National Guard members, what are the estimated costs for each of your courses of action?

General SALTZMAN. My strongest possible recommendation is to enact the SFPMA, while transferring the ANG missions to the Space Force, without establishing a Space National Guard. This ensures unity of command over all Department of the Air Force (DAF) space forces, maximizes flexibility for organize, train, and equip (OT&E) and operational responsibilities, and ensures access to part-time forces for surge capacity. The total transfer is modest, and was not driven by costs.

97. Senator KELLY. General Saltzman, of the options you are considering for organizing the Air National Guard space capabilities, do either of the courses of action you are considering have a loss or degradation of mission capability?

General SALTZMAN. My strongest possible recommendation is to enact the SFPMA, while transferring the ANG missions to the Space Force, without establishing a Space National Guard. This ensures unity of command over all Department of the Air Force (DAF) space forces, maximizes flexibility for organize, train, and equip (OT&E) and operational responsibilities, and ensures access to part-time forces for surge capacity. The total transfer is modest and would include 734 positions (of which only 242 are full time) across 6 states and 11 units. The transfer would also include the resources associated with the ANG space missions (funding, billets, equipment, and facilities). I would be happy to walk through the resourcing details with you if you would like.

PFAS

98. Senator KELLY. Secretary Kendall, the EPA has issued a new proposed drinking water standard for six PFAS chemicals. What steps will the Air Force take to comply with these new standards?

Secretary KENDALL. The Department of the Air Force (DAF) supports EPA's recent actions to propose a regulatory drinking water standard for PFAS that, once promulgated, will apply to all drinking water suppliers, including DOD. The Department respects and values the public comment process on this proposed rule and looks forward to the clarity that a final nationwide standard will provide. We are reviewing existing data and conducting additional sampling where necessary on and off our installations, to prepare to implement the EPA's drinking water standard once it is promulgated. We continue to invest in the research and development of new technologies to accelerate clean-up of PFAS and reduce costs.

99. Senator KELLY. Secretary Kendall, will Air National Guard facilities with national missions follow the same steps to comply with these new standards as Air Force facilities? If not, how do they differ?

Secretary KENDALL. Yes, the Air National Guard facilities will follow the same steps as the DAF to comply with the new Maximum Contaminant Levels once finalized.

100. Senator KELLY. Secretary Kendall, how many Air Force bases are their own purveyor of drinking water for servicemembers?

Secretary KENDALL. As of May 19, 2023 the Air Force has 389 drinking water systems. This number includes both regulated and unregulated systems and changes based on mission and infrastructure.

101. Senator KELLY. Secretary Kendall, how will the Air Force address contaminated wells in nearby defense communities where PFAS levels exceed the new drinking water standards?

Secretary KENDALL. The DAF will respond in the same manner we did for private wells that exceeded the EPA's lifetime health advisory of 70 parts per trillion, individually or combined for PFOS/PFOA. We will investigate private wells and take action if concentrations exceed the promulgated maximum contaminant level for the applicable compound. Actions could include providing bottled water, a home or sink filtration system, or connection to a municipal water system.

102. Senator KELLY. Secretary Kendall, how will Air Force bases incorporate these new standards into clean up plans at bases undergoing remediation?

Secretary KENDALL. The Department is reviewing existing data and conducting additional sampling, where necessary, to prepare to implement the EPA's final drinking water standard once promulgated. We remain committed to fulfilling our cleanup responsibilities under the Federal cleanup laws and based on recent data from our ongoing investigations, will implement interim actions as necessary to address PFAS impacts to drinking water.

QUESTIONS SUBMITTED BY SENATOR TOM COTTON

MUNITIONS

103. Senator COTTON. Secretary Kendall, are there additional actions Congress can take to support your expansion of munitions production? Is there any excess capacity on the AMRAAM or AIM–9 production lines?

Secretary KENDALL. The DAF appreciates the support in our efforts to expand munitions production. This year's budget request shows a renewed commitment to munitions procurement throughout the FYDP by the Department. There are no additional actions necessary to support that expansion.

AMRAAM would be at maximum production rate if the fiscal year 2024 DON and USAF President's Budgets are fully funded (includes potential Foreign Military Sales). AMRAAM is entering a multiyear procurement contract and is planned to be at maximum quantity for fiscal year 2024 to fiscal year 2027 which makes plus-ups or reductions in those years impractical.

The DON is the lead service for AIM–9X procurement. We understand they are working to increase AIM–9X capacity.

CCA

104. Senator COTTON. Secretary Kendall, we've heard some express concern about a lack of munitions for CCA, with some going so far as to claim that CCAs would "compound our missile problem." Does the manufacturing of CCAs in any way negatively impact the production of munitions?

Secretary KENDALL. The Air Force is committed to quickly increasing the depth of the munitions inventory by continuing the efforts started in fiscal year 2023 and evidenced in the Fiscal Year 2024 President's Budget Request. While the Air Force has not yet started to manufacture CCA, we do not anticipate that it would negatively impact the production of munitions once it does begin.

105. Senator COTTON. Secretary Kendall, would unarmed CCAs enhance the mission effectiveness and survivability of manned platforms?

Secretary KENDALL. The Department of the Air Force (DAF) envisions CCA to span a range of cost, capabilities, and missions as the technologies mature over time. The crewed platforms' mission effectiveness and survivability when teamed with CCA provide commanders with significant operational flexibility. Further details are available via classified channels.

106. Senator COTTON. Secretary Kendall, what impacts do you assess delayed funding for CCAs would have on U.S. deterrence and combat capability in the late 2020s?

Secretary KENDALL. General Douglas MacArthur said, "military failure can almost always be summarized in just two words: 'Too late.'" Time is an asset that can never be recovered or replaced. Delayed funding for CCA would delay our ability to add the strategic depth to our fighter inventory that can effectively deter, and if necessary, defeat our pacing competition. For example, we need on time fiscal year 2024 funding to stand up the Experimental Operations Unit (EOU) and begin the Viper Experimentation and Next-gen Operations Model (VENOM) effort. These fiscal year 2024 New Starts are critical to working the tactics, techniques, and procedures (TTPs) and CONOPS necessary to deploy CCA capability on our accelerated timeline.

107. Senator COTTON. Secretary Kendall, with the Navy also working on CCAs is there any coordination for interoperability of these platforms with the Navy?

Secretary KENDALL. The DAF and the Department of the Navy (DON) are in close communication on CCA and plan to leverage common mission systems, architectures, datalinks, and other technologies to ensure interoperability across the Services.

108. Senator COTTON. Secretary Kendall, what is the extent and status of that coordination? Is any joint testing planned to help expedite CCA development and fielding?

Secretary KENDALL. The DAF and the Department of the Navy (DON) are finalizing a partnership agreement that will outline the specifics of the two Services' coordination on CCA development and fielding. The DAF plans to initiate a new effort called the Experimental Operations Unit (EOU) (This is a New Start effort in the Fiscal Year 2024 President's Budget Request). The EOU will explore areas such as updates to doctrine, organizational structure, training, force structure and integration, basing requirements, sustainment concepts, and other non-materiel categories. We expect the EOU to learn and operate existing uncrewed air vehicles alongside the USN and the Royal Australian Air Force to develop tactics, techniques, procedures, and standard operating procedures. This early learning will help inform CCA development and fielding.

E–7

109. Senator COTTON. Secretary Kendall, last year you stated that "there are things that we could do . . . to maybe get access to E–7 aircraft earlier one way or another." Boeing executives at the Farnborough International Airshow last year stated that their company was "ready and willing to accelerate the Wedgetail schedule" ahead of the 2027 timeline. Congress provided a $200 million congressional add to specifically accelerate the delivery of initial E–7s. With that money having been provided to Boeing, has Boeing been able to realize any of the advertised acceleration to their initial E–7 delivery schedule? If yes, when is the first E–7 now assessed to be delivered? If not, how is the service ensuring accountability for those funds not achieving their stated purpose?

Secretary KENDALL. While the Air Force still expects the first E–7 prototype aircraft to deliver in 4QFY27, the fiscal year 2023 congressional adds acceleration of requirements, engineering, and design work has reduced schedule and supply chain risk while offering the potential for additional risk reduction.

The fiscal year 2023 congressional add enabled the DAF to send Boeing a Pre-Contract Cost Authorization in September 2022. With that letter in hand, Boeing leaned forward hiring personnel 6-months early to support proposal preparations and contract award. Specific benefits of those actions included:

- Ordered long-lead items for two E–7A Rapid Prototyping aircraft 5-months earlier than otherwise possible.
- Pulled the System Requirements Review (SRR) and System Functional Review (SFR) 3-months left from July 2023 to April 2023. Both SRR and SFR were held within 43-days of contract award.
- Began Software (SW) development. First SW capability demonstration and program increment (PI) conducted 6-months earlier than otherwise possible.
- Started SW co-development 6-months earlier than otherwise possible.
- First iterative design review (Preliminary Design Review-like event) will be held in June 2023, 3-months earlier than original date (September 2023).
- Boeing awarded contract with Northrop Grumman and Collins 3-months earlier than otherwise possible.

For fiscal year 2024, an opportunity exists to expedite the fielding of the first two production E–7As. This was presented in the fiscal year 2024 E–7A Unfunded Priority List (UPL). If the UPL is funded, long-lead items for two E–7A production aircraft would begin production in fiscal year 2024 pulling delivery on those first two production tails into fiscal year 2028. On the baseline plan, the first two production aircraft will deliver in fiscal year 2029 and fiscal year 2030.

110. Senator COTTON. Secretary Kendall, in February you met with top British defense officials and discussed accelerating E–7 test and evaluation through joint testing using the U.K. E–7. Are there plans to leverage U.K. E–7s to expedite test and evaluation of the E–7?

Secretary KENDALL. Yes. The Air Force is working closely with both the UK and Australia to leverage existing data and to collaborate in ongoing testing, training, exercises, and operations to expedite the test and evaluation portion of the E–7A acquisition program.

111. Senator COTTON. Are there any other steps being taken by the department to expedite the E–7 as a fielded capability?

Secretary KENDALL. The Air Force is executing an aggressive rapid prototyping acquisition strategy as its baseline plan and is continuously evaluating opportunities for additional schedule savings. For fiscal year 2024, an opportunity exists to expedite the fielding of the first two production E–7As. This opportunity was presented in the fiscal year 2024 E–7A Unfunded Priority List (UPL). If the UPL is funded, long-lead items for two E–7A production aircraft would begin production in fiscal year 2024 pulling delivery on those first two production tails into fiscal year 2028. On the baseline plan, the first two production aircraft will deliver in fiscal year 2029 and fiscal year 2030. Additionally, to expedite our operational capability once USAF E–7s are delivered, the Air Force is leveraging the Military Personnel Exchange Program with the Royal Australian Air Force (RAAF) E–7A Wedgetail program to build a foundation of operations and maintenance knowledge to accelerate a smooth transition from the E–3 to E–7. From fiscal year 2023 to fiscal year 2026, the Air Force is sending 25 operators (Pilots, Electronic Warfare Officers, Air Battle Managers) and 25 maintenance personnel (mix of Crew Chiefs, Avionics, Radar, and Computer) to train and fully integrate with the RAAF for 3 years. The Air Force plans to repeat this process from fiscal year 2027 to fiscal year 2030 with a different pool of personnel.

ACQUISITION TIMELINES

112. Senator COTTON. Secretary Kendall, you brought up the concept of "Too Late"—A DARPA study showed that Test and Evaluation times have ballooned over 1000 percent since the 70's and is the largest source of timeline growth in fielding new systems. I applaud the department's aggressive stance on digital engineering to decrease production times but with the urgent need to modernize our current systems and field the next generation of aircraft as quickly as possible—what steps is the Department taking to decrease Test and Evaluation times not just for future systems but also in modernizing current systems?

Secretary KENDALL. Weapon systems of 50 years ago were orders of magnitude less complicated. Hardware and software were far simpler than their modern counterparts, and contemporary challenges like robust cross-system integration and the cyber domain did not exist. These dramatic increases in complexity have driven the Air Force to fundamentally reevaluate how we view and execute Test. To provide a coherent and enduring path that builds on improvements already made, the Air Force has begun an initiative termed "Accelerate Test or Lose." This initiative will explore how to leverage best practices in digital engineering, modeling and simulation, and digital ranges to accelerate development and delivery of safe, reliable, and sustainable capability to the war fighter. While currently still in progress, the "Accelerate Test or Lose" initiative has uncovered several potential changes with high impacts to fielding capabilities faster. The Air Force will begin implementation of easy change/high-impact options as early as late fiscal year 2023.

QUESTIONS SUBMITTED BY SENATOR JONI ERNST

B–21 REQUIREMENTS

113. Senator ERNST. General Brown, would you agree that DOD should reevaluate its B–21 requirement upward of 100 bombers?

General BROWN. The fiscal year 2024 budget proposal supports both the B–21 program and B–52 modernization, to realize our currently planned bomber force of 100 B–21s and 75 B–52s. As we approach force structure decision points in future budgets, the Air Force will continue to assess the strategic environment to inform our long-range strike capacity investments.

NUCLEAR BOMBER ALERT

114. Senator ERNST. General Brown, do you have high confidence that Air Force nuclear bombers have readiness to maintain an extended day-to-day alert posture, if a policy decision is made in that regard? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General BROWN. Due to classification, I will provide my answer to this question in classified document.

115. Senator ERNST. General Brown, for how long could bombers maintain an extended day-to-day alert posture? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General BROWN. Due to classification, I will provide my answer to this question in classified document.

116. Senator ERNST. General Brown, would you support a requirement that the Air Force must maintain readiness to execute an extended day-to-day alert posture, if directed?

General BROWN. Due to classification, I will provide my answer to this question in classified document.

SPACE SENSORS

117. Senator ERNST. General Saltzman, how would fully funding the Ground Moving Target Indicator program help DOD execute its Title 10 responsibility to win war if deterrence fails? Please provide an unclassified answer to the extent possible; please provide an additional classified answer if necessary.

General SALTZMAN. Joint and coalition forces must overcome adversary anti-access/area denial capabilities to prosecute surface moving targets on compressed timelines. The USSF space-based GMTI systems will provide detection, tracking, and weapons data links to close long-range kill-chains for ground and maritime targets at scale in highly contested environments and will afford the warfighter 100 percent of sensor allocated capacity. GMTI is critical due to Joint Surveillance Target Attack Radar System (JSTARS) divestiture and ISR modernization. The Joint Force must be able to perform the MTI mission on a global scale in near real-time. GMTI will replace some of the capability provided by JSTARS aircraft due to deficiencies in JSTARS survivability, speed, range, and sensor performance. Additionally, GMTI is being designed for maximum resiliency and survivability in a near-peer conflict. This capability will increase survivability of the Joint Force and enable weapons employment on tactically relevant timelines.

Funding of the space segment in fiscal year 2024 enables long-lead procurement for payload hardware required to support GMTI launch dates in fiscal year 2027 and fiscal year 2028. The USSF's partnership with the Intelligence Community en-

ables the service to field this warfighter capability much faster than originally planned. An fiscal year 2024 funding shortfall delays initial launch capability by over a year, decelerates the pace of system delivery, and delays deployment of an operationally relevant full warfighting capability.

QUESTIONS SUBMITTED BY SENATOR DAN SULLIVAN

RECENT E–7 WEDGETAIL

118. Senator SULLIVAN. Secretary Kendall and General Brown, approximately 1 year, ago the Air Force conducted its first training exercise with Royal Australian Air Force E–7 Wedgetails. As you well know, our procurement of the E–7 Wedgetail will ensure interoperability with our allies and provide us with a robust ISR and battlefield management tool. Speaking before the Committee earlier this year, NORTHCOM Commander Gen. VanHerck's reiterated the importance of the E–7 Wedgetail and his hope that the Air Force could procure them faster to give NORAD greater domain awareness. Your Unfunded Priority List indicates you agree with Gen. VanHerck. As we have all seen over the last several months, Chinese Spy Balloons, high altitude flying objects, and Russian Bear bombers all require greater domain awareness in the Arctic. Upgrading from the E–3 to the E–7 is essential to enhancing our domain awareness. What steps are you taking to accelerate E–7 training and procurement?

Secretary KENDALL and General BROWN. The Air Force is leveraging the Military Personnel Exchange Program with the Royal Australian Air Force (RAAF) E–7A Wedgetail program to build a foundation of operations and maintenance knowledge to accelerate a smooth transition from the E–3 to E–7. From fiscal year 2023 to fiscal year 2026, the Air Force is sending 25 operators (Pilots, Electronic Warfare Officers, Air Battle Managers) and 25 maintenance personnel (mix of Crew Chiefs, Avionics, Radar, and Computer) to train and fully integrate with the RAAF for 3 years. The Air Force plans to repeat this process from fiscal year 2027 to fiscal year 2030 with a different pool of personnel. The USAF/RAAF E–7A exchange is an essential first step in establishing an initial cadre for Air Force E–7A operations and maintenance. Additionally, it strengthens strategic partnerships in INDOPACOM while increasing future interoperability through Tactics, Techniques and Procedures refinement. Finally, this exchange will accelerate USAF E–7A initial training capacity to maximize the E–7A's operational impact once USAF aircraft are delivered.

Regarding procurement, the Air Force is executing an aggressive rapid prototyping acquisition strategy as its baseline plan and is continuously evaluating opportunities for additional schedule savings. For fiscal year 2024, an opportunity exists to expedite the fielding of the first two production E–7As. This opportunity was presented in the fiscal year 2024 E–7A Unfunded Priority List (UPL). If the UPL is funded, long-lead items for two E–7A production aircraft would begin production in fiscal year 2024 pulling delivery on those first two production tails into fiscal year 2028. On the baseline plan, the first two production aircraft will deliver in fiscal year 2029 and fiscal year 2030.

119. Senator SULLIVAN. Secretary Kendall and General Brown, what steps are you taking to accelerate E–7 deliveries to the operating forces?

Secretary KENDALL and General BROWN. The Air Force is executing an aggressive rapid prototyping acquisition strategy as its baseline plan and is continuously evaluating opportunities for additional schedule savings. For fiscal year 2024, an opportunity exists to expedite the fielding of the first two production E–7As. This opportunity was presented in the fiscal year 2024 E–7A Unfunded Priority List (UPL). If the UPL is funded, long-lead items for two E–7A production aircraft would begin production in fiscal year 2024 pulling delivery on those first two production tails into fiscal year 2028. On the baseline plan, the first two production aircraft will deliver in fiscal year 2029 and fiscal year 2030.

120. Senator SULLIVAN. Secretary Kendall and General Brown, in your conversations with Boeing, have they identified specific bottlenecks to accelerating E–7 production and delivery?

Secretary KENDALL and General BROWN. The DAF and Boeing are already executing the E–7A Rapid Prototyping effort at maximum speed to support accelerated production. The fiscal year 2024 Unfunded Priorities List addresses one of the limiting factors by accelerating long lead procurement of material, but the two primary limiting factors are the timelines for green aircraft production and the production process of the Multifunction Electronically Scanned Array radar. The ability to ac-

celerate the learning curve for the high-skill, high touch-time radar production process has challenged efforts to accelerate the UK E–7 radar delivery to date.

AIR FORCE FIGHTER ACQUISITION

121. Senator SULLIVAN. Secretary Kendall and General Brown, this year's budget includes a request for 72 new fighters—48 F–35As and 24 F–15EX Eagle IIs—to modernize the fleet. Over the last few months, the Alaska-based fighter fleet has been active in the homeland defense mission, intercepting Russian Bear bombers, Chinese spy balloons, and other high altitude flying objects. These Alaska-based fighters are under INDOPACOM control however. In the event of a conflict with the People's Republic of China (PRC), they would likely be deployed into combat, requiring other aircraft to backfill the homeland defense mission in Alaska. How will the Air Force's fighter acquisition plan improve homeland defense?

Secretary KENDALL and General BROWN. The Homeland Defense Mission is the #1 DAF mission priority and will always be covered, so there is minimal risk. If Alaska Homeland Defense assets forward deploy in the Indo-Pacific, we will fleet manage aircraft from other units to Homeland Defense and accept risk in other mission areas. Our fighter acquisition plan is critical to modernizing our aging Air National Guard fighter fleets that perform the majority of our daily homeland defense alert duties. With the help of Congress, we have fielded modern capabilities like Active Electronically Scanned Array (AESA) radars in our F–15C/D and F–16 Block 30 aircraft; however, the aircraft themselves are among the oldest in our inventory and are nearing or exceeding service life. Replacing these aircraft with F–16 Block 40, F–15EX or F–35 will ensure our homeland defense fighters can detect and mitigate threats while reducing the risks and costs of operating legacy aircraft.

122. Senator SULLIVAN. Secretary Kendall and General Brown, what homeland defense risks will the Air Force incur if the fighter procurement timeline is interrupted?

Secretary KENDALL and General BROWN. The Homeland Defense Mission is the #1 DAF mission priority and will always be covered, so there is minimal risk. However, if procurement of F–15EX or F–35 aircraft is interrupted, we will fleet manage aircraft from other units to Homeland Defense and accept risk in other mission areas. The F–15C/D aircraft averages nearly 40 years of age, has exceeded its service life, and can't be extended without significant risk to our aircrew.

HOMELAND DEFENSE

123. Senator SULLIVAN. Secretary Kendall and General Brown, what different capabilities do the F–15EX and F–35 bring to the homeland defense mission compared to the F–15C/D and F–16?

Secretary KENDALL and General BROWN. The F–15E/EX, F–16, F–22 and F–35 all possess the weapons and sensors required to execute the Homeland Defense mission. The F–15E/EX and F–16s with Active Electronically Scanned Array (AESA) radars are preferred platforms for Homeland Defense because our stealth F–22 and F–35 aircraft can be preserved for operations in more contested environments. Although not stealthy, the F–15E/EX offers significant sensor, range, and payload capabilities over the other fighters, while the F–16 is our most affordable fighter and provides capacity in meeting all our Homeland Defense requirements.

F–15Cs have reached the end of their useful service life and are not able to survive in a contested environment. The fiscal year 2024 President's Budget (PB) divests the remaining 54 F–15C/Ds in fiscal year 2024.

SPACE FORCE RECRUITMENT

124. Senator SULLIVAN. General Saltzman, unlike some of the other services, Space Force had no issues meeting recruitment goals over the last 2 years. Last year General John Raymond, the former Chief of Space Operations, stated you have more people looking to join than you can take on. In fact, when the Space Force went looking for cyber professionals who had worked in private industry, hundreds of people applied but your service only took six of them. Why has Space Force recruitment been so successful over the last 2 years?

General SALTZMAN. We are seeking the best and the brightest with a passion to serve. During our first 2 years, over 1500 qualified recruits raised their hands to volunteer for nearly 900 enlisted positions. We have expanded bonuses and removed barriers to entry, through relaxed tattoo policies, modified THC waivers, modified body fat composition, and other efforts which have expanded our talent pool. We are also engaged in robust "STEM to Space" and "Guardian Enhanced Active Recruiting" or "G.E.A.R" outreach programs, which place guardians in communities to mes-

sage and advocate the USSF mission. "STEM to Space" was designed to facilitate virtual connections between guardians and K–12 classrooms to share the importance of STEM careers related to space. Volunteers represent the Space Force in online forums, high school and college visits, and participate in marketing and other events that aid in raising awareness.

125. Senator SULLIVAN. General Saltzman, do you think direct commissioning opportunities are helping recruit the talent you need?

General SALTZMAN. We believe the program can help in expanding the breadth of talent needed to compete in the space domain, however, is too early in the pipeline to declare success. We will continue to review our ability to attract talent, monitor their performance on active duty and, as one of the areas to improve, expedite necessary clearances.

126. Senator SULLIVAN. General Saltzman, can you elaborate on the details of the targeted recruiting strategy you mentioned during the hearing?

General SALTZMAN. In addition to the outstanding support from Air Force Recruiting Service, removal of accession barriers, and our robust outreach programs, we have observed high interest from the Air Force Academy and ROTC cadet cohorts. We implemented our Constructive Service Credit program for Cyber professionals and received over 400 applications, which went through a very rigorous screening and qualification process, resulting in six candidates who successfully completed the process. The six individuals were commissioned as Cyber officers in the grades of 1st Lieutenant to Lieutenant Colonel. Moreover, the Space Force University Partnership Program creates a pipeline for future Space Force officers and civilians through ROTC and internship programs. We will recruit from a diverse group of universities to ensure the strongest possible field of future guardians and STEM talent including from underrepresented populations. We currently have 14 partner universities.

QUESTIONS SUBMITTED BY SENATOR TOMMY TUBERVILLE

SPACE COMMAND HEADQUARTER LOCATION

127. Senator TUBERVILLE. Secretary Kendall, we need a decision on Space Command's headquarters. Many of us are worried the next war is going to start in space and that the U.S. is behind. If this were a track race, we'd still be on the starting blocks and China and Russia would be halfway around the track. Redstone Arsenal in Huntsville, Alabama has, by every quantitative metric, proven to be the best location for SPACECOMM HQ. This is an objective fact not in dispute. Last year, General Dickinson said his biggest hurdle to reaching full operational capability is the basing decision. The Secretary of the Air Force has final basing authority, correct?

Secretary KENDALL. Yes. The Secretary of Defense has delegated the decision to the Secretary of the Air Force. Space Command will reach full operational capability later this summer, independent of the basing decision.

128. Senator TUBERVILLE. Secretary Kendall, would you agree that the major source of the delay has been congressional objections? If not, what is the primary source of delay at this point?

Secretary KENDALL. The Department of the Air Force took appropriate action to support oversight reviews of the USSPACECOM headquarters basing process and to complete the recommendations those reviews contained. These actions required additional time.

129. Senator TUBERVILLE. Secretary Kendall, the number two preferred location was Nebraska. Were any objections raised by elected Members of Congress from Nebraska?

Secretary KENDALL. On January 12, 2021, my predecessor, Secretary Barbara Barrett, selected Huntsville, Alabama as the preferred location for USSPACECOM headquarters and designated all other candidates as reasonable alternatives. The reasonable alternatives were not rank ordered. As part of congressional notification, we provided selection process information to the elected Members of Congress from Nebraska, who did not formally object to the process.

130. Senator TUBERVILLE. Secretary Kendall, the number three location was Texas. Were extra studies requested by and Members of the Texas delegation?

Secretary KENDALL. On January 12, 2021, my predecessor, Secretary Barbara Barrett, selected Huntsville, Alabama as the preferred location for USSPACECOM headquarters and designated all other candidates as reasonable alternatives. The reasonable alternatives were not rank ordered. As part of congressional notification, we provided selection process information to the Members of the Texas delegation, who did not request additional studies.

131. Senator TUBERVILLE. Secretary Kendall, which State delegation initiated a congressional inquiry?

Secretary KENDALL. As documented in public record, the delegates from Colorado requested the House Armed Service Committee Investigator, the Government Accountability Office, and the Department of Defense Inspector General review the process used to select the USSPACECOM headquarters.

132. Senator TUBERVILLE. Secretary Kendall, the Colorado congressional delegation, a State that was, at best, determined to be the number four location preference, has unnecessarily delayed confirmation of Huntsville as the choice for Space Command's new headquarters for more than 2 years. What is the current status of that decision?

Secretary KENDALL. The Department of the Air Force is completing the recommendations contained in the reviews by the Government Accountability Office and the Department of Defense Inspector General. We anticipate a final decision after a thorough review of all current information.

133. Senator TUBERVILLE. Secretary Kendall, how many more reviews need to be conducted in order to further confirm Redstone Arsenal as the preferred location for SPACECOM's headquarters?

Secretary KENDALL. We anticipate a final decision after a thorough review of all current information.

QUESTIONS SUBMITTED BY SENATOR ERIC S. SCHMITT

MANAGEMENT INITIATIVES AND OUTCOMES

134. Senator SCHMITT. Secretary Kendall, you referenced management initiatives that you have implemented to "introduce well-defined metrics for each part of the Air Force." Can you provide a summary of the initiatives you were referencing and direct us to the relevant initiative implementation guidance?

Secretary KENDALL. The Management Initiatives (MIs) were initiated in November 2021 to outline organizational changes and management initiatives necessary to improve the efficiency and effectiveness of how the Department of the Air Force headquarters staff operates. The 11 MIs included many of the business functions to include: Tech Debt, Cyber, Organizational Assessments, Financial Management, and Metrics. The purpose of the Metrics initiative was to establish the baseline for Department of the Air Force (DAF) performance metrics and measures. While this effort is just beginning, the DAF has laid the foundation for a performance management effort that will support leaders at all levels in making timely and informed decisions; decisions that are measurable, attainable, and supported by accurate and timely data.

135. Senator SCHMITT. Secretary Kendall, you stated that the above-referenced initiatives have allowed the Department of the Air Force to realize cost savings. Can you provide a summary of those savings and supporting documentation?

Secretary KENDALL. The DAF is making smart investment decisions with a focus on long-term benefits freeing funds to deliver Enterprise capabilities that enable the warfighter to counter characteristics unique to the China threat, while facilitating true collaboration with our allies and partners. Using the Management Initiatives as the backdrop, we embarked on the whole of DAF approach to identify investments for prioritization and funding advocacy.

In the fiscal year 2024 budget submission, the DAF invested approximately $209 million in six projects to realize future management efficiencies. Based on these investments, the DAF will be able to: scale essential DAF Data investments for operational warfighting requirements, business efficiency, and decision advantages; deploy session controllers to support Voice over Internet Protocol (VoIP) transition from the legacy infrastructure; and replacing legacy contract writing and manage-

ment systems with one interoperable system. Further, the DAF anticipates these additional benefits from the investments:

- Improved Financial Improvement and Audit Readiness (FIAR) compliance;
- Enhanced Category Management disciplines for DAF Information Technology (IT) Assets, Strategic Sourcing, and Demand Management; and
- Increased use of Development Design System across the DAF for software development, including classified environments and weapon systems.

The DAF has begun implementing the recommendations from Management Initiatives (MIs). For example, the DAF is consolidating software buys into enterprise license agreements (ELA). The first of our ELAs is for ServiceNow and is expected to be awarded before the end of this fiscal year. It will consolidate approximately 40 instances of ServiceNow into a much more compact architecture and will combine separate contracts under one umbrella. Once complete, this action will save $17 million across the DAF in fiscal year 2024 and will grow each year after as more functions are added.

The DAF is positioning itself for the future fight, however changes of this scope and magnitude will not be accomplished overnight. The DAF is taking steps to improve processes that are expected to result in efficiencies and cost savings, and to streamline decisionmaking to enable DAF leaders to better execute their respective missions. As Secretary, I will continue to drive efficiencies at all levels of the DAF in support of our airmen and guardians.

DIVERSITY EQUITY AND INCLUSION (DEI) RESOURCE EXPENDITURE

136. Senator SCHMITT. Secretary Kendall, in mid-March I sent a letter to Secretary Austin asking about his civilian workforce and about his training priorities for the force. I have yet to receive a response from Secretary Austin, so I am hopeful that you can answer these questions for me about the Department of the Air Force. How many DEI-related positions exist in the Department of the Air Force?

Secretary KENDALL. The DAF has approximately 70 Diversity, Equity, Inclusion and Accessibility (DEIA) related positions.

137. Senator SCHMITT. Secretary Kendall, can you identify the job titles, number of positions that exist for each job title, and salary range for each DEI-related position in the Department of the Air Force?

Secretary KENDALL. The table included below includes Service, MAJCOM, unit, salary, grade, and title.

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	ACC	AIR COMBAT COMMAND (OL CS00)	$137,469	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	ACC	70 INTL-SURVEIL-RECON WING	$94,199	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	ACC	688 CYBERSPACE WING	$109,066	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL A1A1)	$86,693	GS12	RATED DIVERSITY IMPROVEMENT (RDI) PROGRAM ANALYST
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL A1A1)	$99,764	GS13	RATED DIVERSITY IMPROVEMENT (RDI) PRGRAM ANALYST
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL A1A1)	$116,390	GS13	RATED DIVERSITY IMPROVEMENT (RDI) PRGRAM ANALYST
USAF	AETC	AIR EDUC AND TRNG COMMAND (OL CD01)	$125,750	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AF TAC	709 SUPPORT SQUADRON	$86,179	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	AFCCT	AF CIV CAREER TNG—FOA (OL FR)	$57,853	GS07	DIVERSITY & INCLUSION PROGRAM MANAGER/ CAMPUS LIAISON
USAF	AFMC	AF INST MSN SPT CENTER (OL DP00)	$126,366	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	AF MATERIEL COMMAND (OL A1)	$153,851	NH04	CHIEF, HQ AFMC EQUAL OPPORTUNITY AND DIVERSITY

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	AFMC	AF NUCLEAR WPNS CENTER (OL DPHL)	$115,320	NH03	DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	AF RESEARCH LAB	$146,722	DR03	DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	75 AIR BASE WING	$117,286	NH04	DIVERSITY, EQUITY AND INCLUSION CHIEF
USAF	AFMC	78 AIR BASE WING	$139,759	NH04	DIVERSITY, EQUITY AND INCLUSION CHIEF
USAF	AFMC	88 AIR BASE WING	$105,696	NH03	INSTALLATION DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	96 TEST WING	$52,185	NH02	DIVERSITY AND INCLUSION SPECIALIST
USAF	AFMC	96 TEST WING	$79,780	NH02	DIVERSITY AND INCLUSION OFFICER
USAF	AFMC	96 TEST WING	$86,541	NH03	DIVERSITY AND INCLUSION SPECIALIST
USAF	AFMC	412 TEST WING	$153,010	NH04	DIVERSITY, EQUITY AND INCLUSION CHIEF
USAF	AFOSI	AF OFF SPEC INVEST—FOA	$145,604	GS14	DIVERSITY AND INCLUSION OFFICER
USAF	AFR	HQ AF RESERVE COMMAND	$128,031	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AFSOC	AF-SPEC-OPNS COMMAND (OL A100)	$108,345	GS13	CULTURE AND DIVERSITY SPECIALIST
USAF	AMC	MOBILITY COMMAND (OL CD00)	$130,889	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AMC	6 AIR REFUELING WING	$121,477	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	AMC	60 AIR MOBILITY WING	$102,489	GS12	DIVERSITY AND INCLUSION COORDINATOR
USAF	AMC	62 AIRLIFT WING	$92,123	GS12	DIVERSITY AND INCLUSION MANAGER
USAF	AMC	87 AIR BASE WING	$115,118	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	GLOBAL STRKE	AF GLOBAL STRIKE COMMAND (OL DS00)	$131,911	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	GLOBAL STRKE	377 AIR BASE WING	$144,941	GS14	DIVERSITY AND AFFIRMATIVE EMPLOYMENT SPECIALIST
USAF	HQ AFMOA	AF MD READINESS AGENCY—FOA (OL SG09)	$154,428	GS14	DIVERSITY AND INCLUSION PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$145,604	GS14	DIVERSITY AND INCLUSION PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$150,016	GS14	CIVILIAN DIVERSITY PROGRAM MANAGER (DIVERSITY & INCLUSION)
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$208,767	SES	DIRECTOR, OFFICE OF DIVERSITY AND INCLUSION
USAF	NASIC	NAT AIR-SP INT CENTER—FOA	$124,495	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	PACAF	PACIFIC AIR FORCES COMMAND	$121,059	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	US AFA	DIRCT OF ATHLETICS UNIT	$108,129	AD22	ADVANCED PHYSICAL EDUCATION INSTRUCTOR (DIVERSITY PROGRAMS)
USAF	US AFA	USAF ACADEMY—DRU	$110,092	GS12	DIVERSITY PROGRAM RESEARCH ANALYST

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	US AFA	USAF ACADEMY—DRU	$114,129	GS13	DIVERSITY AND INCLUSION ANALYST
USAF	US AFA	USAF ACADEMY—DRU	$149,307	GS15	CHIEF CULTURE CLIMATE AND DIVERSITY AND INCLUSION
USAF	USAFE	USAF IN EUROPE COMMAND (OL A100)	$106,568	GS14	SUPERVISORY, DIVERSITY AND INCLUSION OFFICER
USAF	USNORTHCOM	AFELM US NORTH COM (OL J1HP)	$119,000	GS14	CHIEF DIVERSITY AND INCLUSION OFFICER
USAF	USSOCOM	AFELM US SOCOM (OL CS00)	$105,062	GS13	DIVERSITY AND INCLUSION OFFICER
USAF	USSTRATCOM	US STRATEGIC CMD (OL J0CS)	$105,982	GS13	CHIEF DIVERSITY AND INCLUSION OFFICER
USSF	HQ USSF	CHIEF OF SPACE OPS HEADQUARTERS (OL SF00)	$131,454	NH04	DIRECTOR, DIVERSITY AND INCLUSION
USSF	HQ USSF	CHIEF OF SPACE OPS HEADQUARTERS (OL SF00)	$137,460	NH04	DIRECTOR, DIVERSITY AND INCLUSION
USSF	USSF	HQ SPOC COMMAND (OL S1)	$127,111	NH04	CHIEF DIVERSITY AND INCLUSION OFFICER
USSF	USSF	1 SPACE BASE DELTA (OL A)	$93,155	GS12	DIVERSITY AND INCLUSION COORDINATOR
USSF	USSF	2 SPACE BASE DELTA	$91,753	GS12	DIVERSITY AND INCLUSION COORDINATOR
USSF	USSF	3 SPACE BASE DELTA	$99,102	GS12	DIVERSITY AND INCLUSION COORDINATOR
USSF	USSF	30 SPACE LAUNCH DELTA	$73,805	NH02	DIVERSITY & INCLUSION COORDINATOR
USSF	USSF	30 SPACE LAUNCH DELTA	$124,677	GS12	DIVERSITY & INCLUSION COORDINATION
USSF	USSF	45 SPACE LAUNCH DELTA	$89,031	NH03	DIVERSITY AND INCLUSION COORDINATOR.
USSF	USSF NON-HQ	1 SPACE BASE DELTA	$95,978	GS12	DIVERSITY AND INCLUSION COORDINATOR
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$117,891	GS14	DEPARTMENT OF THE AF DISABILITY PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$132,368	GS14	AIR FORCE AFFIRMATIVE EMPLOYMENT PROGRAM/SPECIAL EMPHASIS
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$145,604	GS14	DIVERSITY AND INCLUSION PROGRAM MANAGER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$150,016	GS14	CIVILIAN DIVERSITY PROGRAM MANAGER (DIVERSITY & INCLUSION)
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL OS00)	$208,767	SES	DIRECTOR, OFFICE OF DIVERSITY AND INCLUSION
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,277	36–TSGT	NCOIC, STRATEGIC OUTREACH
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$69,345	37-MSGT	SUPER, STRAT, GOV & POL
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$58,197	03–CAPT	EDUCATION & TRNG DEP BRANCH CH
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,196	04–MAJ	EXECUTIVE OFFICER, SAF/DI

BOS	MAJCOM	UNIT DERIVED	Salary	GRADE	DEI Title
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,196	04–MAJ	EXECUTIVE OFFICER
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$66,196	04–MAJ	DEP CHIEF, STRATEGY/POLICY/GOV
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	DIRECTORS ACTION GROUP CHIEF
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	CHIEF, STRATEGIC OUTREACH
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	CHIEF, STRAT ENGAGEMENT & OUT
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$76,719	05–LTCOL	DEP DIV CHIEF, DATA ANALYTICS
USAF	HQAF SUP AGY	US AIR FORCE HEADQUARTERS (OL DI00)	$92,030	06–COL	DEPUTY DIRECTOR

138. Senator SCHMITT. Secretary Kendall, can you estimate the number of mandatory DEI-related training sessions conducted in 2022, and the total number of hours those sessions consumed?

Secretary KENDALL. The Department of the Air Force has implemented training at various stages of members' careers and developmental paths in accordance with Executive Order (EO) 14305. Line (a) in section 9 of EO 14305 states "The head of each agency shall take steps to implement or increase the availability and use of diversity, equity, inclusion, and accessibility training programs for employees, managers, and leadership. Such training programs should enable Federal employees, managers, and leaders to have knowledge of systemic and institutional racism and bias against underserved communities, be supported in building skillsets to promote respectful and inclusive workplaces and eliminate workplace harassment, have knowledge of agency accessibility practices, and have increased understanding of implicit and unconscious bias."

The following table identifies training implemented by Air Force Instruction 36–7001 dated 19 February 2019 (currently in re-write) and executed IAW EO 14305. Time spent for each training requirement is included on the following table.

Diversity & Inclusion Training Courses (IAW DAF Instruction 36–7001)

Targeted Trainee	D&I Module Duration
Basic Military Training (BMT) trainee	3 hours total
Enlisted member on his or her first permanent duty assignment	1 hour
Airman Leadership School (ALS) student	2 hours
Non-Commissioned Officer Academy (NCOA) student	2 hours
Senior Non-Commissioned Officer Academy (SNCOA)	1.5 hours
Enlisted Professional Enhancement (PE) Course (NCO/SNCOPE) student	1 hour
First Sergeant Academy student	2 hours
Chief Master Sergeant	2 hours
New Installation/Center Commander(s) (director), Group Commander(s), Squadron Commander(s), Detachment Commander(s), Section Commander(s), Command Chief Master Sergeant(s)	1 hour
Officer Training School (OTS) trainee	3 hours
Reserve Officer Training Corps (ROTC) cadet	16 hours over 4 years

Diversity & Inclusion Training Courses (IAW DAF Instruction 36–7001)—Continued

Targeted Trainee	D&I Module Duration
United States Air Force Academy (USAFA) Preparatory School cadet	2 hours total
USAFA cadet	16 hours over 4 years
Squadron Officer School (SOS) student	2 hours
Air Command and Staff College (ACSC) student	1 hour
Air War College (AWC) student	1 hour
New Flag or General Officer (F/GO) and SES personnel	1 hour
Recruiter as defined in DODI 1304.33	2 hours
Military Training Instructor (MTI)—when selected to become a training instructor)	2 hours
New Employee Orientation	1 hour
New Supervisor Orientation	1 hour
Experienced Supervisor Training	1 hour
New Manager Course	1 hour
Experienced Manager Course	1 hour
Senior Manager Course	1 hour
D&I Program Manager or Chief Diversity & Inclusion Officer	On-going

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Table 1. Plan Choices for Military Beneficiaries Compared to Federal Civilians

#	QFR	Air Force UPL Item #1	Air Force UPL Item #2	Air Force UPL Item #3	Air Force UPL Item #4	Air Force UPL Item #5	Air Force UPL Item #6
39	General Brown, for each item on the unfunded priorities list you submit in response to 10 U.S.C. 222a, please provide the following information:	Accelerate E–7 delivery ($633.3 million)	Prioritized MILCON List ($1,223.4 million)	Post-block F–16 AESA radar ($174.4 million)	Fund ISR Digital Infrastructure ($129.8 million)	F–15EX Conformal Fuel Tank ($63.6 million)	(OI–5) Agile Communications Equipment ($227.8 million)
40	General Brown, please provide a detailed description of this UPL?	The funding would procure long lead items for the production of two E–7s. Long lead items include the basic 737 aircraft and the Multifunction Electronically Scanned Array (MESA) radar. The funding increases the fiscal year 2025 procurement profile from 1 to 2, and mitigates risk in the procurement to delivery schedule. The funding also adds research and development funds for rapid prototyping aircraft to reduce risk in the Middle Tier Acquisition schedule.	The MILCON UPL is a list of construction projects of varying scope and cost at various CONUS and OCONUS locations. The increaseing costs of contruction projects exceed orignally programmed MILCON amounts. Each project is unique, but each project is aligned with Air Force priorities that improve mission capabilities and Quality of Life.	The request funds the APG–83 AESA radar, enabling the post-block F–16 fleet to execute Homeland Defense missions.	The funds underlying classified commercial cloud based capabilities provided as metered on-demand services from the Intelligence-governed and secured to meet DAF SCI requirements. Focus is on TS/SCI capabilities as shared enterprise services for Air Force and Space Force and bridges IC applications and data with the DAF solutions in support of multi-domain operations. This will also modernize DCGS capabilities and provide enterprise architecture experts and environment at TS/SCI levels to continue to accelerate change and create mission value.	Procures 12 CFTs for previously procured F–15EX aircraft. CFTs add critical capability: increased fuel/range, 12 additional weapons stations (wired for advanced smart munitions) and enables the F–15EX to perform full range of air-to-air and air-to-ground missions.	Funding this program will enhance the Air Force's capability to conduct operations from forward operating locations and enhance air base resiliency. USAF combat unit's ability to operate and communicate from dispersed locations within the Second Island Chain will be enabled by connections in the development and fielding of hardware and software for future open mission systems platforms and the ability to develop new/modify existing communication pathways. Funding for Agile Communications Equipment supports the NDS's Resilient Future Force design with decision advantage.

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Table 1. Plan Choices for Military Beneficiaries Compared to Federal Civilians

#	QFR	Air Force UPL Item #1	Air Force UPL Item #2	Air Force UPL Item #3	Air Force UPL Item #4	Air Force UPL Item #5	Air Force UPL Item #6
41	General Brown, what does the UPL purchase	The funding will accelerate delivery of two E–7 aircraft and supports Combatant Command's Air Moving Target Indicator requirements. The acceleration of E–7 delivery supports NDS objectives and will enable the Joint Force to deter, and if needed prevail, in a high end conflict.	An approximate understanding of what the MILCON UPL could purchase can be obtained from each project title. A small sampling from the UPL includes antiterrorism gate upgrades at F.E. Warren AFB, an F–35 Maintenance Facility at Hill AFB, a Cyber Operations Center at JBSA, and Military Family Housing improvements at Yokota AB. For additional details on each project and operational impacts please reference the DD 1391s previously transmitted.	Funding this program ensures over 25 percent of the F–16 advanced combat fleet will be able to execute Homeland Defense missions. The project improves the Department of Defense's ability to protect the Nation, partners, and assets. The request supports the NDS priority to Defend the Homeland.	The funding would provide: -an extension of the ecosystem of commercial cloud-based software capabilities from the IC and DOD to a regional edge infrastructure allowing for temporary disconnected Air Force operations with a critical subset of capabilities specifically geared toward more sensor to shooter automation; -new high-speed, resilient Intelligence network transport meshed with ABMS-provided black network backbone to optimize use of available capacity to improve resilience and reduce latency; -Air Force Intel managed Infrastructure as a Service (IaaS), Platform as a Service (PaaS) services and DevSecOps platform that includes IC security governance and controls -Air Force Intelligence big data platform, which is the TS/SCI portion of the DAF Data Fabric, integrates other IC data platforms with the DAF; -the complementary services to Platform One that provide DAF classified DevSecOps and cloud based enterprise services necessary for the operational imperatives; -security services for cloud-based capabilities; -enterprise artificial intelligence model development and management environment with a marketplace at all three classifications; -Air Force ISR capability inside the DCGS program as one of the primary customers of the AF ISR DI to refactor into a cloud-native model and integrate with national capabilities -enterprise architect and tools in TS/SCI environment that continue designing innovative improvements to the ISR Sensing Grid environment to continue accelerating change and keep ahead of pacing challenges.	Funding the CFTs increase both range and payload for the F–15EX. This increase allows the F–15EX to patrol longer and farther, as well as carry the appropriate amount and mix of armament to defend the homeland and deter the pacing challenge in the Indo-Pacific. Funding for F–15EX CFTs supports the NDS priority to Defend the Homeland and Deter/Prevail in Conflict	(U) Funding this program will procure 66 Agile Comm Packages (ACP) and 99 Fly Away Communications Terminals (FACTs) for MAJCOMs for Agile Combat Employment (ACE) communication requirements needed to support AF Force Generation (AFFORGEN) Model. This includes standardized equipment that allows airmen to access critical mission data on NIPR, SIPR, and Top-Secret networks (deployable JWICS) through resilient and redundant connectivity paths, training, and sustainment. Current Air Force expeditionary communications alignment and capacity is insufficient to support AFFORGEN.

42	General Brown, please include detail on all end items with quantities, contractor FTEs, etc.	Funding this program will accelerate delivery of 2 E–7 aircraft and meet Combatant Command's Air Moving Target Indicator requirements. Funding accelerated E–7 delivery supports the Joint Force to deter, and if needed, prevail, in a high end conflict.	An approximate understanding of what the MILCON UPL could provide can be obtained from each project title. A small sampling from the UPL includes antiterrorism gate upgrades at F.E. Warren AFB, an F–35 Maintenance Facility at Hill AFB, a Cyber Operations Center at JBSA, and Military Family Housing improvements at Yokota AB. Additional details are provided in the DD 1391s previously transmitted.	Funding the program ensures over 25 percent of the F–16 advanced combat fleet will be able to execute Homeland Defense missions; improving the Deparment of Defense's ability to protect its territory, partners, and assets. The project supports the NDS priority to Defend the Homeland.	Funding this priority transitions prior Intelligence investments to long-term sustainable programs united under C3BM for C2 to encompass all Air Force ISR and DAF SCI cloud-based requirements. Current customer programs include DAF RCO, Space RCO, Rhombus Guardian (A8 financial data), UDL (space data), ELICSAR (cyber data), and 135 others. Custody engine and sensor to shooter are all dependent on AF ISR DI capabilities foundationally.	The CFTs increase both range and payload for the F–15EX. This increase allows the F–15EX to patrol longer and farther, as well as carry the appropriate amount and mix of armament to defend the Homeland and deter our pacing challenge in the Indo-Pacific. Funding for F–15EX CFTs supports the NDS priority to Defend the Homeland and Deter/ Prevail in a conflict	Funding this program will increase the USAF's capability to conduct operations from forward operating locations and enhance air base resiliency. This equipment enables dispersed units to connect with hubs, airborne aircraft, and the JADC2 framework to provide field conditions, received and distribute intelligence information, provide resupply requirements, and coordinate medical support requirements.
43	General Brown, what specific capability will the UPL provide?	Funding this program will accelerate delivery of 2 E–7 aircraft and meet Combatant Command's Air Moving Target Indicator requirements. Funding accelerated E–7 delivery supports the NDS priority to Deter/ Prevail in Conflict.	An approximate understanding of what the MILCON UPL could provide can be obtained from each project title. A small sampling from the UPL includes antiterrorism gate upgrades at F.E. Warren AFB, an F–35 Maintenance Facility at Hill AFB, a Cyber Operations Center at JBSA, and Military Family Housing improvements at Yokota AB. Additional details are provided in the DD 1391s previously transmitted.	Funding the program ensures over 25 percent of the F–16 advanced combat fleet will be able to execute Homeland Defense missions; improving the Deparment of Defense's ability to protect its territory, partners, and assets. The project supports the NDS priority to Defend the Homeland.	Funding this priority transitions prior Intelligence investments to long-term sustainable programs united under C3BM for C2 to encompass all Air Force ISR and DAF SCI cloud-based requirements. Current customer programs include DAF RCO, Space RCO, Rhombus Guardian (A8 financial data), UDL (space data), ELICSAR (cyber data), and 135 others. Custody engine and sensor to shooter are all dependent on AF ISR DI capabilities foundationally.	The CFTs increase both range and payload for the F–15EX. This increase allows the F–15EX to patrol longer and farther, as well as carry the appropriate amount and mix of armament to defend the Homeland and deter our pacing challenge in the Indo-Pacific. Funding for F–15EX CFTs supports the NDS priority to Defend the Homeland and Deter/ Prevail in a conflict	Funding this program will increase the USAF's capability to conduct operations from forward operating locations and enhance air base resiliency. This equipment enables dispersed units to connect with hubs, airborne aircraft, and the JADC2 framework to provide field conditions, received and distribute intelligence information, provide resupply requirements, and coordinate medical support requirements.
44	General Brown, what gap will this fill that is not in the base budget?	The E–3 is increasingly limited in its ability to provide the Airborne Moving Target Indication and Airborne Battle Management Command and Control (BMC2) capability needed by combatant commanders. The fiscal year 2024 base budget seeks to close that capability gap by funding the rapid prototyping of two E–7 aircraft to serve as the Department of the Air Force modern BMC2 node for a high end fight, with initial production slated to begin in fiscal year 2025. The fiscal year 2024 UPL request doubles initial production from 1 tail to 2, and procures long lead items 1 year early, mitigating risk to the delivery schedule while closing the capability gap more rapidly.	The MILCON UPL is a list of construction projects that represents vetted DAF priorities that support the objectives of the National Security, Military, and Defense Strategies. Additionally, many of the projects increase Quality of Life and security at our installations.	The fiscal year 2024 base AESA budget is zero. fiscal year 2024 will fail to support spares, installs, Interim contract support repairs, continued AESA radar software development to reach full validated capability requirements, and begin depot stand-up/activation for AESA radar sustainment.	The base budget does not include non-intelligence provided central funding for these Air Force ISR capabilities that can support DAF SCI requirements today; capacity is elastic and scalable with Air Force ISR DI tenants funding just what they needed when needed.	CFTs, along with the increased weapons carriage capabilities they provide, fill "Other System Attribute" requirements from the 1 Feb 2019 F–15EX Rapid Fielding Requirements Document.	(U) The operational need at the Wing level for temporary (i.e., one to several weeks) and sustained (i.e., far into foreseeable future) on-scene expeditionary communications to provide decentralized execution, speed tactical action against fleeting opportunities, shorten kill chains, support time-sensitive targeting, and drive the dynamic targeting process through tactical operators following mission type orders. Current Air Force expeditionary communications alignment and capacity is insufficient to support AFFORGEN.The base budget procures an initial tranche of this capability but does not fully equip INDOPACOM units and follow-on forces from other MAJCOMs.

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Table 1. Plan Choices for Military Beneficiaries Compared to Federal Civilians

#	QFR	Air Force UPL Item #1	Air Force UPL Item #2	Air Force UPL Item #3	Air Force UPL Item #4	Air Force UPL Item #5	Air Force UPL Item #6
45	General Brown, how will this capability support objectives outlined in current National Security, Military, and Defense Strategy documents?	The E–7 supports the NDS priority to deter, and if needed, prevail, in a high end conflict. The E–7 also supports the NDS priority for Homeland Defense by providing wide area detection capabilities able to counter modern air and cruise missile threats.	The MILCON UPL is a list of construction projects of varying scope and cost at CONUS and OCONUS locations. Each project is unique, but represents vetted DAF priorities that support the objectives of the National Security, Military, and Defense Strategy documents in a variety of ways. This includes projects in the United Kingdom to support posture setting activities with increased munitions capability and positioning of Deployable Air Base Systems. Support to F–35 beddown at Hill AFB and multiple projects to improve the quality of life of our airmen and guardians. All projects are in line with the top four defense priorities outlined in the NDS.	Funding the program ensures over 25 percent of the F–16 advanced combat fleet will be able to execute Homeland Defense mission, improving the Department of Defense's bility to protect its territory, partners, and assets. Funding supports the NDS priority to Defend the Homeland.	More warfighting has shifted to dependance on TS/SCI data and capabilities in peer competition and conflict than ever before. Fighting on JWICS, SAP-based SCI, data aggregation all bring additional requirements above intelligence requirements. The expansion extends to new modern technology delivery methods in commercial cloud taking advantage of mature options based on the long standing Intelligence community (IC) work. National Intel data and applications seamlessly meshed with DOD data and applications is foundational to countering adversary capabilities at the scope and scale required, ultimately shortening the long range kill chain.	Funding for F–15EX CFTs supports the NDS priority to defend the Homeland and deter, and if needed prevail, in a high end conflict	[Deleted.]

46	General Brown, what is the operational requirement? How does this UPL support current or future operations?	The requirement is to provide Air Moving Target Indicator (AMTI), Airborne Battle Management, and Command and Control (BMC2) to counter advanced and emerging air threats fielded or in development by adversaries. The requirement also answers Joint and coalition forces requirement for a mix of space and airborne next-generation sensors, weapons, and decision support for C2 in the air domain. Our ability to project airpower is directly tied to our ability to execute agile command and control of those forces. Airborne C2, currently provided by our rapidly aging E–3 fleet, is our best way to do this. The E–7, as the replacement for the E–3, will provide airborne C2 with improved capability and mission effectiveness that will directly enable our capacity to meet the challenge of our pacing threat.	An approximate understanding of how the MILCON UPL supports current or future requirements can be obtained from each project title. A small sampling from the UPL includes antiterrorism gate upgrades at F.E. Warren AFB, an F–35 Maintenance Facility at Hill AFB, a Cyber Operations Center at JBSA, and Military Family Housing improvements at Yokota AB. Additional details are available in the DD 1391s for each project previously transmitted.	Funding the program ensures over 25 percent of the F–16 advanced combat fleet will be able to execute Homeland Defense missions; improving the Deparment of Defense's ability to protect its territory, partners, and assets. The project supports the NDS priority to Defend the Homeland.	The operational requirement is to prosecute more moving targets faster in a dispersed resilient, manner in a contested AOR. This will require automation, and eventually AI, to meet the operational capability need. Only by harnessing the agility of software can solutions be provided at the speed of need at scale supported through commercial hyperscale cloud capabilities securely and resiliently.	CFTs, along with the increased weapons carriage capabilities they provide, fill ''Other System Attribute'' requirements from the 1 Feb 2019 F–15EX Rapid Fielding Requirements Document.	(U) The operational need for temporary (i.e., one to several weeks) and sustained (i.e., far into foreseeable future) on-scene expeditionary communications will continue to be a military requirement to provide decentralized execution, speed tactical action against fleeting opportunities, shorten kill chains, support time-sensitive targeting, and drive the dynamic targeting process through tactical operators following mission type orders. Current AF expeditionary communications alignment and capacity is insufficient to support AFFORGEN. Furthermore, the AF previously divested of these capabilities in a 2013 Deployable Communications Program Action Directive.
47	General Brown, what is the operational impact if this UPL is not funded in fiscal year 2024?	The Air Force and Joint Force are challenged to execute long range kill chains in highly contested environment with forward operating locations and for Homeland Defense. If the UPL is not funded, we miss an opportunity to close the capability gap more rapidly. Further, any delay to E–7 procurement will materially impact our capacity to execute airpower and consequently our ability to enable joint, all-domain operations. This puts our forces at a disadvantage and empowers our adversaries as a result.	If the MILCON UPL is not funded, execution of these requirements will be delayed.	Currenlty, 67 AESA radars will not be fielded and will remain on the shelf, uninstalled, unavailable for combat forces.	If left unfunded, the capability will be delayed until later in the FYDP and potentially not be there in time for a high end conflict. Capabilities require time to build, mature, and stabilize for programs to learn to depend on them and modify their traditional methods of IT delivery. Lack of capability in fiscal year 2024 will have programs building duplicate services internal to their programs vice using a centrally created set which standards with their resourced requirements; complicating integration in the joint war fight.	If this UPL is not funded, only 12 of 24 Lot 5 aircraft will deliver with CFTs, reducing weapon system capability and extending the time the AF would need to operate a mixed-configuration of the F–15EX fleet. Additionally, the F–15EX will be constrained to primarily employing air-to-air munitions (as large air-to-ground weapons can otherwise only be carried on Station 5).	[Deleted.]
48	General Brown, are there plans to include this item in the fiscal year 2025 base budget?	The AF is still preparing the fiscal year 2025 budget and content is pre-decisional.	The Air Force is still preparing the fiscal year 2025 budget and content is pre-decisional.	The Air Force is still preparing the fiscal year 2025 budget, and content is pre-decisional.	The AF is still preparing the fiscal year 2025 budget, and content is pre-decisional.	The AF is still preparing the fiscal year 2025 budget, and content is pre-decisional.	The AF is still preparing the fiscal year 2025 budget, and content is pre-decisional.

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Table 1. Plan Choices for Military Beneficiaries Compared to Federal Civilians

#	QFR	Air Force UPL Item #1	Air Force UPL Item #2	Air Force UPL Item #3	Air Force UPL Item #4	Air Force UPL Item #5	Air Force UPL Item #6
49	General Brown, why was this UPL not included in the Fiscal Year 2024 President's Budget submission?	The fiscal year 2024 President's Budget prioritized many critical future capabilities, and includes significant investment in the E–7 program. The fiscal year 2024 UPL request will help close the capability gap more rapidly	The Air Force has a long range MILCON that plan spans several years This UPL contains projects we could accelerate if the funding were made available.	While this upgrade is important, the Air Force prioritized funding future capabilities over upgrading legacy fighters to achieve NDS objectives.	This digital infrastructure improvement is absolutely important. However, we must balance and prioritize funding future capabilities and needs. This is an area we can accelerate work for consistent and secure IT for our networks and our weapons systems.	While this upgrade is important, the Air Force prioritized funding future capabilities over upgrading legacy fighters in order to attempt to achieve NDS guidance.	While this capability is important, the AF needed to prioritize funding future capabilities over funding the Agile Comms Equipment (ACE) to the full requirement.
50	General Brown, what is the name of the vendor(s) executing this effort? Sub-vendor(s)?	Vendor: Boeing Defense, Space & Security. Major Sub vendors: Northrop Grumman and Collins	The Air Force utilizes multiple vendors for MILCON projecst. We are available to provide a briefing on specific projects.	Installation: Lockheed Martin OEM: Northrop Grumman	Booz Allen Hamilton; CACI; SAIC; LEIDOS; iCR	Prime: Boeing Sub-vendor: Israeli Aerospace Industries (current Qatari F–15QA conformal fuel tank supplier)	There are multiple vendors. The Air Force is able to provide a briefing to provide additional details. Baseband: Iron Bow / Sub PACSTAR MILSATCOM: TBD Commercial SATCOM: TBD (USSF Contract) Tactical Data Links: TBD JWICS Transport: TBD
51	General Brown, how often has your command met with the vendor executing this effort? Please provide a list of all such meetings, and the agenda for these meetings?	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.

52	General Brown, what is your history with this vendor? Please detail when the relationship began, the number of contracts applied for by this vendor, the number of contracts awarded to this vendor, and if you have had a personal relationship with the vendor?	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.
53	General Brown, has anyone who formerly worked for your command represented the vendor in meetings? What is their name, what was their position, and when did you meet with them?	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.	I do not participate in the acquisition decisionmaking process for the Air Force. Acquisition decisions reside with the Secretary of the Air Force and subordinate acquisition authorities within the Department of the Air Force. The protections in place that identify and address conflicts of interest in the acquisition decisionmaking process also apply to the programs contained within the Air Force UPL for fiscal year 2024.
54	General Brown, in which city/ State will the UPL be executed?	If the UPL is funded, the Air Force anticipates awarding a contract to Boeing Defense, Space & Security. Components for E–7 long-lead parts come from many states. The major contributors are Washington, Kansas, Ohio, Maryland, and Oklahoma.	The UPL MILCON projects would execute in multiple states and countries. Please reference the UPL MILCON prioritized list for locations.	Baltimore, MD; to be delivered to Active, Guard, and Reserve Air Force bases.	There is work being done on this effort across mutliple states and cities with remote workers. Primary hubs are in San Antonio, Texas; Rome, New York, and Washington DC.	St. Louis, MO; to be delivered with Lot 5 aircraft.	Contract details are to be determined and executed from Hanscom AFB, MA

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#	QFR	Air Force UPL Item #1	Air Force UPL Item #2	Air Force UPL Item #3	Air Force UPL Item #4	Air Force UPL Item #5	Air Force UPL Item #6
55	General Brown, is this requirement on an existing contract? If so, with who? What is the history of the contract?	The Research, Development, Test and Evaluation (RDT&E) requirement ($37.2 million) is on an existing contract. The Advanced Procurement ($596.16 million) requirement is not currently on contract. The RDT&E dollars ($37.2 million) would fund requirements on the existing E–7 Rapid Prototyping Contract. That existing contract was awarded to Boeing Defense, Space & Security on 28 Feb 2023 initiating the E–7 Rapid Prototyping effort. It was an undefinitized contract award with a not to exceed value of $1.2 billion. The Air Force anticipates definitizing that contract in the 2QFY24. The APAF dollars ($596.16 million) would fund a production requirement, which is not currently on an existing contract. The APAF dollars ($596.16 million) would fund Advanced Procurement for E–7 long-lead components and would go on a new production contract with Boeing Defense, Space & Security.	There are no existing contracts.	Yes, contract is with Northrop Grumman to procure radars and Lockheed Martin is contracted to perform installs.	There are multiple existing service contracts utilizing commercial cloud services, but a more detailed data call would be required in order to furnish this information.	No. The requirement is not on an existing contract.	This is a new contract awarded Dec 2022.
56	General Brown, what is the anticipated contract award date if the UPL receives funding?	The anticipated production contract award date is 3-months after UPL funding is appropriated.	The anticipated award date is 3-months after UPL funding is appropriated.	Contract to be awarded 1Q FY2024 to fund AESA installs.	The contracts are already in place; the Air Foce can quickly obligate the funding and execute the work.	To be awarded with the Lot 5 contract in Jun 2024.	NLT 2d quarter fiscal year 2024
57	General Brown, what funding lines are associated with this UPL?	The funding line associated with the E–7 is Air Force Line, R–41 (R–1 E–7) Program Element Code (PEC) 0604007F – RDT&E.	The Air Force submitted 21 prioritized MILCON projects. We can provide additional details for each project as requested.	The funding line associated with F–16 AESA is Program Element Code (PEC) 0207133F.	This would execute in Program Element Code (PEC) 027431F and 0305208F. A request has been submitted to establish a new PEC to track execution.	This would execute in Program Element Code (PEC) 0207146F.	This would execute in Program Element Code (PEC) 0207422F and 0207431F.

58	General Brown, if multiple appropriations fund this requirement, must all appropriations be funded simultaneously to source this requirement, or can each appropriation stand on its own to fund a portion of the requirement?	The UPL is comprised of both RDT&E and Aircraft Procurement Air Force (APAF) funding. Each appropriation can stand on its own to fund certain aspects of the requirement.	The projects can stand on their own.	The project can stand on its own.	This project can stand alone and does not rely on other projects.	The project would fall under aircraft procurement (3010 Approp) only.	The projects vary and some can stand on their own.
59	General Brown, how much was enacted and obligated (or expended for RDT&E) in fiscal year 2022 to fiscal year 2023 for this requirement?	As of 30 April, $22 million has been oblicated in (FY22) for RDT&E funding, with $2.1 million expended. In (FY23) $320.2 million has been obligated in RDT&E funds, with $43.9 million expended for the E–7A.	No MILCON funding was enacted or obligated related to this project.	Fiscal year 2022 $317.164 million; fiscal year 2023 $286.141 million	No funding was enacted or expended. Funding for ISR Digital Infrastructure pilots and projects was sourced from PECs 35022F and 35208F.	No RDT&E was enacted or obligated for F–15EX CFTs in fiscal year 2022 to fiscal year 2023.	RDT&E funded for in fiscal year 2023 was $16,000.
60	General Brown, how much was requested in fiscal year 2024 for this requirement?	The Air Force (DAF) requested $681 million in fiscal year 2024 as the baseline budget for the E–7.	None	We requested $174.5 million for this program in fiscal year 2024.	No funding was requested in the fiscal year 2024 President's Budget due to fiscal constraints.	$70.8 million was requested within the AME line for 12 CFT sets, $17.9 million was requested within Initial Spares line for CFT spares, and $16.6 million was requested within the Support Equipment line for CFT SE.	The Air Force requested $1.269 billion in fiscal year 2024. The request represents the maturation of ACE concepts and evaluation of potential distributed locations that require significant infrastructure improvements.
61	General Brown, is there a tail associated with this UPL?	The UPL funds long lead time parts such as the green Boeing 737 aircraft and the MESA radar. Procurement funding is required in fiscal year 2025 to complete the integration of the mission systems on these aircraft.	MILCON projects require feasibility studies and design money prior to executing a project.	Yes, funds are needed fiscal year 2024 to fiscal year 2029 to complete the full F–16 AESA program.	Additional details can be provided if Congress appropriates the funds.	There is no tail accociated with F–15EX CFTs.	The FYDP will continue to request funding to mature ACE concepts.
62	General Brown, is any tail funded in the future years defense program?	The AF is still preparing the fiscal year 2025 budget and content is pre-decisional.	There is no projected tail funding for the MILCON.	The AF is still preparing the fiscal year 2025 budget and content is pre-decisional.	Additional details can be provided if Congress appropriates the funds.	No CFT tail is funded in the FYDP.	The FYDP will continue to request funding to mature ACE concepts.
63	General Brown, please describe how much the requirement will cost per year for the next 5 years.	DAF is continuing to refine its requirements in the future years defense program (FYDP) through our formal processes. The Air Force will continue to communicate those requirements of the E–7 with Congress and the committees over the next few years. Currently, the service cost position (SCP) is being drafted.	The requriements will be determined by force structure changes and environmental assessments.	AESA radars have already been purchased. fiscal year 2024 UPL request is to fund installation of the new radars. If this UPL item is chosen for funding, the estimated FYDP funding requirements would be: fiscal year 2025 $102.6 million; fiscal year 2026 $81.6 million; fiscal year 2027 $51.1 million; fiscal year 2028 $31.3 million; fiscal year 2029 $21.9 million	The Air Force would like to offer a brief on the ISR Digital Infrastructure initiative in order to provide additional funding details once the fiscal year 2025 budget is released.	The Air Force has not yet determined if CFTs are required for the entire F–15EX fleet; however, a report was delivered to Congress detailing the costs and options to outfit the F–15EX fleet with CFTs.	The fiscal year 2025 POM and FYDP associated is pre-decisional. The Air Force can provide a brief to offer additional details on ACE concepts.

APPENDIX

ATTACHMENT 1—Continued

Table 1. Plan Choices for Military Beneficiaries Compared to Federal Civilians

#	QFR	Air Force UPL Item #1	Air Force UPL Item #2	Air Force UPL Item #3	Air Force UPL Item #4	Air Force UPL Item #5	Air Force UPL Item #6
64	General Brown, please provide in detail the previous funding requests and enacted for this requirement, including if it was in the base budget or UPL.	In fiscal year 2022, the DAF requested $22.2 million (RDT&E) New Start to stand up the E–7 program office and its personnel. Congress appropriated $22.2 million. In fiscal year 2023, the DAF requested $226.8 million (RDT&E) for the E–7A program, and Congress appropriated $426.8 million.	The Air Force would like to offer a brief to provide additional funding details.	All prior funds were base budget or a congressional add (for ANG requirements); nothing has been funded on a prior UPL.	Fiscal year 2024 was the first year the Air Force tried to source funding for this requirement.	No funding requests for F–15EX CFTs have been requested in previous budgets or UPLs	A total of $77,000 was enacted for the ACE program in fiscal year 2023. There are other capabilities funded seperately that funded ACE.
65	General Brown, if the requirement is not included in the future years defense plan, will that be rectified in the next Program Objective Memorandum or the Program, Planning, Budget, and Execution (PPBE) cycle?	The Air Force will continue to fund E–7 capabilities in future years. However to accelerate procurement funding, the Air Force must invest in fiscal year 2024 to increase future capabilities and mitigate delivery delays.	The Air Force is preparing the fiscal year 2025 budget, and content is pre-decisional.	The Air Force is preparing the fiscal year 2025 budget, and content is pre-decisional.	The Air Force is preparing the fiscal year 2025 budget, and content is pre-decisional.	The Air Force is preparing the fiscal year 2025 budget, and content is pre-decisional.	The Air Force must invest in additional capabilities and formalize training programs to field an agile force that sets the theater and establishes distributed command and control. Funding requests will decrease in the FYDP but there will be additional investments.
66	General Brown, please provide photos of this requirement for visual aid.	Please see photos below.	N/A	Please see photos below.	N/A	Please see photos below.	N/A

66. General Brown, please provide photos of this requirement for visual aid.

AIR FORCE UPL ITEM #1



AIR FORCE UPL ITEM #3



AIR FORCE UPL ITEM #5



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