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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2022
AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS
BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED SEVENTEENTH CONGRESS
FIRST SESSION
—
FULL COMMITTEE HEARING
ON
**DEPARTMENT OF THE NAVY FISCAL
YEAR 2022 BUDGET REQUEST**
—

HEARING HELD
JUNE 15, 2021



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**DEPARTMENT OF THE NAVY
FISCAL YEAR 2022 BUDGET REQUEST**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Tuesday, June 15, 2021.

The subcommittee met, pursuant to call, at 11:02 a.m., in room 2118, Rayburn House Office Building, Hon. Adam Smith (chairman of the committee) presiding.

OPENING STATEMENT OF HON. ADAM SMITH, A REPRESENTATIVE FROM WASHINGTON, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. I call the committee to order.

This is our first day under the new old rules, old new rules. The Architect of the Capitol or whoever it is who's in charge has told us that we can be back in the committee in person in full, members without masks or social distancing.

That announcement just—yeah.

[Applause.]

The CHAIRMAN. I missed you, too. That announcement was just made last night. So, you know, we're scrambling around this morning to let people know that the new rules are here. So members will be drifting in.

But from this point forward, you know, we will be in the committee hearing, no social distancing, do not have to wear a mask.

Now there—people are still going to be allowed to participate remotely. There's a very long CDC [Centers for Disease Control and Prevention] speech to explain that, which I won't get into. It makes sense.

So, unfortunately, the one feature of the old rules that applies is you still get to hear me read this statement. So I'll try to do it as quickly as possible and we'll move on.

Members who are joining remotely must be visible on screen for purposes of identity verification, establishing and maintaining a quorum, participating in the proceeding, and voting. Those members must continue to use the software platform's video function while in attendance unless they experience connectivity issues or other technical problems that render them unable to participate on camera.

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Members participating remotely must seek recognition verbally and they're asked to mute the microphones when they are not speaking. Members who are participating remotely are reminded to

keep the software platform's video function on the entire time they attend the proceeding.

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If members will be absent for a significant period or depart to join a different proceeding, they should exit the software platform entirely and then rejoin it if they return.

Members may use the software platform's chat feature to communicate with staff regarding technical or logistical support issues only.

Finally, I've designated a committee staff member if necessary to mute unrecognized members' microphones to cancel any inadvertent background noise that may disrupt the proceedings.

So we will continue to do that for a while to allow members to participate remotely if they so choose.

So our hearing this morning is a full committee hearing on the Department of the Navy fiscal year 2022 budget request.

We have the Honorable Thomas Harker, Acting Secretary of the Navy, with us this morning as well as Admiral Michael Gilday, Chief of Naval Operations, and General—so I got to slow down. I was in my—I was in my sort of, you know, get through that thing mode. Now it's like I just get—and General David Berger, Commandant of the Marine Corps.

And we thank you, gentlemen, for being here. We look forward to your testimony.

These are very, very challenging times in our country for a variety of different reasons. But within the military, there's huge transformations going on and huge challenges going on at the same time.

I've met and spoken with all three of you about your approach to that and at the outset, I just want to say, you know, thank you. I think you are doing an outstanding job of, you know, confronting those challenges, and it's not easy. You have to do so within a finite budget environment.

Number one, we still have the complex threat environment that we have had for a while with Russia and China, with North Korea and Iran, and transnational terrorist groups, and trying to figure out how to manage our resources and meet all those threats and meet the needs of our national security continues to be a challenge.

We are still working our way through COVID. Obviously, vaccination rates a little troublesome within the military. Got to get those up higher. And then, of course, we have the global challenges that come from the fact that much of the world does not have access to the vaccine and there are many places where it is spreading.

But the transformation that I think is really interesting is what you've been working on in terms of building the force to meet the challenges of today and to meet the information warfare scene that we face.

And the simplest way to explain this is, you know, mostly warfare is about massing as much firepower as possible and being able to get it to where you need to get it as quickly as possible, and that's still the case.

But now information has become so key. The ability to access that information, the ability to find within the information exactly what you need, and then the ability to get it to the people who need it in real time so that, you know, your front line Marine, your, you know, ship captain, they have that information that they need about the adversary and about the environment and then to protect that information.

As we have seen in recent days in many different ways, if adversaries can cut off our information, cut off our flow, attack us in a cyber way, that can really render all of that firepower useless. So how do we protect it?

And then how do we make it survivable? The systems have to be survivable wherever they go, and that is a big change from the military that we built. So both—all three of you have wrestle with that.

What systems do you continue to fund? What do we need to add funds to? It's a huge set of challenges that I know all three of you have confronted, and we're very anxious to hear today, you know, how the President's budget reflects that and what you think we need to do here on this committee to help enhance your efforts to make those changes.

I guess the two big things that I would mention before I turn it over to Mr. Rogers, you know, one, on the infrastructure side, there's been a lot of focus on the Navy side on the shipyards and our maintenance requirements.

As you well know, one of the big problems with having our assets available is hitting the maintenance schedules. You know, ships have to wait an extended period of time just to get access to a shipyard to get the maintenance they need to continue. What sort of upgrades do we need? What's the best way to go about doing those upgrades?

And then on the Marine Corps side, I know, General Berger, you have made some big strong statements about how to transform the Marine Corps. The idea of massing and fighting on the battlefield is different now.

You need different systems to support the mission that Marine Corps is going to face, fundamentally different than what you've been doing throughout most of your 200-plus year history. I know you've done a lot of work on that. We're anxious to hear about that.

I guess the last comment I'd make is I mentioned that 200-plus year history. Our staff sort of, I guess, messed up on the schedule because it's the Army's birthday today. But here we are.

So we'll wish the Army birthday even though they're coming, I think, next week. So but we appreciate all of your service and all the hard work you're doing in these very difficult times.

And with that, I will turn it over to Ranking Member Rogers for his opening statement.

STATEMENT OF HON. MIKE ROGERS, A REPRESENTATIVE FROM ALABAMA, RANKING MEMBER, COMMITTEE ON ARMED SERVICES

Mr. ROGERS. Thank you.

And it's not just the Army's birthday today. I think the rest of the committee will join me in wishing the chairman a happy birthday and I hope it's your best year ever.

The CHAIRMAN. Thank you. I appreciate that.

[Applause.]

The CHAIRMAN. We have to mention it is also Rick Larsen's birthday today.

Mr. ROGERS. All right.

The CHAIRMAN. That is the little—

Mr. LARSEN. Applause.

[Laughter.]

The CHAIRMAN. That is a little known fact. Yes, we got to—we got to clap for you.

Mr. ROGERS. All right.

[Applause.]

The CHAIRMAN. Rick and I were actually born on the exact same day. We are the exact same age.

Mr. ROGERS. Washington State has some activity going on.

The CHAIRMAN. I was born in DC but that's another story.

[Laughter.]

The CHAIRMAN. The time is yours. I apologize. Go ahead.

Mr. ROGERS. I do want to thank the witnesses for being here and their time it took to prepare for this. I know it's a—it's a pain, but we really appreciate it and I appreciate your service to our Nation.

At his confirmation hearing, Secretary Austin said that China presents the most significant threat, going forward, and that China should be viewed as our national security, quote, "pacing threat," closed quote.

I wholeheartedly agree with that. I was optimistic that President—the President would hear that rhetoric from the Secretary and turn it into action.

Unfortunately, I was being naive. Rather than keeping pace with the threat from China, the President's budget recommendation would let us lap them—let them lap us.

We need not look much further than the request for the Department of the Navy. The President requests a paltry eight battle force ships, two of which are tugboats. At the same time, the President wants to retire 15 other battleships including 7 cruisers. Those seven cruisers provide more afloat missile capability than almost the entire British fleet.

But the cuts don't end there. The budget would break a multi-year destroyer procurement, truncate key developmental programs like railgun, and pass on critical munition investments like Tomahawk missiles and heavyweight torpedoes.

This budget is throwing the shipbuilding industrial base further into disarray. Shipbuilders are laying off workers because of the lack of Navy vision and chronic underfunding.

Even strategies that save money beyond the ability of—or beyond the ability of this administration to support. Despite testimony that smart amphibious ship acquisition would lead to over \$700 million in cost savings, the administration has elected to take a pass.

While this administration dithers, China is rapidly growing and modernizing its navy. Our fleet of 296 ships has already been eclipsed by the Chinese fleet of over 350 ships and submarines.

China has more than 1,250 ground-launched ballistic missiles and ground-launched cruise missiles with ranges between 200 and 2,000 miles. The United States currently fields just one type of conventional ground-launched ballistic missile with a range of 30 to 120 miles.

I'm also concerned with the strike fighter gap. This budget fails to fund additional Super Hornets, F-35s, for the Navy. That leaves us with a critical capability gap in the near term that Congress will have to fill. Setting back our critical deterrent even further is Acting Secretary Harker's call to eliminate the nuclear sea-launched cruise missile.

The DNI [Director of National Intelligence] recently reported that China is fielding a full nuclear triad and is expected to reach 1,000 warheads by 2030. In light of this growing threat, the recommendation to end SLCM [Sea-Launched Cruise Missile] is both short-sighted and dangerous. It's almost as if the President developed this budget with little understanding of what is required to deter conflict, if necessary, to win a war.

Quite simply, this budget has little to do with pacing China and I refuse to support it. We should be expanding and modernizing our naval capabilities as called for by the last administration. I am disappointed the Biden administration doesn't see the threat from China the same way.

But I look forward to working with the majority to pass a real defense budget that supports modernization and ensures credible deterrence.

And with that, Mr. Chairman, I yield back.

The CHAIRMAN. Thank you.

Mr. Harker.

STATEMENT OF HON. THOMAS W. HARKER, ACTING SECRETARY OF THE NAVY

Mr. HARKER. Chairman Smith, Ranking Member Rogers, distinguished members of the committee, thank you for your bipartisan efforts on behalf of the sailors, Marines, and civilians that make up our Department of the Navy.

I'm honored to be here with General Berger and Admiral Gilday. I support their efforts to build a more integrated all-domain naval force through the NAVPLAN [Navigation Plan] and Force Design 2030.

The President's budget for fiscal year 2022 reflects a balanced approach to ensure we have the capabilities, capacity, and readiness needed to defend the nation and our interests.

It demonstrates our resolve to stay ahead of the pacing threat of China and other global challenges, making hard choices to divest of less capable assets to invest in a superior future force.

The top priority for each of us will always be to ensure our sailors, Marines, and civilians are prepared to execute the mission and return home safely to their families.

We're prioritizing the mental health of our force, speaking out at the senior level about the benefits of counseling and the availability of counselors, chaplains, and other professionals. We appreciate this committee's attention to that vital issue and your support

in providing additional mental health support to our sailors and Marines in forward operational units.

We're fighting the scourge of sexual harassment and sexual assault through efforts like the Watch List, a tool that uses Navy and Marine Corps data to alert commanders to conditions in their units that may lead to these toxic behaviors.

We also look forward to the findings of Secretary Austin's 90-day Independent Review Commission and are committed to making meaningful and lasting progress on this issue.

To ensure our resources reach the warfighters who need them, we're demanding rigorous self-assessment and responsive accountability through the Performance to Plan initiative.

We are also on the right path towards obtaining an opinion, an audit opinion, for the Navy and Marine Corps general funds and the DON's [Department of the Navy's] working capital fund. We are the only military department that has fixed audit material weaknesses and are leading the way on this critical effort.

We are also increasing our investment in the Department's oversight functions while maximizing our return on our investment in the performance audit process.

Modernization of our information technology infrastructure is a critical warfighting priority for the Department. Effective use and management of data is key to our digital transformation and will change how we fight and win at every level.

I have visited all four of our Navy shipyards as well as most of the private shipyards, and I'm fully committed to the shipyard infrastructure optimization program and other vital physical and IT [information technology] infrastructure investments.

These will increase the capability and resiliency of these century-old installations, increasing the size and capability of our dry docks and equipping our 40,000-person workforce with the tools they need to maintain our new and more lethal assets.

Around the world and around the clock, the sailors, Marines, and civilians of our integrated naval force stand the watch and execute the mission.

On behalf of each of them, I thank you for your time and dedicated oversight and look forward to your questions.

[The prepared statement of Mr. Harker can be found in the Appendix on page 69.]

The CHAIRMAN. Thank you.
Admiral Gilday.

STATEMENT OF ADM MICHAEL M. GILDAY, USN, CHIEF OF NAVAL OPERATIONS

Admiral GILDAY. Chairman Smith, Ranking Member Rogers, distinguished members of the committee, thank you for the opportunity to testify this morning along with Secretary Harker and General Berger. We all are thankful for the enduring support that this committee provides the Navy and Marine Corps team.

This hearing, I believe, comes at a critical time for our Nation. Competition on, under, and above the seas is intensifying. China and Russia are rapidly mobilizing their militaries, attempting to undermine our alliances and degrading the free and the open order.

The People's Liberation Army Navy battle force is the largest in the world and it is growing. They command modern surface combatants, submarines, aircraft carriers, amphibious assault ships, and next-generation fighters, and their maritime ambition is backed by a robust industrial base and the largest shipbuilding infrastructure in the world.

Put simply, China has designed a blue water fleet to rival our own, and America's enduring advantage at sea is eroding. Make no mistake, our fleet can control the seas in conflict and project power ashore today. But we will be increasingly challenged to do so in the future unless hard choices are made.

The Navy currently faces the task of recapitalizing our strategic nuclear deterrent, which we haven't done in 40 years. At the same time, we're making once in a century investment in our critical public shipyards, as the chairman mentioned, and at the same time we're trying to modernize our fleet for the potential future fight.

At the same time, we have responsibility to our sailors and our nation to maximize readiness so the fleet can confidently operate forward and be relevant. Nearly 70 percent of the ships that we have today we'll have a decade from now. We have to take care of the ships that we have today, although the price tag on readiness is rising.

Over the last 20 years, manpower, operations, and maintenance costs—60 percent of our budget—have grown at 2.4 percent above the rate of inflation. Meanwhile, the buying power of our Navy is less than it was in 2010. Back then, we had 288 ships. Today, we have 296.

As you all know, the results of analysis done over the past 5 years, whether inside the Pentagon or outside, have been consistent and clear. America needs a larger, more capable fleet.

Our latest future force naval structure assessment provided the headlights not only for the size of our future fleet but, importantly, for the composition of that fleet and the capabilities that it brings to the joint force.

If the Navy's top line remains flat or goes down further, the size of our fleet will definitely shrink. Despite these fiscal challenges, we're determined to field a more capable, a more lethal, and a more ready Navy for the joint force.

To do this, we are improving our maintenance in our shipyards and aviation depots. We are ensuring our ships are properly manned, that our magazines are filled with ammunition, and that we have our store rooms filled with spare parts, and that our sailors are getting the steaming days and flying hours that they need to hone their skills.

We are working hard on a more robust resilient network infrastructure. We are investing in long-range precision fires like hypersonics and Tactical Tomahawk, and we're developing directed energy systems to improve fleet survivability.

Our eye is on the larger hybrid fleet. The investments in our shipbuilding account reflect the rigorous analysis we conducted last year as well as the high demand from combatant commanders.

We are determined to deliver the *Columbia* SSBN [ballistic missile submarine] on time as we build affordable capacity, which includes a deliberate approach to unmanned, and we're making sure

that every sailor can outthink and outfight any adversary by scaling our efforts for ready relevant learning and live virtual constructive training.

Committee, the average age of the Chinese fleet is 11 years. Ours is 21. It's time to field the future Navy. We must modernize now for the looming competition ahead of us and maintain a forward posture that keeps America safe and prosperous.

I am extremely proud of our sailors, our Navy civilians, and our families who have sustained historic high optempo [operations tempo] in the midst of a pandemic. They remain the source of our strength, as are the patriots in our shipyards and aircraft depots and our partners in industry, companies large and small who keep the production lines moving.

Again, we are grateful for this committee's support to our Navy and Marine Corps team. I look forward to answering your questions. Thank you.

[The prepared statement of Admiral Gilday can be found in the Appendix on page 93.]

The CHAIRMAN. Thank you.

General Berger.

STATEMENT OF GEN DAVID H. BERGER, USMC, COMMANDANT OF THE MARINE CORPS

General BERGER. Chairman Smith, Ranking Member Rogers, and members of the committee, over the past 2 years since becoming Commandant, I've come to better understand and appreciate the bipartisan support of this committee, which is really critical to creating the force that we have today but also the force that we're going to need for the future.

I realize there's competing national priorities you have to wrestle with and that's going to put pressure on defense budgets. But I'm also confident that you all appreciate the severity of the security environment around the world.

As the global competition with China and Russia increases and accelerates, I would argue your military will need to have more advanced capabilities in order to effectively compete to reassure our allies and partners and to deter war.

Force Design 2030 is the Marine Corps answer to creating the cutting-edge capabilities and the ready forces that will better enable the fleet and the joint force to deter, to compete, and to respond with ready forces to any crisis anywhere on the globe.

To be clear, Force Design is the centerpiece of a broader, more systemic modernization effort across your Corps, one that improves more than just our equipment and our warfighting formations but also our personnel systems, our training, and our family programs as well.

We're, roughly, 2 years into that modernization program and I feel I owe this committee an update. And while we don't have sufficient time this morning to go into all the details, I do want to highlight three key areas of progress.

First, we have increased the operational reach and the efficacy of our naval expeditionary forces to include our Marine Expeditionary Units, our MEUs, which remain the crown jewel of our force.

Beginning last year, we started our transition to a mixed capability of long-range ship- and ground-based unmanned aerial systems, UASes, including the MQ-9 Reaper.

This will significantly expand our ISR [intelligence, surveillance, and reconnaissance] capabilities and it will enable us to better support the fleet and the joint operational commander, including anti-submarine warfare.

We have also initiated a partnership with industry to develop a future autonomous long-range unmanned surface vessel that will extend the reach of our MEUs.

That vessel will give us a new tool for maritime gray zone competition. It will help thicken what we call the C5 [command, control, computers, communications, cyber] ISR network. It will add to our conventional naval deterrent using loitering munitions.

Lastly, we're aggressively pursuing organic precision fires for our infantry. Those also have loitering munitions. And we're on track to make a decision on the vendor—a final decision this year.

Second, we have made significant advancements across our training and our education enterprise. In the last 16 months, we have released our first new doctrine in 20 years. Actually, we released two, one on learning, one on competing.

We have also significantly advanced the intellectual framework for some of our future operational concepts. Earlier this year, we published a tentative manual for expeditionary advanced base operations and we will use that to inform our training, our wargaming and our exercises.

We substantially increased the resources we have dedicated to wargaming and to experimentation. Last month, we broke ground on a new state-of-the-art wargaming center here in Quantico, Virginia.

And finally, we dramatically enhanced both the quality and the duration of infantry training. Infantry training for us is now 50 percent longer than it was before and we have added new modules to increase lethality.

Third, we have taken some important steps to improve our personnel systems and our policies. To continue attracting the highest quality men and women for your Marine Corps, we raised the AFQT [Armed Forces Qualification Test] standards to enlist and we raised the ASVAB [Armed Services Vocational Aptitude Battery] requirements for infantry.

Our enlisted performance evaluation system in the Marine Corps was antiquated, it was subjective, and it was completely manual. We just replaced that old system with a cloud-based system where, for the first time, Marines are evaluated based on clearly defined objective standards that they have control over.

We revised our retention policies so that qualified Marines can now reenlist a year earlier than they could before, and I've delegated to commanders the authority to enlist Marines on the spot.

Recognizing the strong connection between the health of our force and the support of our families, we revised our parental leave policies. They now include both adoptive and same-sex parents, and I'll continue to push for expanded maternity leave for our Marines.

And while it may seem like a modest accomplishment, perhaps, to some, this year we updated our maternity uniforms to improve both their utility and their professional appearance.

So, overall, while I'm encouraged by our progress on Force Design and the other modernization initiatives, I'm not satisfied with the pace of change. We have to move faster.

To accelerate our program, we, as a service, will need to do a better job of explaining the details of Force Design 2030 to members and to your staffs, and that's my responsibility as your Commandant.

To that end, I'm prepared to testify before the full committee and the Appropriations Committee if committee chairs would find such a hearing useful.

I think it's critical that we develop a shared understanding about where your Marine Corps is headed and why, and how your support is absolutely essential to our success.

Equally important is explaining how we plan to pay for it all. As Chairman Smith recently noted, we can and must make better choices to be better stewards of taxpayer dollars and I couldn't agree more.

This is part of the reason for the past 2 years we have pursued a cost neutral approach to force design, from the beginning self-funding our modernization, not asking for any more funds.

To ensure the success of that approach, I will need to ask for your support in reducing the total procurement of some platforms commensurate with the recent reductions in our end strength.

The fact is today's Marine Corps is significantly smaller than it was 10 to 12 years ago, about 24,000 Marines smaller. We simply won't need as many ground vehicles.

We won't need as many aircraft as we thought we did when we made those procurement decisions 20 years ago. It's just simple math.

With the reductions outlined in our force design report this spring, I believe we will have sufficient resources to create the modern capabilities required for competition, for deterrence, and for crisis response without a further reduction in our end strength.

So I welcome the opportunity to work with this committee and I look forward to your questions, both in this hearing and in the weeks to follow.

Thank you, sir.

[The prepared statement of General Berger can be found in the Appendix on page 112.]

The CHAIRMAN. Thank you.

Mr. Secretary, how is the vaccination issue going? What percentage of the force has been vaccinated? How is that affecting your ability to get everybody back up and running as normal?

Mr. HARKER. We have made progress on vaccinations. The Navy and Marine Corps have both issued—

The CHAIRMAN. I'm sorry. We're having a hard time hearing. I don't know if it's because you're too far back or—

Mr. HARKER. Sorry, sir. We have made progress on vaccinations. Both the Navy and Marine Corps have issued policies that have increased the ability of sailors and Marines to have liberty in foreign ports or to do different—

The CHAIRMAN. Do you have numbers on that progress aside? Do you know what percentage of your—of the Navy and Marine Corps have been vaccinated?

Mr. HARKER. Do you have the—

Admiral GILDAY. Seventy-five percent for the Navy right now, sir.

The CHAIRMAN. That's great. Marine Corps now?

General BERGER. We're at 50 percent for fully vaccinized—fully immunized.

The CHAIRMAN. And would you support, once the FDA [Food and Drug Administration] fully approves the vaccine, making it mandatory for service members?

Mr. HARKER. Sir, we're looking at that right now at the OSD [Office of the Secretary of Defense] level. They're coming up with guidance. I believe the Secretary is considering making that decision to do so. But it's not something that he has announced to us yet.

The CHAIRMAN. Okay. The only other question I have is on the unmanned systems, and, General Berger, you alluded to it, but I'd like both of you to respond.

You know, I know we're making a big investment, going forward, in developing unmanned systems. It's not—it's still not 100 percent clear to me what the Navy's vision of how unmanned systems will help you in your mission.

Could you just quickly sort of give us what that vision is, Admiral Gilday?

Admiral GILDAY. Yes, sir. We intend to use our fleet in a distributed manner, and so these unmanned, obviously, give us—give us volume, give us more ships that allow us to come at, let's say, China or Russia, at many vectors across many domains.

We'll be leveraging space and cyber as well. The two biggest challenges that we're getting after on unmanned are, one, reliability. So the engineering plants have to be reliable so they can operate months at a time unattended.

The second is command and control, and we feel like we're on a good path on both. But we have not—we don't have any intentions of scaling any of these efforts until we get to a place where we're comfortable with both of those aspects.

If I could just say briefly, sir, in the last month we have had three big steps forward. One, we have had the largest unmanned exercise in our history on the west coast with unmanned under the surface, on the surface, and in the air with the *Zumwalt*-class destroyer and LCS [littoral combat ship] ships.

And so this conceptually is helping us understand how we're going to use those unmanned platforms in conjunction with our—the manned ships that we have today.

Separately, last Friday we had our first successful refueling of an F/A-18 Super Hornet from an MQ-25 drone. That's going to be a carrier-based capability that will be IOC [initial operational capability] in 2025.

And lastly, we had a surface unmanned mega transit, a 4,000-plus-mile transit from the gulf coast through the Panama Canal up to the Port Hueneme, the third ship—third ship that's done so, 98 percent of it done autonomously.

And so we are making strides. I do think it's a big step, though. I think it's going to be phased with respect to minimal manning before we ever get to a point where we're using unmanned completely unattended.

The CHAIRMAN. Thanks.

General Berger, do you have anything to add?

General BERGER. I think you expect the Marine Corps to be your forward force, your stand-in force, Chairman. I'd have to say the role of UAS, the vision you're talking about, probably four different parts.

One, intelligence collection and moving that information back to the fleet and to joint force.

Second, I would say logistics. The ability to move, to distribute itself, and sustain that we're going to need unmanned platforms to do that.

Third, I would say lethality. And some of these are multi-platform kind of aircraft. But third, certainly, is the lethality, and fourth would be the command and control aspect, the ability to fuse and move information laterally and back to the joint force.

The CHAIRMAN. Thank you.

Mr. Rogers, you're recognized.

Mr. ROGERS. Thank you, Mr. Chairman.

Admiral, you painted a pretty ugly picture for the future of the Navy. Given that fact, do you feel like this budget is adequate to help you take on those challenges?

Admiral GILDAY. Sir, I think it's important to understand that the base and the top line that we have that we can afford a Navy of about 300 ships. What we're trying to do with our investment strategy is to—is to balance those investments across the readiness of the fleet today, the modernization with new technologies, and that's reflected, as an example, with a 12 percent increase in R&D [research and development] with an emphasis on hypersonics in the offensive and laser technology on the defensive to protect the fleet.

The third piece is capacity, and so we're growing the Navy at an affordable rate, although that is really a key—

Mr. ROGERS. You said you're growing the Navy? From what I'm reading you're—the Navy is shrinking under this budget.

Admiral GILDAY. Sir, for the 2022 budget itself, the Navy—the Navy's numbers are declining. That's correct.

Mr. ROGERS. So how do you take on your challenges with a budget that's diminishing?

Admiral GILDAY. So as I stated, sir, in my opening comments, the last several studies that have been done going back 5 years call for a larger, more capable fleet.

Mr. ROGERS. And this budget doesn't get you there.

Admiral GILDAY. No, sir. It does not.

Mr. ROGERS. Let me ask this.

Admiral Davidson, the recent PACOM [U.S. Indo-Pacific Command] commander, indicated that he expects a conflict with China in the next 6 years. In your best professional military judgment, do you agree with Admiral Davidson's assessment?

Admiral GILDAY. Sir, I think the key word that he used there was “could,” and I think that that potential always exists and I think we have to be ready any given day for anything.

Mr. ROGERS. Well, you know, if you agree it could happen, I just don’t know why we would agree with anything that would reduce the force structure and induce a near-term risk with China.

Recently, we have heard from General Hyten at STRATCOM [U.S. Strategic Command] that the SLCM is needed to increase deterrence. Do you agree with Admiral Richard and General Hyten that the SLCM fulfills a critical capability gap for the Navy and would increase deterrence?

Admiral GILDAY. I agree with that comment. I think it’s consistent with the new posture review that was done previously.

Mr. ROGERS. In recent years, the nonpartisan—the bipartisan Commission on National Security Defense recommended a 3 to 5 percent increase in defense spending each year over inflation for the foreseeable future as we try to modernize our services.

Do you agree with that recommendation by that commission?

Admiral GILDAY. Yes, sir. I think if you take a look at all the services’ unfunded requests together, they come up to about 3 to 5 percent.

Mr. ROGERS. Great.

Secretary Harker, has the administration completed its Nuclear Posture Review?

Mr. HARKER. So the Nuclear Posture Review that is forthcoming has not been done yet. The——

Mr. ROGERS. Okay. Has the administration completed his analysis of alternatives for the SLCM?

Mr. HARKER. No, sir.

Mr. ROGERS. So before the posture review and the analysis of alternatives is complete, why are you canceling the program that our best military minds on deterrence tell us that we need to deter Russia and China?

Mr. HARKER. Sir, I’m not canceling the program. That program is in our fiscal year 2022 budget. As we’re starting the planning process for fiscal year 2023, we have a process that we go through inside the Navy and Marine Corps where we go in and determine which items to put in our budget.

My initial guidance was based on the fact that that posture review, the overall posture review, and the National Defense Strategy update have not been completed.

So I didn’t want anyone to assume that that would be in until we had further guidance from the Nuclear Posture Review. Once that guidance comes, we will adjust accordingly, sir.

Mr. ROGERS. General Berger, you submitted a list of Marine Corps unfunded priorities that total over \$3 billion. Without funding these research and procurement priorities in fiscal year 2022, will the Marine Corps be able to modernize in time to counter the pacing threat of China in the near term?

General BERGER. Sir, the items on the unfunded priority list will allow us to move faster. The answer to your question is really difficult because in a pacing environment like we’re in right now, it’s tough to forecast whether or not China will move faster or on the same scale or on the same glide slope they’re on.

We're self-funding our modernization, as I explained. Those items on the unfunded priority list would reduce the risk. It would allow us to move faster.

Mr. ROGERS. So you need them?

General BERGER. If we're going to stay in front of China with a margin of advantage, then I think everything that we can do in the Department of Defense to buy down that risk is in our favor.

Mr. ROGERS. I understand the pressure y'all are under to support this President's budget recommendation. But we count on your best military judgment, and the fact is these UFRs [unfunded requirements] are necessary and we need to fund them.

With that, Mr. Chairman, I yield back.

The CHAIRMAN. Mr. Langevin is recognized.

Mr. LANGEVIN. Thank you, Mr. Chairman. I want to thank our witnesses for their testimony today.

Let me start with this question. I'm really pleased that both the *Columbia*- and *Virginia*-class submarine programs received full funding.

Secretary Harker—

The CHAIRMAN. Hey, Jim, could you get closer to the microphone? I don't know if that's possible or not. You're a little light. We'll try to turn it up here as well.

Mr. LANGEVIN. Okay. I hope that's a little better. That's about as close as I can get, I think.

I just wanted to start off by saying that I'm pleased that both the *Columbia*- and *Virginia*-class submarine programs received full funding.

Secretary Harker, do you have any concerns with the *Columbia*- or *Virginia*-class programs, given that there is no room for a schedule to slip with the *Columbia*, given the fact that the *Ohios* will be retiring and taking—be taken out of service relatively soon?

Mr. HARKER. No, sir. Funding the *Columbia*- and the *Virginia*-class submarines was one of our number-one priorities and we made sure that they were fully funded in this budget.

Mr. LANGEVIN. Thank you.

Admiral Gilday, thank you for the phone call the other day. I'm sorry it got cut short but, hopefully we'll be able to circle back.

But, Admiral, I want to applaud you with how enthusiastically the Navy has embraced directed energy technology. Your navigation plan included directed energy considerations for the next destroyer and I'm excited to get the directed energy campaign plan in the near future.

How do directed energy weapons fit into the 2030 or 2040 ship fleet and does every ship in this future fleet have a directed energy capability?

Admiral GILDAY. Sir, I can say with a high degree of confidence that those ships that have excess power generation capability—the *Ford*-class aircraft carriers, as an example—generate three times the power of the *Nimitz* class.

Our new DDG(X) [Next-Generation Guided-Missile Destroyer] destroyer should have excess power generation capacity. The *Zumwalt*-class destroyers have excess power capacity. And so those would be the first candidates for directed energy system on a

manned ship with high-powered systems, and the key here is we want systems that can knock down missiles.

We need an anti-ballistic missile defense capability. That's a lot cheaper than the missile defense capabilities that we have today.

I do think that if we're optimistic about unmanned that we could look at a medium- or large-sized unmanned vessel that could also have laser technology, perhaps with—networked with other ships, and that could also provide for fleet defense.

I think if we—if we're going to—if we're going to defend the fleet in the future, a potentially larger fleet that's dispersed, we're going to have to look at directed energy as a potential—as a potential solution set.

And as I mentioned earlier, it remains, on the defensive side, our top priority with respect to research and development, and that is proceeding at pace with industry.

Mr. LANGEVIN. Thank you, Admiral.

Let me turn to another emerging technology that I've been following for quite some time. I'm concerned that the Navy is trying to shelf the railgun. I view the weapon as an air defense capability that will be vital in the area—in the era of great power competition.

It has a cost per shot advantage and it will deepen a ship's magazine and it helps alleviate Navy's vertical launch cell shortage. Why is Navy giving up on the railgun and gun-based air defense capabilities?

Admiral GILDAY. Sir, we have been chasing railgun for almost 30 years now and we just have not been able to develop the system—develop a system that you can easily get aboard a ship that would provide the kind of probability of kill that you speak to that we aspired to when we started doing the research years ago.

I do have more confidence in the high-velocity projectile that was used with the railgun that we think we can use in other guns that we have to provide us a layered defense along with some of the other kinetic systems we have now plus laser technology in the future.

I'd also say that the hypersonic missile technology and the stand-off ranges that both we and our potential adversaries face begin to make the railgun a less attractive option, just with respect to range.

Mr. LANGEVIN. That's something else we're going to have to continue to follow, Admiral.

Last question. The degree to which you have high confidence on cybersecurity for the fleet and in our weapon systems?

Admiral GILDAY. Yes, sir. You know, I always say that I never wake up in the morning completely confident that we don't have somebody in one of our systems that we have to get after.

And so I will tell you that we are making a move at pace to cloud—to the cloud for all—across all—

The CHAIRMAN. I do apologize. The gentleman's time has expired. So the rest of that answer would have to be for the record if he wants to follow up.

[The information referred to can be found in the Appendix on page 153.]

And I will try to keep us at 5 minutes because there's a lot of members to get in today.

Mr. Wilson is recognized for 5 minutes.

Mr. WILSON. Thank you, Mr. Chairman. I thank you for the witnesses being here today. It's so inspiring to see such competent and capable people to represent our country and work with our service members.

For Admiral Gilday, in a prior hearing on the Indo-Pacific theater posture, Admiral Phil Davidson testified to the appreciated American territory of Guam's significance as a deepwater strategic port, fuel and munition logistical depot, and it's home to 170,000 patriotic American citizens and service members.

He recommended deploying the Aegis Ashore missile defense facility to counter the Chinese missile threat, which would free up three Navy destroyers.

In your assessment, how could we improve Guam's defense strategy to limit its impact on strike power resources, which are already severely impacted by decommissioning plans?

Admiral GILDAY. Sir, there's a lot of work that's behind Admiral Davidson's requirement for missile defense of Guam. I think it's a valid requirement.

The only thing I'd add is, based on the last discussion I had, I think that we also ought to look at laser technology. I think it's even easier if it's shore based rather than ship based. The real key is the power generation source. I think you're talking about a much more affordable system.

I'm not saying that you would have that in lieu of missile defense, but probably additive in some type of defense in-depth construct. That's the only thing I'd add with respect to that requirement.

Mr. WILSON. And, Admiral, as you look at that we need to always remember that the people of Guam have the highest percentage of participation in the American military of any State or territory, and the people are so patriotic and so grateful for the liberation by the Marines.

Previously, Admiral, I was fortunate to represent the Marine Corps Air Station in Beaufort, which is home to four Marine Corps F/A-18 Hornet attack squadrons and two F-35B fleet replacement squadrons.

The budget request for the Navy does not include any funding for continued procurement of F/A-18E/F Super Hornet aircraft.

How does the Navy plan to manage tactical aircraft inventory risk and reduce the current strike fighter inventory shortfall without increased procurement quantities of the F-35C above plans and noting that the next-generation air dominance program has just begun efforts to define aircraft requirements and develop concepts?

Admiral GILDAY. Sir, simply, we have procured as many F/A-18 Super Hornets as we need. We have over 500 now. When our—when our deliveries are complete, we'll have about 640 Super Hornets. Many of those will be Block III Super Hornets, which are the latest generation of Super Hornet capability.

Our goal is to combine the latest F/A-18 Super Hornets with the F-35s to give us a mix of fourth- and fifth-generation fighters in our carrier air wings. What we found from extensive analysis, the

conclusions that we have seen in wargames and in exercises have demonstrated that we benefit from a mix of fourth- and fifth-generation aircraft.

And so we are at the twilight of our fourth-generation purchase. We are still picking up the pace with fifth gen [generation], and by 2025 we will close the current strike fighter shortfall that we have of 42 aircraft and if we remain apace with respect to funding and get that fourth-/fifth-gen mix that we think we need.

Mr. WILSON. Thank you very much.

And, Secretary Harker, the budget request proposes to cut 200 civilians from the Naval Audit Service and dramatically reduce its mission and scope. What rationale is driving this reduction and why should the Naval Audit Service be a quarter of the size of other services' audit agencies?

Mr. HARKER. Thank you, sir.

As a former certified public accountant, I believe in strong oversight, and we have six different organizations that provide oversight of the Navy and Marine Corps. Our overall budget request for that—those six oversight organizations has gone up by over \$125 million from fiscal year 2021 to fiscal year 2022.

So we strongly believe in oversight. The Naval Audit Service is one element of that. We are not eliminating those jobs or getting rid of those people. We're simply moving them to other elements within our oversight organization, sir.

Mr. WILSON. Thank you very much.

And I yield back, Mr. Chairman.

The CHAIRMAN. Thank you.

Mr. Larsen is recognized for 5 minutes.

Mr. LARSEN. Thank you, Mr. Chair, and I appreciate everyone coming out today. So this is for, I think, Secretary Harker.

We got a really nice shiny new building at Naval Air Station Whidbey Island built for the Triton and it's got that new car smell and no one's in it.

So the question is about the time line for the Triton and getting that, not just getting it operational beyond the two that are out there and the budget, again, delays that for a year. So can you give us an update on when the timing is—what the timing is for the Triton? And if you can't I'll have Admiral Gilday.

Mr. HARKER. Sir, I'd have to get back with you on that one. Do you know?

Mr. LARSEN. Admiral Gilday.

Admiral GILDAY. Sir, just so that I understand you correctly, you're talking about the new *Columbia*-class that we're bringing online in 2027?

Mr. LARSEN. No. The unmanned aircraft. At Naval Air Station Whidbey Island—

Admiral GILDAY. Yes, sir.

Mr. LARSEN [continuing]. There's a building built, MQ-4.

Admiral GILDAY. Ah, the MQ-4.

Mr. LARSEN. MQ-4.

Admiral GILDAY. Sir, right now—yes, sir?

Mr. LARSEN. By the way, thank you, Representative Courtney.
[Laughter.]

Admiral GILDAY. Yes, sir. As you know, our MQ-4s right now are deployed to Guam, and so we will be—we will be bringing them back at some point and rotating them in and out.

Mr. LARSEN. But that's just two of them. I'm talking about the operators. You got a building built for the operators and it's empty. So the VQ-1 squadron is moving in there before their decommissioning, but that's just a matter of happenstance.

Admiral GILDAY. Sir, I know—

Mr. LARSEN. It's built, ready to go.

Admiral GILDAY. Yes, sir. We have our—

Mr. LARSEN. And we're not going to be using it for 3 years?

Admiral GILDAY. Sir, I'll have to get back on the time line for that transition with more details.

Mr. LARSEN. Soon, please. When are we going to get these strategic laydown documents, which were supposed to be here by the end of June 11th?

Admiral GILDAY. Sir, our documents are being informed by the ongoing Global Posture Review. So the OSD just finished their Task Force China. They're finishing up their Global Posture Review next month, and that'll inform the laydown for the services.

[The information referred to was not available at the time of printing.]

Mr. LARSEN. All right.

The Navy analysis plan to homeport 12 new frigates at Naval— in Naval Station Everett in my district, the first 2, I think, by 2025 or 2026, if I recall that right.

How are you—how is the Navy approaching the MILCON [military construction] budget to support that? Because all we—all we know now is the frigates, but we assume there'll be something that's support for that.

Admiral GILDAY. Yes, sir. We're in the planning stages right now for that. As you know, we just recently settled on Washington as the homeport, and so that planning will begin to get funded and begin to be underway within the next year. I'll get you more specifics on that time line as well.

Mr. LARSEN. Yeah. And then, Secretary, can you give us the status of the Department of Navy's Arctic strategy? I'm trying to put the pieces of this together between the services and so far I don't really have a broad view of how the Pentagon sees this. So I've got to pick at each of the services to piece it together.

Mr. HARKER. Yes, sir. We have worked with the Coast Guard, the Navy and the Marine Corps to come forward with an Arctic Posture Review and that was completed over the winter, and there's ongoing work to fine tune that and look at what other elements will be included.

I know the Coast Guard's moving forward with our polar security cutter and then we have all of our submarines up there, and then we also do operations up in Alaska as well.

Mr. LARSEN. All right. Well, I look forward to some more detail on that.

Mr. Chairman, I want to just take the last bit of my time to as well wish you a happy birthday, and I think I speak for all of us right now when I say who the heck are all you people.

[Laughter.]

Mr. LARSEN. I haven't seen you all for 15 months. It's good to be back in the—back in the Armed Services room.

I yield back.

The CHAIRMAN. Yes, it'll be—will be good to get back to normal here very, very soon. Looking forward to it.

Mr. Turner is recognized for 5 minutes.

Mr. TURNER. Thank you, Mr. Chairman.

Mr. Harker, you've testified before Congress before, correct?

Mr. HARKER. Yes, sir.

Mr. TURNER. You're aware of your obligations in testifying before Congress, that it's not a press conference, that you have an obligation for truthfulness and completeness in your answer?

Mr. HARKER. Yes.

Mr. TURNER. Great. Your background, as you testified, is you're a CPA [certified public accountant].

Mr. HARKER. I was a CPA. I let my license lapse recently because of the other work that—

Mr. TURNER. You achieved the level of a CPA. Your background is accounting.

Mr. HARKER. Yes, sir.

Mr. TURNER. Okay. I have your June 4th memo, which I'd like to enter into the record, where you direct defund sea-launched cruise missile nuclear development effort.

The CHAIRMAN. Just one second. If I could enter that into the record with—you know, I ask unanimous consent the form you just said be entered into the record. Hearing no objection, so ordered.

[The information referred to can be found in the Appendix on page 148.]

Mr. TURNER. Thank you, Mr. Chairman. Thank you.

The line says, defund sea-launched cruise missile nuclear development efforts. You said that's not canceling. Dictionary says that defund is to prevent from continuing to receive funds. Seems to be a conflict.

Mr. Harker, there are a lot of people on this committee who are staunch advocates against unilateral disarmament, unilateral meaning alone and disarmament mean where we eliminate a weapons system. We're big fans of arms control negotiations where we actually get something for what we're doing.

Now, I'm very concerned about this memo because your background is accounting. Now, Secretary of Defense Austin, Chairman Milley, and Admiral Richard, and I'm going to guess with a question here, Admiral Gilday, were you consulted on this defunding of this missile?

Admiral GILDAY. No, sir.

Mr. TURNER. No, sir.

So Secretary Austin has that experience. Chairman Milley has that experience. Admiral Richard has that experience. Admiral Gilday has the experience, and you do not.

Congress and two administrations, including this budget, funded it. Do you have the expertise to conduct the assessment of—the analysis of alternatives to the sea-based launched cruise missile other than financial?

Mr. HARKER. No, sir, I do not.

Mr. TURNER. Do you have the expertise to conduct the Nuclear Posture Review?

Mr. HARKER. No, sir. I do not.

Mr. TURNER. So but yet you have the expertise, apparently, to direct the defunding of a cruise missile. Now, you said it was because you didn't want anybody to assume it was in because the Nuclear Posture Review hadn't been conducted.

Why not all nukes, Mr. Harker? Why didn't you direct them to defund all nukes? How did you choose—and remember your obligations before Congress—how did you choose defund the sea-launched cruise missile?

Mr. HARKER. Sir, because of where we are in the budget process. We have about 8 months before the President's budget is finalized and——

Mr. TURNER. So but, Mr. Harker, you had to specifically choose something. This is not a number that's in this. This is a weapons system.

Mr. Harker, I'm going to ask you who did you discuss this with? Since you've already indicated you don't have the expertise to being able to make strategic nuclear weapons decisions, who in the Pentagon did you discuss this with before you put in your memo signed by you defund the sea-launched nuclear cruise missile? Who?

Mr. HARKER. Nobody.

Mr. TURNER. No one alone? So, again, you're under—you know, you're under your obligations of testifying before Congress. You spoke to no one in your decision to defund the sea-launched cruise missile?

Mr. HARKER. It was preliminary guidance and it was my decision and I took it based on——

Mr. TURNER. Mr. Harker, I'm going to ask you to deliver to this committee all communications concerning the deliberations, advice, review, directions, and analysis that were undertaken—it's not classified, it's budget materials—that went into this item. Do you agree to deliver those to me?

Mr. HARKER. Yes, sir.

Mr. TURNER. Excellent. Are you aware as you were drafting this memo that the President of the United States is sitting down with Vladimir Putin this very month, and that as all the headlines today, because our President just landed in Geneva, indicate that arms control negotiations is one of those subject matters?

Mr. HARKER. Yes, sir.

Mr. TURNER. Do you realize the extent to which you have undermined President Biden and the United States in indicating that a weapons system that is nuclear is going to be unilaterally defunded without any negotiations or without receiving any concessions from Russia?

Mr. HARKER. Sir, it was a preliminary internal document.

Mr. TURNER. Are you aware of the extent to which your actions—because I want this to be clear. It may be your own undertaking and it may be just that you have uninformed to do this—undertaken this.

But everyone at the Pentagon needs to understand the severity of the actions that you've taken and its implications on the United

States for arms control negotiations, and the impact on the President of the United States.

This is not an accounting decision, Mr. Harker. Do you know the extent to which you have undermined the President of the United States in his arms control negotiations by undertaking what can only be described as a unilateral, you alone having done it, disarmament recommendation?

Mr. HARKER. Yes, sir.

Mr. TURNER. I yield back.

The CHAIRMAN. Mr. Courtney is recognized.

Mr. COURTNEY. Thank you, Mr. Chairman, and thank you to all the witnesses who—and the Seapower Subcommittee. We work together a lot and I'm looking forward. I think we are going to have more work to do.

You know, one just sort of comment I want to make and then I want to ask Admiral Gilday a couple questions is that, you know, unfortunately, when a budget comes over without a FYDP [Future Years Defense Program] and without a 30-year shipbuilding plan, it, frankly, makes your job a lot harder because in terms of trying to explain decisions, particularly on shipbuilding, which is a long game, I think, as you all know, it's a 1-year window, or headlights. It's just not sufficient to sort of see the direction where we're going.

So, hopefully, it's my understanding that some of those documents and analysis may be on its way over here, and I, frankly, think that's going to help everybody in terms of trying to get the right balance this year.

Admiral, on page 13 of your testimony you state that our future fleet places a premium on expanding our undersea advantage. During conflict, sea control and sea denial from beneath the waves are among the Navy's core advantages. We cannot afford to yield any ground to our competitors.

Again, this budget, unlike last year's budget, fully funds that undersea advantage with construction of two *Virginia*-class submarines, payload modules that will go with that, as well as R&D for the next version of our attack submarine fleet, as well as our nuclear deterrence with full funding for the *Columbia* program, which carries 70 percent of our nuclear warheads.

And could you just sort of talk about that priority in the context of China's threat that you mentioned at the outset of your testimony?

Admiral GILDAY. Yes, sir. I think that with respect to our most survivable strike platform—and again, this goes right back to why we have a Navy. This is about sea control and power projection, the ability to project power ashore. The submarines give us that greatest advantage.

That overmatch that we have right now against China we are unwilling to budge on. And so as we take a look at our investment strategy and where we put our next dollar with respect to lethality, our mind always goes to the undersea, including the unmanned undersea.

With respect to—with respect to *Columbia*, this year *Columbia* is about—just over 20 percent of our shipbuilding budget. And so in the future, it'll be over a third of our shipbuilding budget. It's a huge commitment.

But it has to be fenced off and we have to deliver that in 2027.

Mr. COURTNEY. Great, and I would encourage my colleagues to come up to Rhode Island and Connecticut to see the eye-watering infrastructure that is being built right now.

Secretary Marty Walsh was up and, again, as the building trades he, again, was speechless when he saw the magnitude of the project that's going on up there. I mean, there was—this is really happening. This isn't just sort of talk that's going on.

This is about the fourth or fifth year since I've been—or fourth or fifth time since I've been on Seapower that a pretty aggressive decommissioning proposal has come in on the cruisers and there's—as I think you all know, Congress has sort of pushed back in past years in terms of trying to preserve that air defense command capacity as well as the missile tube capacity.

I guess if you could just sort of talk about the fact that whether or not, you know, this plan is trying to sort of sift out the platforms that are salvageable versus not, and also how the decision to cut a DDG [guided missile destroyer], which is, in my opinion, Flight III are going to be the replacement of that air defense command.

I mean, that's where I think there's the biggest sort of heartburn on this side of the room.

Admiral GILDAY. Sir, I think the first thing I'd frame it with kind of big picture is where are we headed. So if I take a look at 2025, the questions came out earlier about Admiral Davidson's testimony about 6 years of potential conflict with China. So what do we plan to deliver in 2025 and 2026.

So if I take a look at the undersea we'll have delivered all of our Block III *Virginias*. We'll have delivered all of our Block IV *Virginias*. We'll be on the cusp of delivering Block Vs, and we'll have a longer range, more lethal undersea weapon.

On the surface, we'll be delivering the *Constellation*-class frigate. We'll be—we'll be building DDG(X). We'll be putting more Flight III DDGs in the water. We have—by 2025 our plan is to have hypersonics and the *Zumwalt*-class destroyers.

We're making continued investments in weapons with range and speed. Think Tactical Tomahawk. If I look at aviation, I talked about the fourth and fifth gen mix a few minutes ago that bring—that we'll have that in half of our air wings, six of our air wings—more than half our air wings—by 2025 with longer range weapons, with speed.

And so that—

The CHAIRMAN. Thank you. I, again, apologize. The gentleman's time has expired.

Mr. Lamborn is recognized for 5 minutes.

Mr. LAMBORN. Thank you, Mr. Chairman.

And General Berger, in a minute I'm going to ask you about some armaments that are on the unfunded priority list.

But, Admiral Gilday, I have to ask you about something first that I'm concerned about, many people are, and a lot of people in the civilian world.

I sent you a letter with two dozen people on it concerned that you had recently added several books to the Navy's professional reading list promoting Critical Race Theory and one of these books is Ibram X. Kendi's "How to Be an Anti-Racist," and it argues that

the entire American system is corrupted from top to bottom by racial prejudices, which account for all differences and outcomes in our society.

And one sentence out of that book says “the only remedy to past discrimination is present discrimination. The only remedy to present discrimination is future discrimination.”

Now, I understand that this is a voluntary reading list, but how does exposing our sailors to the idea that they are either oppressors or oppressed, and that we must actively discriminate to make up for past discrimination improve our Navy’s readiness and lethality for great power competition?

Admiral GILDAY. Sir, initially you mentioned Critical Race Theory. I’m not a theorist. I’m the Chief of Naval Operations.

What I can tell you is factually based on a substantial amount of time talking to sailors in the fleet there’s racism in the Navy just like there’s racism in our country, and the way we’re going to get after it is to be honest about it, not to sweep it under the rug, and to talk about it and that’s what we’re doing.

And that’s one of the reasons that book is on the list. It doesn’t mean I have any expectation that anybody believe or support everything that Mr. Kendi states in his book. I don’t support everything that Kendi says.

But the key point here is the sailors in our Navy have to be able to think critically. They have to be able to look outwardly at China and Russia and they have to understand what those societies—why those societies are a potential danger to the United States.

Inwardly, we have to understand ourselves and we have to understand critically that we value diversity. And I think—

Mr. LAMBORN. Okay. Admiral, I agree that we should have a robust and great discussion, and any racism should be uprooted and taken away. I absolutely agree and I endorse that.

But should we have future discrimination? You don’t endorse that particular statement, do you?

Admiral GILDAY. Sir, I have to look at the context of it. I’m not trying to be evasive. But I don’t—as I mentioned, I don’t support everything that Kendi asserts. I don’t believe everything I read. I think that—

Mr. LAMBORN. I hope—thank you.

Admiral GILDAY. I think that everybody has to be in a position to weigh fact from fiction, even our sailors. They’re bombarded every day by misinformation. Much of it comes from China and Russia on this issue that’s getting at our national psyche. I’m trying to get after it in the Navy.

Mr. LAMBORN. Okay. Well, I hope that’s one statement you don’t—you don’t endorse and maybe we can follow up on that.

[The information referred to can be found in the Appendix on page 155.]

Admiral—excuse me, General Berger, the number one and number three items on your unfunded priority list are Naval Strike Missiles and Tactical Tomahawks. If you don’t have those, what’s that going to do to the buildup of your plan for the Indo-Pacific?

General BERGER. Sir, those two are in the top for a reason, as you highlight. That’s going to allow us to control straits, to control pieces of littoral areas from either ship or from shore in a—in an

expeditionary and a light manner because it's really a JLTV [Joint Light Tactical Vehicle] with a missile on the back of it that can—that can hold at bay, can hold at risk an adversary's naval vessels.

Without it, we just allow them to maneuver with some freedom that we don't want them to have. So it's important for distributed maritime operations. It's important for our future role.

Mr. LAMBORN. Well, I'll try to help you work on getting that funded. I yield the rest of my time to the gentleman, Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Lamborn.

Acting Secretary of the Navy Harker, I want to ask this. I could ask you about the Navy's plan for negative seven ships. I could ask you about them taking out a DDG. I could ask them about absolutely blowing up the multi-ship procurement for amphibious ships.

But what I want to focus on is where we are in the fork of the road, I believe, with modernization versus generating current readiness. And as Yogi Berra once said, when you get to the fork in the road, take it.

I want to know, what's the Navy's future plan and how do they make sure that we're pursuing the necessary modernization elements, especially in light of a budget that seems to me to be completely abandoning any sort of future modernization efforts.

Mr. HARKER. Sir, we try to focus on modernization and to balance that with the need for current readiness and it made very difficult decisions for us.

Mr. WITTMAN. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. The gentleman's time has expired.

Mr. Moulton is recognized for 5 minutes.

Mr. MOULTON. Thank you, Mr. Chairman.

And first, I want to start by just thanking Admiral Gilday for defending basic American values of free and critical thought, which I think are one of the most important weapons we hold against adversaries like China.

General Berger, to start with you, last year, I asked you about the CH-53K requirement. I regret using the word requirement as you responded that you need 200 aircraft per the established program of record.

Less than 30 days after you testified, you released your force design report and stated that you needed fewer heavy-lift helicopters, that in March of this year you said that you do not need at least two full squadrons of heavy-lift helicopters compared to your previous plans.

Thirty-two fewer aircraft creates a potential savings for the American taxpayer or for the Marine Corps of \$4.4 billion. So if you were allowed to change the acquisition plan and recover those funds, can you please state how you would use those savings and why?

General BERGER. I think—I agree with the premise and I tried to address it in my opening comments. I think you look at us—you look to us to buy what we need, nothing more. So we need to match the vertical lift capability to the size of the Marine Corps and the tasks we're going to have in the future.

I think the program of record is—I know it's larger than we're going to need. I think we're going to learn as we go through experimentation through wargaming just how many we'll need to reduce.

But that initial program of record was based on a much larger Marine Corps.

Where would I redirect those funds? On things like the unfunded priority list that would help us accelerate force design, get us a bigger margin of strategic advantage over the PLA [People's Liberation Army] and faster.

Mr. MOULTON. So I want to make sure the ranking member and other members of this—other colleagues of mine on this committee hear this, which is that we need to listen to you in your requirements.

If we want to fund unfunded requirements, we should start by saving money on things that you don't need. I think that's really critical.

Admiral Gilday, how are you addressing this same question? What is the Navy doing to make these important tradeoffs between old and new capabilities? Because we simply don't have the luxury of keeping all our older systems while also investing in new ones.

Admiral GILDAY. Yes, sir. And so as I mentioned earlier, we need—we need the Navy forward to be relevant, and as Admiral Davidson testified, as Admiral Aquilino testified, China is becoming increasingly a concern with respect to Taiwan. We need to be out there.

And so I continue to fund the readiness of an aging fleet that, as I mentioned, is 21 years old. It's expensive, but that's the Navy that I believe the Nation needs out there on point.

We're investing heavily in new technologies, hypersonics as an example, directed energy in the defensive side as an example. As opposed to years ago, we are actually doing the maintenance on our ships.

We're getting better at doing that maintenance on time. We're not deferring the maintenance. We're not kicking it down the road because we know that 70 percent of the force we have today we're going to have in the future.

Sir, it is a balance between being ready today and making those investments for a force just around the corner that we may need tomorrow. It's based—it's a risk issue and it also takes into account the industrial base.

Mr. MOULTON. One of the clear conclusions of our bipartisan future defense task force report is that we have to make these tradeoffs, but also that many of these new technologies and capabilities are actually less expensive than some of the big old heavy weapons systems that we are working so hard to maintain right now.

Just look at China for an example, and we can see the kind of tradeoffs we can make and that's why our bipartisan task force was also able to recommend spending more money on fundamental investments in our national security like basic scientific research and STEM [science, technology, engineering, and math] education of our youth.

Commandant, it sounds like this question of modernization and tradeoffs is critical. Would you benefit from having a separate hearing to discuss this before the committee?

General BERGER. If it's useful to the members and your staff, yes, I would agree with that, and I think the way that the CNO [Chief of Naval Operations] and you and others have characterized it, I've

heard Congressman Wittman and a couple of other members the same. On the one hand, you have combatant commanders who have a risk right now this——

Mr. MOULTON. We're just short on time.

General BERGER. Very well.

Mr. MOULTON. General, Secretary Harker, Admiral Gilday, would you agree to such a hearing?

Mr. HARKER. Yes, sir.

Admiral GILDAY. Yes, sir.

Mr. MOULTON. General Berger, is it a problem that we lost the USS *Bonhomme Richard* for your China strategy?

General BERGER. It's a strategic problem.

Mr. MOULTON. Admiral Gilday, we need to see the report on this. We need to see the report and we need to have a clear plan to replace this ship if it's critical for our China strategy, all the more so if the rumors are true that one of your sailors burned it down.

Admiral GILDAY. Yes, sir. I commit to providing the full report to the Congress and make the report public.

The CHAIRMAN. The gentleman's time has expired.

Mr. Wittman is recognized.

Mr. WITTMAN. Thank you, Mr. Chairman. I want to thank our witnesses again.

General Berger, thank you again for all the work that you're doing with Force Design 2030 for the Marine Corps. Very forward thinking, the exact direction I believe we need to go to make sure the Marine Corps is, indeed, that lethal fighting force or the tip of the spear that protects this nation at a moment's notice and deters our adversaries around the world.

As we look at the things that are necessary in Force Design 2030, there's a lot there. There is a lot of modernization that needs to take place. There is a lot of divestiture in existing platforms.

There is a lot of transition to new platforms, to new capability. All those things, I think, are incredibly important.

The thing that I'm concerned about, though, is that Congress, in looking at that, gets lulled into a sense that the Marine Corps can do this by just in and of itself retiring legacy systems and then taking those resources and putting them forward to modernization.

But as we know, you have to do the transition properly. You can't just get rid of everything and then have this giant gap in capability and say, well, now, years from now things are going to happen.

I always tell folks, I said, you know, the dreams of our Nation's defense always happen outside the FYDP, and I want to make sure that doesn't happen in this particular case. And what I want to make sure, too, is that we understand that we're not taking on unacceptable risk in that transition. In other words, going through that bathtub.

Can you give me your perspective? Because it seems like to me that the Marine Corps has always been noted for doing more with less.

Seems like to me that as we modernize, we may be at a point of doing less with less if we don't look at the funding perspectives as you modernize, in addition to savings that you accrue by retiring legacy systems.

General BERGER. Sir, in my assessment, we have wrung just about everything we can out of the Marine Corps internally. We're at the limits of the risk that you address. We have reduced end strength. We have divested of legacy systems.

We have taken every measure we can to include a 15 percent cut in our headquarters. We have wrung it dry. We're driven by a pacing threat, as several of you all have highlighted today, that we don't control the pace at which they go.

And neither me nor the CNO want to transfer our risk onto the backs of a combatant commander because we—as others have pointed out, we have a perfect record of getting—guessing where the next conflict is going to happen. We got it wrong every time.

Mr. WITTMAN. Yeah.

General BERGER. We have to be ready every day every week, and the best insurance policy we have is a naval expeditionary force that's forward. We're at the—we're at the limits of what I can do internally right now.

Mr. WITTMAN. So would it be correct to say then that you—in order to get where you need to be with Force Design 2030, you would not only need the resources that you get from retiring older systems but also some additional resources to make sure we're on track so we don't take that unacceptable risk with the Marine Corps as you modernize?

General BERGER. I think that's accurate. My only other option is to reduce the end strength of your Marine Corps even further, and I think that's unacceptable risk.

Mr. WITTMAN. I agree.

Admiral GILDAY, let me—let me ask about the tension between the COCOMs [combatant commands] and what the chiefs are asked to provide, specifically, the Navy-Marine Corps team, as that demand signal continues to come in.

As you look at the plans that our combatant commanders have and then the request for forces, so it's always what are we doing for today's risk. And I understand the combatant commanders' quandary there.

But it seems like to me, historically, we have seen recently a significant increase in those RFFs [request for forces]. So I think the question becomes is the system broken.

If all we're doing now is seeing this constant procession of RFFs, is the system broken and should we maybe go back to the beginning and say, what's the real scope of threats and how do we do a better job to make sure that we're not consuming so much resources today to generate readiness today that we can't do the modernization we need for years to come?

Admiral GILDAY. Sir, I think, in short, I think the process needs more rigor, and so those 15 requests for forces that extended 4 carriers in Central Command for almost a year came at a cost of over a quarter of a billion dollars that we can't invest in modernization.

If there's a reason to keep the carrier there, then keep it there. But if there's not, use another element of the joint force to do the job and move things dynamically around.

I think the current Secretary of Defense recognizes that. He's bringing the *Eisenhower* home. He's swinging—he's swinging the

Reagan from the Western Pacific. That is not an easy decision to make.

But on any given day, today, the Navy is putting a hundred players on the field. The Secretary of Defense gets to decide how those players are used, and I just try to advise the judicious use of those forces so that we preserve precious resources.

Thank you.

Mr. WITTMAN. Thank you, Mr. Chairman. I yield back.

Mr. COURTNEY [presiding]. Thank you, Mr. Wittman. Thank you, Admiral.

Next up is Mr. Brown, who's joining us remotely.

Mr. BROWN. Mr. Chairman, can you hear me?

Mr. COURTNEY. We can hear you now.

Mr. BROWN. Great. Thank you.

And my question is for the secretary. I'd like to ask you not about, you know, procurement and platforms but about, I think, you know, our most important asset and that's, you know, our people, our sailors and our Marines.

In last year's NDAA [National Defense Authorization Act], Congress directed the Department of Defense, working with the service—with the services to establish a mentoring and career enhancing program with the aim to increase the diversity of the officer corps to better reflect our Nation by fostering a more diverse leadership pipeline.

I think mentoring is critical when you have 43 percent of the men and women in the total joint force are black and brown but there are zero four-star admirals, one four-star general in the Air Force and one in the Army.

I think mentoring is really important. Can you update us, Secretary Harker, on the Navy's effort to establish that mentoring program?

Mr. HARKER. Sorry, sir, I'm hard of hearing and I couldn't hear the entire question. The CNO is going to help me with this one.

Admiral GILDAY. Sir, I think the first thing I'd say is that I think this—I think that I'm speaking for the secretary when I say that he agrees that a Navy that looks like its citizens is a Navy that is truly representative of who we strive to be as a nation.

And so coming out of Task Force Navy was about a 6-month effort where we—where we went out to the fleet, we talked to sailors, and we got a better understanding of issues related to racism with respect to gender discrimination, with respect to ethnic issues, and we came back with a number of recommendations.

To your point, sir, one of the key things that we're doing is we're trying to do a better job at talent management so that we can put people in a position to be promoted so that we can make them admirals or make them—make them generals.

And so in the Navy, we have 17 officer committees and they have just now started to brief me individually on what they're doing at the lieutenant and lieutenant commander level so that we not—so that we develop leaders that are going to be competitive with their peers and are going to promote at a rate equal to their peers so that we can have that more diverse leadership flag wardroom in the future.

Mr. BROWN. Thank you. And I'd just—and I'd just like to emphasize that that mentoring also needs to occur, and you and I have had this conversation, at the precommissioning, training schooling, ROTC [Reserve Officers' Training Corps], and the academies.

I'd like to ask the secretary another question. Last year in the defense authorization we directed each service secretary to establish a senior advisor for diversity and inclusion.

In fact, we worked across the aisle in the services to ensure that we didn't call that person a chief diversity officer, but a senior advisor and their qualifications are that they have a background in management in diversity, equity, and inclusion issues, and personnel.

What is the status of the appointment of the senior advisor for diversity and inclusion in the Navy, this senior advisor who reports directly to the service secretary?

Mr. HARKER. Sir, we have hired a senior advisor to report to us on diversity, equity, and inclusion and that person just started recently.

He is looking at the existing policies that are department-wide and then also what's in the Navy and the Marine Corps in order to come forward and make sure that we are aligned with the direction of the administration on this effort.

Mr. BROWN. Well, I appreciate that and if you, you know, take for the record—I don't know if that's the right language we use or to request—but if we could get the background—the publicly available information about the senior advisor I'd appreciate it.

[The information referred to can be found in the Appendix on page 153.]

Thank you, Mr. Chairman. I yield back.

Mr. COURTNEY. Thank you, Mr. Brown, for bringing that up.

Again, that was a very strong bipartisan priority last year in the NDAA and I think we would definitely welcome that followup.

Next up is Mr. Scott from Georgia.

Mr. SCOTT. Thank you, Mr. Chairman.

Secretary Harker, before I move to the issue of readiness, I want to mention something to you and ask for your support in one thing.

Four graduates from service academies have been allowed to forego their service commitment this year and play in the NFL [National Football League]. The Navy has a gentleman who I've never met named Cameron Kinley, who asked for the same accommodation.

The others are from the different academies, Air Force and Army. But Malcolm Perry from the—is a Naval Academy grad and he was granted a request last year to forego his service briefly to play in the NFL.

Cameron Kinley, to the best of what I've seen in my reading, is the only person that has been denied that request. He was president of his class. He signed with the Tampa Bay Buccaneers, and then not only was he denied the request, he was denied the right to appeal, and my question gets back to the appeal.

I would appreciate it if you would allow him to appeal the decision and listen to the merits of his case, and if he's able to make his case then allow him to pursue both of his dreams to be a naval officer and play in the NFL.

So that is my specific request is to—is to listen to his—allow him to appeal and listen to it.

And the other statement I would make is that I'm not—I don't know if it's right or wrong, but I do know that there should be a uniform standard. And if it is an accommodation that's granted to—that's going to be granted to West Point and Air Force Academy grads then it needs to be accommodated to Naval Academy grads as well, in my opinion, and there needs to be consistency with the requests.

So that's a general statement. But I would appreciate if you would hear his—allow him to appeal the decision and listen to his appeal on the merits.

Mr. HARKER. Sir, I understand there have been different laws at different points in time as well as different policies, some of them at the OSD level.

Mr. SCOTT. Yes, sir.

Mr. HARKER. I looked at this case. I looked at the significant investment that taxpayers make in every midshipman and our expectation and their expectation is that midshipmen will graduate and be commissioned with the Navy and Marine Corps.

So talked with the CNO, talked with the Commandant and looked for their military advice and we went forward. I made the decision to deny his request.

Mr. SCOTT. The accommodation was made for Malcolm Perry. The accommodation has been made for four additional people.

Why is—it seems to me that his is the only accommodation that has not been made. Why is he different? Why should he be given less of an accommodation than others have been?

Mr. HARKER. I can't speak for what the Army and Air Force secretaries decided. I did not have a conversation with them about this. But, you know, looking at the two most famous Naval Academy graduates that played in professional sports—

Mr. SCOTT. Roger Staubach.

Mr. HARKER [continuing]. They both served first.

Mr. SCOTT. Roger Staubach served first?

Mr. HARKER. Yes, sir.

Mr. SCOTT. I didn't know—that was a long time ago, though.

Mr. HARKER. Yes, sir. But, I mean, that's—the legislation allows us to make exceptions when it's a significant benefit to the service, and for us, David Robinson and Roger Staubach, they both served first and they were recognized as graduates who had served in the military, and that added value to us.

Mr. SCOTT. Well, I've spent more time on this than I intended to, but I would suggest to you that if you have an all-American athlete that comes into our offices and is trying to decide which academy they want to go to, then it would be a mistake for us to recommend that they go to the Naval Academy if the Air Force and the Army are going to accommodate or be more accommodating to them.

Either way, I think there should be a uniform standard across the academies. And so obviously, you know, I'll tell you I'll speak with Lloyd Austin about it as well. But I think there needs to be a uniform standard.

Admiral, I'll move quickly on this. On the CNO's unfunded priority list, you've got readiness shortfalls including aviation depot maintenance, ship depot maintenance, and flying hour programs.

Could you speak to the issue of the balance between growing the Navy and sustaining the current Navy, and what it does for readiness today?

Admiral GILDAY. Yes, sir. Current readiness has been and will be my number one priority. We need a Navy that needs to be forward and is ready to fight tonight, and so I'm not backing off at all on our requirement, I believe, that serves our sailors well.

And now, General Berger mentioned this a few minutes ago. When we start—when we start cutting away at current readiness, we begin to push that risk on the backs of commanders out there at sea and the people that work for them.

When we begin to man ships with less people because it's always easy to take away people—that's money in your pocket right off the bat—or we put less ammunition in magazines or less spare parts in supply storerooms or we cut back on training, then you have a Navy that begins to become irrelevant and that's not a place where we want to be.

The CHAIRMAN [presiding]. The gentleman's time has expired.

Mr. Garamendi is recognized.

Mr. SCOTT. Thank you, Mr. Chairman.

Mr. GARAMENDI. Excuse me. I was stuck on Roger Staubach, with whom I had the privilege of playing against him twice during his career. So memories.

Mr. Secretary, you made the right decision.

Moving on. Admiral Gilday, where's the 5-year ship plan?

Admiral GILDAY. Sir, the 30-year shipbuilding plan or—

Mr. GARAMENDI. The ship—the shipyard improvement plan.

Admiral GILDAY. Oh, the shipyard improvement plan? Yes, sir. We'll have that by the end of the month.

Mr. GARAMENDI. Good. Then we'll have a hearing shortly thereafter. Thank you very much. Appreciate that.

Commandant Berger, could you in 4 minutes explain the Marine Corps of the future and what we need to know to prepare for that in this year's NDAA?

General BERGER. Sir, I offered in a separate hearing to lay it out in detail in 4 minutes or less.

First, you need a Marine Corps today, and until that point that's ready that can respond now. We can't take it off the field, as a couple of you have said, come back on the field 3 or 4 years later with the force we're going to need.

We have to be ready every week. We will. We are ready today. The force that you need in the future, I think the best case you have for deterrence against somebody like the PLAN [People's Liberation Army Navy] or Russia is to have a very strong forward force that's expeditionary, that has the ability to collect against, to deter, to compete every day, every week, that have the ability to work with allies and partners to build a network that will have the best chance of success of denying the—to preventing the next conflict from ever happening.

But if it does, to be already forward so that they can respond quickly and decisively. That means we have to be lighter. That

means we have to be less of a land force like we have been for the past 20 years, supporting the operations in the Middle East, and more of a naval force.

You need us—expeditionary you need us lighter, you need us able to sustain that force in a really distributed fashion, plugged into a naval and joint architecture that can move information rapidly, make decisions quickly.

It's the best chance you have of deterring and, frankly, if a crisis happens responding quickly.

Mr. GARAMENDI. Well, all that in 2 minutes. Well done.

I do agree with you we need to have a full hearing on it. Of particular interest to my subcommittee is the sustainment issues as well as locations from which you need to operate. So thank you for that.

Also, I understand that—and this may have been asked earlier during my absence. If so, my apologies. The AAV [Amphibious Assault Vehicle] incident off the coast of California, the loss of nine—of eight Marines, one sailor, I understand that an additional action has been taken in the last week with regard to the command structure.

Has that been—could you please sort of tell us where—what actions have been taken with regard to the command?

General BERGER. Once I reviewed the results of two investigations, the one safety investigation and then the first legal investigation—once it was clear to me what we knew about the event itself and that day, there were still unanswered questions.

So we directed a follow-on investigation to look back 6 months to find out how was this unit formed and who made what decisions. When that investigation came to me, it was pretty clear that the division commander at that time failed to uphold what we expect of a commander to do and provide in a trained ready force.

I pulled him out of his IG [inspector general] position, and since that time, I've administratively counseled him—formally counseled him. That's a permanent part of his record.

Mr. GARAMENDI. Which means what?

General BERGER. Most likely—it's difficult for an officer or general to move forward with that in their record as a permanent basis.

Mr. GARAMENDI. Very good. I appreciate your ongoing effort to deal with this tragedy and the necessary command. As I've said and others have said in the hearings in which we conducted on this, a culture of safety must be part of the Marine Corps ethics.

Could you—well, you won't comment in the next 7 seconds but I'll let that hang there, and appreciate your efforts. Thank you.

The CHAIRMAN. The gentleman's time has expired.

Dr. DesJarlais is recognized for 5 minutes.

Dr. DESJARLAIS. Thank you, Mr. Chairman.

Secretary Harker, last year the Department deployed the W76—2 low-yield nuclear warhead on some American [inaudible] submarines. I believe the utility [inaudible] something that deserves more attention [inaudible]. First, can you provide some context for what [inaudible] important [inaudible] escalate-to-win strategy?

The CHAIRMAN. I'm sorry. We have lost Dr. DesJarlais. We cannot hear you. It's getting cut off.

Dr. DESJARLAIS. You can't hear audio?

The CHAIRMAN. I'm hearing that. But you were, like, breaking up in between. So give it—give it one more try.

Dr. DESJARLAIS. Okay, let's—we're talking about low-yield W76-2 missiles, Secretary Harker. As you know that they were placed on submarines. Can you explain why that's important in the Putin escalate-to-win strategy? So if you could give us some context to why it's important that we have this.

Mr. HARKER. Yes, sir. The low-yield nuclear weapons was something that was done previously, the—different from the sea-launched cruise missile nuclear that was discussed a little while ago.

From the warfighting value of that, I think the CNO is probably the best capable person to discuss the value of the low-yield nuclear weapons.

Admiral GILDAY. Yes, sir. Low-yield is based on the findings of the Nuclear Posture Review, and the stated purpose of the low-yield weapons was to close a deterrence gap against the Russians and the Chinese.

And so there is a—there's a capability that the Russians in particular have and the NPR's [Nuclear Posture Review's] intent was to ensure that we could close that gap so that the Russians didn't feel like they were in a position of advantage with respect to weapons with that kind of yield.

Dr. DESJARLAIS. Do you feel that our current strategy is adequate?

Admiral GILDAY. Sir, I think as we come up on this new Nuclear Posture Review, one of the things that I always find reassuring about these reviews is from administration to administration they've been squarely focused on national security.

The recommendations track very consistently from administration to administration. And so I think taking a deeper look right now is a good opportunity and I think—I'm not trying to be evasive with your question. I just think that the NPR will shed some more light in terms of where we need to go and why.

Dr. DESJARLAIS. Okay. Well, I think it's very possible that the next nuclear blast we see is likely to be a low-yield and we have to have an adequate response, and I don't think that would be us making that first move.

But I think it is an important deterrent. Admiral Richards' assessment certainly feels that it would make conflict less likely. Do you agree with that?

Admiral GILDAY. Yes, sir. I do.

Dr. DESJARLAIS. Okay. And then the current system we have, of course, we can do it air launched. We have submarine launched from a missile, but this could also be something that was used on the sea-launched cruise missile. That would be another method that now may not be an option. Could that possibly take away a strategic tool that's very important?

Admiral GILDAY. Yes, sir. I think—technically, I think that would be feasible.

Dr. DESJARLAIS. Considering what Putin has with Skyfall and other weapons, as Mr. Turner pointed out earlier in the hearing, I think that that's something that needs another look because, ob-

viously, it's easier—for the Russians it's probably easier to intercept a ballistic missile and, certainly, some low yield that was delivered or attempted to be delivered by plane may also be less effective than a cruise missile that's launched from a submarine. Would you agree with that?

Admiral GILDAY. Sir, I think—I think at a higher classification, I think it would be worth a deeper discussion on that particular issue.

Dr. DESJARLAIS. Okay, and just for clarification, the yield of these W76-2, how does it compare to, say, Hiroshima and Nagasaki in terms of kilotons?

Admiral GILDAY. Sir, again, I think that that particular—those particular numbers exceed the classification of this hearing.

Dr. DESJARLAIS. Okay. I mean, you can Google it and read it on Wikipedia. So it may be for this hearing or not. I understand that's different. But there's been some argument made that our low-yield—

The CHAIRMAN. The gentleman's time has expired. Apologize.

Ms. Houlihan is recognized for 5 minutes.

Ms. HOULAHAN. Thank you, Mr. Chair, and thank you, gentlemen, for joining us today. I am going to try and accomplish something which is within 5 minutes to talk about the future of defense and also childcare. So I'm hoping I'll be able to have time.

I want to start by reading an abridged version—a version of an article by Christian Brose, who's a former McCain staffer, and he says, "Many defense experts believe that the U.S. military abetted and even encouraged by Congress continues to be focused on too many resources preparing for yesterday's battles rather than the conflicts most likely to be seen in the future.

"While aircraft carriers, heavy tanks, fighter jets, and nuclear weapons will continue to play a role in defending the homeland, many believe that the United States must shift its focus away from old wars and legacy weapons systems and focus more on asymmetrical threats such as biosecurity, cybersecurity, pandemics, and even disinformation.

"If a conflict occurred today, U.S. satellites would likely immediately be disabled and American ships would be rendered useless since they would be too vulnerable to precise hypersonic missiles.

"So, consequently, the U.S. should follow the Chinese, experts argue, pointing to cheap unmanned weapons and cheap unmanned underwater drones."

With that in mind, my question for Acting Secretary Harker and Admiral Gilday is I wanted to follow up on Mr. Wittman and Mr. Moulton's lines of question.

I was really grateful to be part of that bipartisan Future of Defense Task Force and I'm grateful that you all are willing to have another conversation about this.

But it doesn't appear that the Navy has conducted yet an analysis that looks simultaneously at the political ambitions of our two chief rivals, which are China and Russia, and at emerging technologies for warfare above all—I'm sorry, above, at, and below sea level and at the ability of the American and our allied industrial base to develop and put into production those affordable systems

that are necessary for our allies and we to prevail at sea, both in peace and at wartime.

So is it fair to say that there really hasn't been a study or an analysis of the way that you all think about that path, the fork to take? And if so, how, short of a hearing, can we ask for an understanding and insight into how you think through these really important decisions?

Mr. HARKER. Thank you, ma'am. We have actually done a lot of work around the unmanned systems and how to integrate those in with our force.

As the CNO mentioned earlier, there was a significant exercise off the coast of San Diego last month. There was also then a lot of work with getting the F/A-18 in order to be able to do that refueling with the MQ-25.

So we have done a lot to bring that technology into our doctrine and warfighting capabilities. There's still room to grow. I know both this committee and the Senate Armed Services Committee have concerns with how fast we're going. Some people think we're not moving fast enough.

Others think we're moving too fast, and we're trying to balance that with, you know, the requirements that we have and the budget we have.

Ms. HOULAHAN. And, Admiral Gilday, can I ask you as well for your reflections on that?

Admiral GILDAY. So, ma'am, our distributed maritime operations concept, in conjunction with the Marine Corps and how we believe we're going to fight, was the underpinning of the two latest assessments that actually heavily considered unmanned vehicles in the air, on the sea, under the sea.

Our investment strategy leads us to a hybrid fleet in the 2030s. As I mentioned earlier, we want to make sure that we get the technology correct before we come to—we come to the Secretary and ask him and make a proposal to scale.

But we believe that about a third of the fleet would be unmanned by the mid-2030s if we stay on pace, and by the late 2030s, about 40 percent of our air wings at sea would be unmanned. So we are moving in that direction. It's critical that we do so.

Ms. HOULAHAN. Thank you, and I look forward to further conversations on this. And with my minute left that I would like very much to talk about childcare.

You have asked for a very modest increase in family childcare homes. But the request for child development centers remains, largely, unchanged from year to year and neither of these requests have come close to the fiscal year 2020 funding level.

Can you give me some insight and context into the decision making of why childcare portions of the Navy and Marine Corps budget requests are where they are when we have 7,000 children who still are on wait lists?

Mr. HARKER. Yes, ma'am. There was a significant increase in funding for childcare last year. We had a MILCON project that's going to increase and do repairs to the child facility in Kitsap.

We also had five planning and design projects for \$11 million, which we're executing this year as we look at how can we go for-

ward with the MILCON necessary to continue to expand our childcare capability.

At the same time, we're also working to increase our childcare in ways that don't require MILCON. So we have got a public-private partnership. We're working with the Coronado Unified School District in San Diego to try to use some of their schools for after school care so that we can free up space in our child development centers and be able to accommodate additional students.

This is definitely something we take seriously and we're trying to handle that.

Ms. HOULAHAN. I look forward to working with you on that.

And with that, gentlemen, I yield back and thank you, Mr. Chair.

The CHAIRMAN. Thank you.

Mr. Kelly is recognized for 5 minutes.

Mr. KELLY. Mr. Secretary, what is the top line budget this year as opposed to last year, just the dollar number?

Mr. HARKER. This year's top line budget for the Department of Defense is——

Mr. KELLY. Not for the Department of Defense. For the Department of the Navy.

Mr. HARKER. \$211 million.

Mr. KELLY. What was that?

Mr. HARKER. \$211 million, sir.

Mr. KELLY. And what was it last year?

Mr. HARKER. \$206 million.

Mr. KELLY. Okay. And so my next question would be is——

The CHAIRMAN. I think you mean billion. Okay.

Mr. HARKER. Yes, sir. Billion.

The CHAIRMAN. Go ahead.

Mr. KELLY. All right. And my next question would be is of that how much is allocated to things other than building ships or doing personnel? How much of that is to climate change?

How much of that is to renewable fuels? How much of those dollars of your budget are allocated to something other than building ships or training sailors or Marines?

Mr. HARKER. The majority of our budget is focused on personnel——

Mr. KELLY. I know the majority, but how much of it is not focused on that?

Mr. HARKER. We have not previously tagged our budget for those things, and so we're going through the process of identifying what those specific dollars are right now, sir.

Mr. KELLY. Okay. And there's a \$2 billion cut in shipbuilding next year, right? Two billion cut in the shipbuilding budget. Is that correct?

Mr. HARKER. Versus what we had planned in fiscal year 2021, yes, sir.

Mr. KELLY. Okay. And then so when do we expect the shipbuilding plan?

Mr. HARKER. Shipbuilding plan is going through the clearance process right now—I hope to get it to you as soon as possible. I'd wanted to get it to you before this hearing and was unable to get the——

Mr. KELLY. That was one of the only questions I asked Secretary Austin, would he commit to doing that since we did not get one last year. You understand that we can't do our jobs if we don't get that product from y'all?

Mr. HARKER. Yes, sir. I understand. We have committed to get it to you and we will get it to you. Could not get it done by—

Mr. KELLY. It's a little late now, though. We're talking about the budget now. And you understand that you're asking us to trust your judgment into the future and your management of risk throughout all departments while at the same time failing to provide us any insight into what the future looks like. It's one of those "trust me."

Mr. HARKER. Sir, the shipbuilding plan is something that is typically not delivered in the first year of a new administration. This year it is required and we—

Mr. KELLY. But it's the requirement under law, correct?

Mr. HARKER. Pardon me, sir?

Mr. KELLY. It's a requirement under law to provide that to us, correct?

Mr. HARKER. Yes [inaudible] does and we are going to deliver that.

Mr. KELLY. And you do understand that in Mississippi, you know, we build ships there, and you've visited there and I thank you for that. That shows that you are on the spot doing the things that you're supposed to do, and I really appreciate that, Mr. Secretary.

But my question is, in this budget we're asking to cut out one DDG.

Mr. HARKER. Yes, sir.

Mr. KELLY. Yet, we had already committed in this plan to build two. So we're asking to cut one of those. So what do we tell those shipbuilders? What do we tell those employers?

What do we do with that labor force? And when we have to build that DDG later, how much more will it cost the taxpayers because we didn't do what we as a government agreed to do?

Mr. HARKER. Sir, that's—that was our biggest regret in this budget. I wish we could have fit that DDG into this budget, and we are committed to building that next year. We're also committed to doing a multi—

Mr. KELLY. And those laid-off workers—will it cost more once we lay off workers that aren't able to do what they were committed to do? You understand our industrial base.

When we have to lay off workers or they don't have something to do, they have to be laid off, and you understand then that costs us, the American taxpayers, much more dollars to build the exact same thing because we have to regen a workforce?

Mr. HARKER. Yes, sir. I understand, and I was impressed with what you're doing down in Mississippi with the partnership with the local high schools and with your community colleges to bring on a workforce and to maintain that workforce, and we believe that we can continue forward with providing the support for that industrial base.

Mr. KELLY. Here's all I'll tell you is we're getting a defense cut. We're getting a haircut this year. You can call it whatever you

want, but it's a haircut and it's a significant haircut across the board.

And I remember when we had ships crashing into each other, commanders being relieved, captains of ships or commanders at all levels, aircraft falling out of the air, vehicle turnovers that were killing Marines and Army kids.

All these things happened because we had an inadequate budget in order to do the things that are necessary today. And I will argue if we're not really, really careful, guys, we're going to start having sailors crashing ships, airplanes falling out of the sky because of maintenance errors, untrained leaders who are not enforcing standards that should be, and I will just tell you, you guys need to really push back.

This budget is not capable of doing what we need to do to protect the nation today or in 2030 or 2035. And I'd just asked, guys, that's what we pay you big dollars for.

Please push back and let them know it's not enough. You're great leaders. You owe that to this nation. Thank you, and I yield back.

The CHAIRMAN. Ms. Slotkin.

Ms. SLOTKIN. Yes. Thank you for being here. I know we have had a lot of discussion about the top-line budget, about equipment, about hardware, about numbers of ships. But we have also heard in pretty much every one of our hearings, especially those of us on the bipartisan defense task force, that it's not just about hardware.

It's about our ability to quickly and efficiently acquire new technology, take the best from Silicon Valley, and incorporate it into the Department of Defense. And I know, as I'm sure you do, that it's a laborious process to go from great idea to new weapons.

China has no such problem. They have no such problem, no such 3-year string, and while we can have a debate about the top-line budget and the hardware, I want to know what you all are doing to change the culture and climate around acquisition to make sure our smallest companies who have some of the best ideas are actually able to get the attention of the Department of Defense.

And as we have heard, this valley of death, that you can get money for a prototype but you can't actually turn it into a program of record.

So can I hear from both OSD as well as Admiral Gilday on this, please? Briefly.

Mr. HARKER. Yes, ma'am. This is something that we definitely are working to improve. We stood up an organization called NavalX [Naval Expeditions Agility Office], which is focused on trying to identify those requirements and partner with industry in order to come up with quick rapid ways of meeting those requirements.

That's something that's been stood up in the last couple of years that is a really powerful capability that we have established both here in the DC area and then out at all the various fleet concentration areas, and we're working within the acquisition community as well as within the operational Navy and Marine Corps to try to facilitate a quick dialogue so that we can go from requirement to delivery as quickly as we can.

You're absolutely right that there is a long valley of death in the current acquisition process, and this is something that needs to change.

When you look at all of the different acquisition requirements, we have put in requirements and controls in place to prevent fraud, prevent waste, prevent abuse, but all of those requirements come at a cost and they slow things down, and we need to figure out how to maintain control over waste, abuse, those types of things, while enabling our acquisition community to work as quickly as they can.

Ms. SLOTKIN. Admiral.

Admiral GILDAY. Yes, ma'am. I'd like to thank the Congress for the—for the authorities that we have to accelerate buys in the acquisition process.

I'll give you a couple of examples. We have a new deck crawler kind of machine that cleans the hulls of submarines when they go into dry dock. A year ago, that would take us 4 weeks to clean the outside of the hull. It takes us two—it takes two shifts to complete that work.

We have headsets now that allow us to map a space on a ship digitally so that a job that we give a shipyard worker to do is much more accurate in terms of its measurements, in terms of its 3D [three dimensional] capability. Those were turned very, very quickly. Just a couple of examples.

But another one is laser technology, and so we're trying to leverage small businesses as much as we can because of the power and the innovation that out there. But I'm not at all under the impression that we have completely solved this, and there are companies that still can't get to us. And so—

Ms. SLOTKIN. Yeah. I would say we're pretty far from solving it since, literally, every hearing we have heard from these companies has talked about how difficult it is.

And I would note that we did give you guys the authority, actually, even before I got here. This SBIR [Small Business Innovation Research] authority allows you to do this rapid acquisition, and it's less than 2.5 percent of your acquisition budget was through that program in 2021.

So I would just flag it's also a cultural thing hearing from you all that people can try things and fail, and Department of Defense doesn't usually like that kind of thing.

My second question is myself and Representative Gallagher have been running a supply chain task force here on HASC [House Armed Services Committee]. It's been a very bipartisan process.

We all learned through the past year of COVID how difficult it is to have transparency on our supply chains, but how important it is so we don't get caught with our pants down if we're sole source buying things from China.

Do you, Admiral Gilday, have transparency on supply chain that is needed for the Navy? If not, what is your plan to get that transparency?

Admiral GILDAY. So I would say that one of the silver linings to COVID has been the lifting of that opaque curtain on 395 between Crystal City and the Pentagon.

We have much more visibility into the fragility of those supply chains, those single-source overseas suppliers, because industry understands the risk both to them and to us if we can't solve those problems quickly.

We're in a better place now and I—my hat's off to industry and to our Under Secretary Geurts for making the effort to keep those communications on a weekly basis during the pandemic.

Ms. SLOTKIN. Thank you, and I yield back.

The CHAIRMAN. Thank you.

Mr. Gallagher is recognized for 5 minutes.

Mr. GALLAGHER. Thank you.

Commandant Berger, do you share the concerns expressed by Admiral Davidson about a potential PRC [People's Republic of China] action against Taiwan within the next 6 years?

General BERGER. I do, sir.

Mr. GALLAGHER. CNO, same question to you.

Admiral GILDAY. Yes, sir.

Mr. GALLAGHER. I think this gets to the fundamental dilemma that you're hearing expressed on both sides with regards to the overall budget. We seem to be punting our—a larger Navy into the future on a 2045 time line when really we need to be planning around a 2025 time line, and we need to be resourcing it accordingly.

And that's—to the extent you're hearing frustration, I think that is the frustration or at least—I don't speak for other members. That's the frustration and sense of urgency I feel.

There may be small ways we can start to get at it as we haggle over the bigger budgetary picture.

Commandant, for example, last year this committee supported at least part of your requests for ground-based anti-ship missiles and long-range fires. In a bipartisan manner, we endorsed your overall force design initiatives.

Regrettably, the appropriators cut your funding for GBASM [Ground Based Anti-Ship Missile] and zeroed out long-range fires. Can you briefly describe the impact of that cut and the importance of those programs.

General BERGER. It reduced what we'll have in the field in 2023. It'll delay the fielding of the capability. It's a proven technology. It set us back in time, which equals—for a combatant commander it equals risk.

Mr. GALLAGHER. And then a bit more of the initial program, you also identified artificial intelligence-enabled force protection as a capability for prioritized investment in your most recent force design guidance.

Yet, it's not resourced in the fiscal year 2022 budget submission. This was funded and developed by the Small Business Innovation Research program, which is highly competitive, subject to multi-phase competition, very difficult to get to phase three.

In light of that, the design budget, how does the Marine Corps plan to leverage this SBIR investment and resource and deploy this AI [artificial intelligence]-enabled force protection capability?

General BERGER. At our bases and stations, in my opinion, and I'm very familiar with the technology, it can actually reduce the number of military police, security—civilian security that we hire right now.

It's also the kind of technology that will allow you to use it into the future. It won't be obsolete 2 or 3 years from now. Baked into it is the ability to update the software inside it.

For perimeter security, for monitoring the security of our installations, I think it will be a helpful capability, and I think this year we'll make a—we'll make a decision on procurement and where to field it, because we have already used it at Marine Corps Air Station Miramar and it's proven its effectiveness.

Mr. GALLAGHER. That's good to hear, and I hope members of the committee will work to give you the resources you need there.

Admiral Gilday, we—I think we all agree we want the *Constellation*-class frigate to be a success. We want it on time, on budget. Sort of the logic of that was it was a proven design. I think that's what put Fincantieri in an advantageous position.

I understand the need for combat systems changes on that ship. But will you commit to—you know, with the with the lessons of the LCS in mind commit to minimizing changes to existing hull and machinery?

I mean, why make any changes in light of just the urgency of fielding this platform on time and on budget?

Admiral GILDAY. Sir, I agree with you. When I went up to the shipyard to visit that's one of the things I committed to, that we would minimize any perturbations.

We got a lot done what we want to put in that ship and go after it instead of, as you as you allude to, kind of drag it out over time and add uncertainty and risk to the—to the build.

Mr. GALLAGHER. And I get that the—just to sort of step back here in what time I have remaining, I get that a lot of the decisions that need to be made are, in some ways, even above your paygrade.

In other words, any tradeoff between the services would have to be reconciled by the Secretary of Defense and the President for the budget. You know, their overall tradeoff between nondefense discretionary spending verse defense spending is, certainly, something that only the White House can resolve.

But given that the commitment to a 355-ship Navy is a statutory commitment, I mean, what top line would you need in order to advance towards that objective more expeditiously?

Admiral GILDAY. Yes, sir. The shipbuilding plan that we submitted last year that was predicated on 4.1 percent growth to get us to 355 in 10 years. And so that was, to Mr. Courtney's point, a clear set of headlights not only for the Congress but for industry.

When EB [General Dynamics Electric Boat] puts millions of dollars into infrastructure because they're counting on building that *Columbia* for the next 15 years, that's the kind of predictability and—predictability that we really need.

Mr. GALLAGHER. Well, I support the 10-year time horizon as unrealistic, as some may suggest, and just in light of these warnings about something happening within the next 5 or 6 years, I think we all need to act with a greater sense of urgency.

The CHAIRMAN. Thank you.

Mr. Golden is recognized for 5 minutes.

Mr. GOLDEN. Thank you.

Admiral Gilday, during your recent visit to Bath Iron Works, you said that, "One of the most important reasons I'm in Maine today is to ensure that every person here knows their work is critically important to our Navy."

“DDGs are the workhorse of our fleet and, simply put, you can’t get to the fight if you don’t have ships to sail there. To the entire workforce here at Bath Iron Works, who are responsible for helping us generate warfighting readiness, you have my profound thanks.”

A few weeks later, the Navy delivered a budget request that would cut a DDG that’s already under contract. This proposed cut would result in about 500 laid off DDG shipbuilders, and those are likely to be the youngest shipbuilders.

It takes about 7 years to get fully proficient. So those are your future shipbuilders. Those are your DDG(X) shipbuilders.

You mentioned the DDG is critically important to the Navy. It’s the most versatile ship in the fleet. It’s the principal for ballistic missile defense. It provides anti-submarine, anti-surface, and anti-air capabilities in a single platform.

Since I became a member of this committee, when asked not one member of the Navy has failed to stress the importance of getting the Flight III out to sea.

Now when we’re prepared to deliver the Navy this new capability it’s proposed to reduce it. In front of the Senate last week, Admiral Kilby said the Navy needs the Flight III capability.

Same hearing, Mr. Stefany says that the Navy absolutely wants to do another multi-year procurement from 2023 to 2027. But we’re looking at a cut in fiscal year 2022.

This just doesn’t add up to me. The budget would take seven cruisers offline, the tradeoff generally understood that we replace them with a new DDG Flight III, which has less missiles in the magazine but great new capabilities with the SPY-6 radar. But the proposal would reduce both at the same time.

So where does the Navy plan to get the capabilities that the Flight III provides? You’re decommissioning cruisers. The new frigate can’t deliver the full capability of the DDG Flight II-A let alone the Flight III.

The DDG-51 is the most consistent and stable surface combatant program in the Navy right now. Compared to many of the Navy’s recent surface combatant programs, it’s a huge success. We can deliver on budget, on time, and the Flight III coming online now is the most superior destroyer ever built.

Last year, Congress expressed strong support for increased procurement of Flight III by including \$130 million in the fiscal year 2021 defense bills to support the procurement of an additional DDG in fiscal year 2022. In other words, we told you to procure three DDG ships this year, and instead, the Navy has come back and requested one.

Congress bears the responsibility to provide and maintain a Navy and Congress gave the Navy direction last year that isn’t reflected at all in this budget proposal, essentially, a two-ship reduction from the existing law, which Congress agreed to this past December.

Admiral, you talked about fiscal year 2025 and 2026 and the fleet that you envision having out there and ready for the combatant commander. You won’t be building DDG(X) in 2025. That is slated for fiscal year 2028 at the earliest.

You know, essentially, I think what you’re looking at is you’ll still be building DDG-51 Flight IIIs. I think that the last con-

tracted one will be delivered in fiscal year 2027 for a total of only 14 ships, roughly speaking.

So in 2025, thinking about that potential threat from China that everyone has been talking about, you're going to have the Flight III, you're going to have the *Zumwalt*, and you're going to have the frigate.

That's what you're going to have out there. I hope that by that time we might have successfully equipped the *Zumwalt* with a hypersonic missile capability, and I know that you have a March 18th solicitation on how to reconfigure the *Zumwalt*-class to host larger hypersonic missiles in the new vertical launch system.

As you're looking at the DDG(X) out in the future, I've seen Admiral Galinis talking about how it's probably going to look maybe a little bit more like a *Zumwalt* than the *Arleigh Burke* in a desire to get the DDG-51 Flight III capabilities alongside the DDG 1000 integrated power system.

So given this concern about fiscal years 2025 and 2026, why aren't we looking to focus on getting that *Zumwalt* equipped with the hypersonic, learning the lessons about how to blend the 51 with the 1000, pumping the brakes a little bit, like Congress said in the last Congress quite clearly with the budget that it delivered, essentially saying let's slow down the DDG(X) and let's focus on the acquisition of the Flight III capability?

With my remaining time, and I look forward to the Navy's responses on, you know, on the record after the fact, Secretary Harker, you have a June 4th memo where you talk about using existing authority such as multi-year procurements in order to be efficient with taxpayer dollars and provide stability to the industrial tax base.

That's something that this committee and the Appropriations Committee in the last Congress has already endorsed.

I look forward to working with you in that. And, you know, as disappointed as I am with this budget request, you have a friend in trying to work with the Navy to get you your top priority for the UPL [unfunded priority list].

[The information referred to can be found in the Appendix on page 153.]

The CHAIRMAN. Thank you. The gentleman's time has expired.

Mr. Bacon is recognized for 5 minutes.

Mr. BACON. Thank you, Mr. Chairman.

Thank you, gentlemen, for being here. Thanks for your leadership.

I agree with the ranking member, Mike Rogers, and Senator Inhofe concerning the President's defense budget request. The budget falls short of providing the resources, equipment, and training that our service members require to confront threats like China.

And we have heard today that China is our pacing threat. We have heard that China has the largest navy in the world. We have heard today that our Navy's buying power is less than it was in 2010. These are compelling words.

Yet, while the nondefense budget from this administration is increasing by 16 percent, the defense budget is being cut when infla-

tion is factored in. The Navy's shipbuilding budget is being cut by 3 percent. The Navy's aviation budget is being cut by 15 percent.

That's reality. Those are—those are the actions by the administration and they don't match the words. That's my—really, my main point here. The actions are not matching the words from the administration. It's cognitive dissonance personified.

And we're not fooled by some good-sounding words from the administration that China is the pacing threat, yet the defense budget is being cut at the same time. So I just want to make those opening comments.

My first question is to Admiral Gilday and General Berger. I've been a leading proponent of compelling the Department of Defense to establish not only EMS [electromagnetic spectrum] strategy but an implementation plan as well. It's a priority. We have fallen behind in this area in electronic magnetic spectrum.

Have the Navy and Marine Corps published electronic magnetic spectrum warfare strategy, and if not, when could we see it? Thank you.

Admiral GILDAY. Sir, I'll have to get back to you on that specific strategy. I know that we have detailed concepts of operation in terms of how we use the systems tactically, particularly in the Growler, and how we combine those with other joint assets in order—in order to increase our effectiveness out there in the Western Pacific. But I'll get back to you on the—on the strategy piece, sir.

[The information referred to can be found in the Appendix on page 153.]

Mr. BACON. I would just point out, after serving 30 years and being an electronic warfare guy myself, the Navy has led the way in this since the 1990s. So we appreciate it.

But we do need a good strategy. We need a Joint Staff strategy that guides it.

General Berger.

General BERGER. I understand the question and I agree with the priority on it. It's an area of warfare, especially vis-a-vis Russia/PLAN that we have got to maintain an advantage in.

I'll ask you if I can check—I don't know of a written Marine Corps strategy that we published in the past 24 months. It may exist, but not that I'm familiar with.

[The information referred to can be found in the Appendix on page 153.]

Mr. BACON. Thank you. I've just—I've been studying this for a while. We fell behind in the 1990s. We didn't have the right leadership at DOD [Department of Defense] and the Joint Staff on electronic warfare—electromagnetic spectrum operations, as it is called now.

We need to play catch-up and it starts with the DOD and Joint Staff level, but we surely need the services to be a strong part of that.

Secretary Harker, do you support the funding of the *Columbia*-class submarine out of the National Sea-Based Deterrence Fund?

Mr. HARKER. Sir, that's one that you've given us the authority to do that, and then the appropriators appropriated into SCN [Shipbuilding and Conversion, Navy]. So we go ahead and we transfer

the money from SCN into the National Sea-Based Deterrence Fund. And so that's a process that we currently do in order to comply with the law.

Mr. BACON. Are you—are you confident that we're going to be fielding the *Columbia* class on time with our current budget and are things going as you would like?

Mr. HARKER. Yes, sir. We are moving forward with *Columbia*. It's our number one priority. We have put additional funds into this year's budget for risk reduction on *Columbia*, and so that was one of the areas where we invested funds and that is our number one priority and it will remain that way.

Mr. BACON. Question for Admiral Gilday. If the Navy didn't request funding for continued procurement of the F/A-18 Super Hornet and has not increased the buy for the F-35, are we putting ourselves at risk here with our tactical fighter inventory?

Admiral GILDAY. Sir, right now we're short 42 fighters. We believe the path that we're on gets this—resolves that by 2025.

So each year as we continue to upgrade our existing F/A-18 Super Hornet, so Block IIs to Block IIIs, and then procure F-35s at pace from 15 to 20 a year, we'll get to where we need to be with about 5 to 6 wings by 2025 that have that fourth/fifth gen integration.

Mr. BACON. Thank you, and just a closing request for Mr. Harker. I sent you a letter last month. We had a World War II hero, Petty Officer Charles French, an African-American sailor. He was on a ship that was sunk off the Solomon Islands in 1942.

He rescued 15 sailors from capture and probable being killed by the Japanese at the time, and he didn't get an award. This would mean something for Omaha. He's a favorite son of Omaha, and his family. If you would look at that, I would be grateful.

Thank you.

Mr. HARKER. Thank you, sir. Be glad to look at it.

Ms. SPEIER [presiding]. The gentleman's time has expired.

The gentlelady from Virginia, Mrs. Luria, is recognized for 5 minutes.

Mrs. LURIA. Thank you.

And, Admiral Gilday, in the interest of time, I'm going to ask some yes, no, or short answer questions. And you've already had the opportunity several times during today's hearing to state that you agree with Admiral Davidson and Admiral Aquilino's comments about the urgency of a potential attack by the Chinese on Taiwan.

I wanted to point out, in your statement you write that the Navy has studied, identified, and prioritized the future capabilities we need to execute our evolving warfighting concepts and maintain a credible deterrent with respect to the PRC.

So what year do you expect to have the majority of those capabilities available operating and deployed to counter that threat?

Admiral GILDAY. I think hypersonics offensively by—initially by 2025. That program itself is—

Mrs. LURIA. So hypersonics. You're talking about one thing.

So I mean, this future fleet that you're envisioning by 2025 you think that we're going to have all of those capabilities?

Admiral GILDAY. No. No. No. No, I don't, ma'am.

Mrs. LURIA. Okay.

Admiral GILDAY. So, specifically, I mean, there, are a number of different capabilities we're talking about including the networks we need to fight on.

Mrs. LURIA. Further out, like, not within the next 5 to 6 years, in that time frame?

Admiral GILDAY. Not by—not by—the majority of those systems not by 2025.

Mrs. LURIA. Okay. So and if the PACOM commanders are correct, and I believe them to be—I think in your professional opinion as a surface warfare officer, you also, you know, believe that it's not prudent to decommission 15 ships in the next year when China could invade Taiwan in the very near term.

So I understand you were given a pretty shitty top line by the administration and, specifically, the Pentagon. So you didn't have a lot of good choices. But you did have choices.

And so I was looking at the words you used, and you said that this budget is going to divest to invest. So that's your strategy you're using.

And I look back over the last 20 years of budgets and saw that that was a very familiar term, especially in the 2004 budget where the Navy used that same divest to invest strategy in its 21st Century Sea Power 21.

So that was defined by Sea Shield, Sea Strike, and Sea Basing, all tied together by this network called FORCENet.

And so if we fast forward to today and we look at that future strategy at the time, it was based on DDG-1000, LCS, and FORCENet. So with the DDG-1000, just a quick question. How many DDG-1000s at that point in time did we intend to build?

Admiral GILDAY. Ma'am, I'd have to get back to you on the exact number. I know it's fluctuated over time. But—

Mrs. LURIA. Around 30?

Admiral GILDAY. Many. Yes, about 30.

Mrs. LURIA. Yes, and we have built three.

Admiral GILDAY. Right.

Mrs. LURIA. What was the plan procurement totals for the LCS?

Admiral GILDAY. I don't know off—

[The information referred to can be found in the Appendix on page 154.]

Mrs. LURIA. Higher than what we have built, obviously, with these modular capabilities that we haven't developed.

And what is the current status of FORCENet? Is that a mature system that we're operating today?

Admiral GILDAY. No.

Mrs. LURIA. Okay. Because I'm thinking Project Overmatch as I'm looking at ForceNet, going back.

Admiral GILDAY. Right. Right. Right.

Mrs. LURIA. So I think that we're, you know, in a similar cross-roads, the divest to invest strategy and, you know, as I've said many times, as many of my colleagues have echoed today, you know, we're looking at this Battle Force 2045, a plan that's far off, a 355-ship goal that we're never going to get to when we decommission more ships every year than we actually build.

And it causes a great concern because I think there's an urgency. I mean, what are we going to do in 2025 to counter this threat? And, you know, you very correctly stated—you know, spent a lot of time in your statement talking about how the United States is a maritime nation and how that's been important since the founding of this nation, and the Navy has allowed us to maintain our role on the global stage as a global power to maintain free trade, and some very good comments in there.

But I don't see what the Navy is doing today to accomplish that when we're continuing to shrink and we're continuing to divest to invest with strategies and capabilities that are just a hope for the future.

You know, and the obvious thing is that, you know, we're looking to develop a large unmanned surface vessel, which theoretically would have 16 VLS [vertical launching system] cells.

We're going to decommission 7 cruisers that each have 2 VLS launchers with 122 cells each. You know, when you're looking at that problem writ large, you know, we are reducing our capability to counter the threat that we have today.

And so, you know, I would just close by saying that, you know, I feel this budget is, you know, focused on a future hope for technology that we will have in order to counter a threat that might happen way out in the future, and I think that many of us in this room here and during this hearing have reflected on the fact that we need that capability today.

The one thing we can build with reliability on schedule is the DDG, and we cut one this year and we'd even planned to potentially build three. And then, you know, I think that the—what I would consider a modest current investment in modernizing the cruisers to operate for several more years with their sizable capability is something that we should maintain.

So, you know, I think that we're creating a gap and I am really concerned that the Chinese will actually find a way to exploit that gap.

And so I yield back my remaining time.

Ms. SPEIER. The gentlewoman yields back.

I recommend everyone read the Texas National Security Review commentary that Ms. Luria presented yesterday. It was very impressive.

We are now going to recognize the gentleman from Indiana, Mr. Banks, for 5 minutes.

Mr. BANKS. Thank you Madam Chair.

Admiral Gilday, I was glad to hear Congressman Lamborn asked you about your decision to include Ibram X. Kendi's "How to Be an Anti-Racist" in your recommended reading list.

I was also relieved to hear you say that you disagree with Kendi and you do not support racial discrimination.

That being said, the Navy recently completed a one-day stand down to remove extremism from the ranks. The Chief of Naval Personnel explained, quote, "We will not tolerate extremist ideologies that go against our oath to the Constitution."

In my view, Kendi has espoused extremist beliefs that, clearly, violate the oath to the Constitution that I took when I served in the Navy.

Ibram Kendi, by the way, labeled Amy Coney Barrett a, quote, “white colonizer” and criticized her for, quote, “cutting the biological parents of these children out,” end quote, because she adopted two children from Haiti.

Yes or no, Admiral, do you personally consider opposition to interracial adoption an extremist belief?

Admiral GILDAY. Sir, what I said to correct the record [inaudible] I said that I did not—I did not support everything that Kendi says in his book.

Mr. BANKS. I just asked you do you consider opposition to interracial adoption an extremist belief? It’s a simple question.

Admiral GILDAY. Sir, I’m not going to answer that question. I’ll go back—

Mr. BANKS. Okay. Kendi’s book states that—Admiral, Kendi’s book states that capitalism is essentially racist.

Ms. SPEIER. Admiral, your microphone isn’t on, I believe. Thank you.

Admiral GILDAY. Thank you.

Mr. BANKS. Kendi’s book states that capitalism is essentially racist, and Kendi is clear that racism must be eliminated. So yes or no, do you personally consider advocating for the destruction of American capitalism to be extremist?

Admiral GILDAY. Here’s what I know, Congressman.

Mr. BANKS. It’s a yes or no question, Admiral.

Admiral GILDAY. There is racism in the United States Navy. I have an obligation—

Mr. BANKS. Admiral, you recommended every sailor in the United States Navy read this book. It’s a yes or no question.

Admiral GILDAY. I’m not forcing anybody to read the book. It’s on a recommended reading list.

Mr. BANKS. Admiral, did you read the book?

Admiral GILDAY. I did.

Mr. BANKS. Okay. In college, Kendi stated that white people are a different breed of humans and are responsible for the AIDS [acquired immunodeficiency syndrome] virus. Yes or no, do you personally consider the conspiracy that white people started AIDS to be an extremist belief?

Admiral GILDAY. Sir, I’d have to understand the context the statements were made—

Mr. BANKS. That is a simple question.

Admiral GILDAY. I’m not going to—I’m not going to sit here—I’m not going to sit here, sir, and defend cherry-picked—

Mr. BANKS. Admiral, this is a book that you recommended every sailor in the United States Navy read.

Admiral GILDAY [continuing]. Quotes from somebody’s book. I’m not going to do that. This is a bigger issue than Kendi’s book.

What this is really about is trying to paint the United States military—in this case, the United States Navy—as weak, as woke, and we have had sailors that spent 341 days at sea last year with minimal port visits, the longest deployments we’ve ever—

[Simultaneous speaking.]

Mr. BANKS. Admiral, I’ve met you. I respect you.

Admiral GILDAY. We are not weak.

Mr. BANKS. I remain astonished—

Admiral GILDAY. We are strong and are——

[Simultaneous speaking.]

Mr. BANKS. Admiral, I remain astonished that you put this book on a reading list and recommended that every sailor in the United States Navy read it.

I'm also surprised that you said you've read it. But I'm glad you brought up those points.

Admiral GILDAY. Why does it surprise you, sir?

Mr. BANKS. The Department of Defense—Admiral, the Department of Defense undertook the stand down because they understand that extremism detracts from military readiness.

So if sailors accept Kendi's argument that America and the United States Navy are fundamentally racist, as you've encouraged them to do, do you expect that to increase or decrease morale and cohesion or even recruiting into the United States Navy?

Admiral GILDAY. I do know this. Our strength is in our diversity, and our sailors understand that. Race is a very—racism in the United States is a very complex issue. What we benefit from is an open discussion about those issues, that we don't try to ignore it or rewrite it, but we actually have a discussion about it.

And there will be various views and I trust sailors will come and—to an understanding of hopefully separating fact from fiction, agreeing or disagreeing with Kendi in this case and come to, hopefully, very useful conclusions about how we ought to treat each other in the United States.

Mr. BANKS. Admiral, why did you put this book on the reading list and recommended that every single United States sailor read it?

Admiral GILDAY. Because I think it's really important to consider a variety of views particularly on a complex——

Mr. BANKS. Admiral, you said you read this book. What part of this book is redeeming and qualifies as something that every sailor in the United States Navy should read it?

Admiral GILDAY. I think Kendi is self-critical about his own journey as an African American in this country, what he's experienced——

Mr. BANKS. Let me ask you again, Admiral. Do you expect that after sailors read this book that says that the United States Navy is racist that we will increase or decrease morale, cohesion, and recruiting rates into the United States Navy?

Admiral GILDAY. I think we'll be a better Navy from having open honest conversations about racism.

Mr. BANKS. My time has expired.

Ms. SPEIER. The gentleman's time has expired.

The gentleman from Hawaii, Mr. Kahele, is recognized for 5 minutes.

Mr. KAHELE. Aloha and mahalo, Madam Chair, and aloha to our witnesses for your testimony today.

My question—I have two questions I hope to get in, one for the Marines, one for the Navy. My first one is for the Marines.

General Berger, my question is related to your testimony on page 8 regarding the F-35 and the current and future shortage of Marine and Navy pilots and maintainers.

Specifically, you're concerned that if we do not remedy these shortfalls that we're going to have a problem, that we're going to have a superior fifth-generation aircraft that the American people have purchased critical to our agility and tactical supremacy of the MAGTF [Marine Air-Ground Task Force] and the future expeditionary missions of the Marine Corps without any pilots to fly them.

So my question is what has the Marines done since last year's budget request and this year's budget request to conduct a reassessment of its aviation plans, specifically, the F-35 capacity requirements of the future force in regards to staffing, recruiting, training, and retention of that aviator force based on the approximately 420 F-35s the service intends to buy at full buildout?

General BERGER. Sir, we conducted a—actually we contracted an external study to look at what we thought our requirements were capacity-wise, which is the heart of your question—is it 420 some or what is it?

The second part of that, which you highlighted, is our ability to recruit, retain, train the people who can maintain and fly those aircraft.

On the first, the capacity part, I think, clear for the capacity part—first, the F-35 is a very capable aircraft and meets what we need it to do. The number of aircraft has to match what the Navy and Marine Corps team is going to need to do in the future.

My expectation is, my belief is, it won't be the entire program of record. I don't know how many less until we do more wargaming, more experimenting, more learning. But it'll be less than the program of record.

On the pilot and maintainer aspect, there were technical problems with trainer aircraft and some other issues that caused a backlog of training pilots at Pensacola. That's, largely, been rectified. But there is, clearly, a backlog, a gap now that we must make up.

What we can't do is accelerate and get somewhere fast in the wrong way. We also have to retain the ones that we have trained already.

Here, competition is fierce, as you're well aware, some from the airline industry but some from other places that make it a real challenge for the services to hold on to the captain and major that has a couple of deployments under their belt, a lot of time away from family, and we need them to stay in.

We have to work harder there. We have to—on retention side we have to approach it in a different manner.

Mr. KAHELE. All right. Thank you, sir.

Question for Admiral Gilday in regards to BARSTUR [Barking Sands Tactical Underwater Range] and the critical undersea training ranges, specifically, the one that exists in Hawaii at the Pacific Missile Range Facility out at Barking Sands.

I'll cut right to the chase. The President's budget provided only \$33.56 million to commence fully restoring those range capabilities. I don't believe that funding is sufficient to restore full capability to our ranges.

The Barking Sands Tactical Underwater Range is past its design life and needs to be replaced. Its sensors are inoperable, aging infrastructure resulting in reduced tracking coverage.

Would you support replacing BARSTUR sooner and maybe talk about how an accelerated time line would actually save money while allowing more efficient ordinal materials and potential savings in level of effort costs.

Admiral GILDAY. Sir, I agree with you on the value of the range. I owe you more details with respect to the phasing and the money that we're putting against it, and if it's okay I'd like to get back to you with those details, including what acceleration might look like.

Mr. KAHELE. Okay. You bet. Thank you. And I'll yield my time. Mahalo.

[The information referred to can be found in the Appendix on page 154.]

The CHAIRMAN [presiding]. Thank you. I will point out to members we have a hard stop at 2:00 o'clock. I think we're going to get there. We're making good progress.

So, Mr. Franklin, you are recognized for 5 minutes.

Mr. FRANKLIN. Thank you, Mr. Chairman.

Admiral, early in the testimony today, you painted a pretty stark picture of the threat we're facing from China, the things we need to do to get there.

In your exchange with Ranking Member Rogers, it sounds like, you know, your assessment of this current year budget doesn't cut it, and if extrapolated over a number of years we'd have a hard time meeting that threat that we're facing. Is that a fair assessment?

Admiral GILDAY. I think this is a critical decade for us to close gaps against China, or in those areas where we have overmatch to create distance against China, and so I think that if we don't do it in this decade I think we're fooling ourselves, based on the momentum, that it's going to happen in the future.

That's why we need to get after it and that's why we need to make these risk-informed decisions about modernization versus keeping legacy platforms.

Mr. FRANKLIN. Right. Thanks.

General, from the Marine Corps perspective, would you agree with that? Is this current year budget what you'd need?

I know there are things on there that you want that we're not getting, but if this is extrapolated over a number of years is that going to impact your ability to get to the Corps that you feel we need to face the China threat?

General BERGER. If our budgets don't even match inflation, then the risk is high, correct, that at some point in the future we're overmatched, and that's not what you want us to—that's not a place we want to be in.

Mr. FRANKLIN. Very good.

Admiral, specifically on P-8s, the Neptunes, the risk-informed warfighting requirement was for 138. With the 9 Congress added last year, we're at 128 if there's no funding for this year. Has the assessment changed or is this an example of we don't have enough money to do the things we think we need to do?

Admiral GILDAY. Sir, I think the assessment has changed. We don't think we need as many as we initially estimated.

So we have had some good runtime with the P-8. They're a heavily sought after aircraft. We're using them—we're using them in the Eastern Med [Mediterranean]. We're using them in the high north. We're using them in the Pacific with a great degree of effectiveness.

So we know how to use the platform better than we did initially when we first procured it, and so it's led to a decrease—slight decrease in overall numbers.

Mr. FRANKLIN. Okay.

General Berger talked about the pilot shortage and some of the things the Marines are looking at. But, Admiral, from your perspective, what are the things we're going to need to do?

And as he alluded to, and I've seen in my own experience, it's not just the pilot being produced right out of flight school. It's that second tour of JO [junior officer] with a couple of cruises under their belt that's strike lead qualified.

That doesn't happen overnight. We ran into that deficiency in the 1990s with the T-notch and by the late 1990s you just can't—you can't produce them at the snap of a finger. What are we doing to ensure we don't get there?

Admiral GILDAY. I tell you we're monitoring it really closely. And so in terms of incentives for those pilots, I'll just mention a couple.

One of them is the career intermission break where they can go off and study if they need to, or they can—they can take the time off to begin a family if they need to.

We're trying to work with them on an individual basis so that we can retain them, at the same time keep their skills proficient. There are also, as you would—as you would imagine, there are monetary considerations there. We do have—we do have some incentives that we have offered pilots.

We have created a separate now track for a professional flight instructor and so that avenue exists as well. And so what we're trying to do is, in a very—in a competitive environment with respect to the commercial aviation sector, we're trying to remain competitive with ourselves—competitive ourselves in terms of making naval aviation the best place to work.

Mr. FRANKLIN. I'm glad to hear that about the professional instructor. That was an idea kicked around a long time ago and I knew a lot of people that would have loved to have stayed in the cockpit. Didn't have aspirations for stars like you all.

Admiral GILDAY. Right. Right.

Mr. FRANKLIN. That's great to hear.

And then finally, Mr. Harker, this is really more just editorial for me. This is my first pass through on the budget here. It's not what—from a bipartisan response you're hearing here today it's not enough.

You've got professionals who we have entrusted to come to you with the advice of what's needed to get the job done. But they're also military, and at the end of the day they're going to snap to and salute and get the job done with what you give them, and it's not enough.

In peacetime, that's going to lead to low morale, lack of readiness, and it's going to kill people. It's going to kill soldiers, sailors, and airmen in a wartime footing.

In the future that we're headed towards it's our very national security at risk. We have got to do better. This is not going to be an acceptable posture, going forward.

And I yield back.

The CHAIRMAN. Thank you. Mr. Panetta is recognized for 5 minutes.

Mr. PANETTA. Thank you, Mr. Chairman, and, gentlemen, thank you very much for your time today as well as—and, of course, your service.

I'm going to focus on Mr. Harker as well in talking about the professional—naval professional development education and the funding behind it.

Obviously, many of you know—well, I come from the Central Coast of California. Very proud of the Naval Postgraduate School, which has plenty of naval professional development education, and so it's very important to me. It's very important to my district and I do believe it's very important to the United States Navy.

That's why I was pretty surprised and absolutely disappointed to see that the Navy has requested a cut of nearly \$32 million in the fiscal year 2022 budget request when it comes to naval professional development education.

I just think one of the most cost effective, highest returns on investment you can get is the education of our future leaders.

And so, Mr. Harker, can you describe the rationale behind this top-line cut and the programs—specifically, the programs that you feel will be impacted by this?

Mr. HARKER. Thank you, sir.

The decisions we faced when going through this budget were very challenging. We had a lot of competing demands for very limited resources, as has been pointed out before, and looking at making cuts to the naval education program is not something we took lightly.

I've been out to the Naval Postgraduate School in Monterey. I've met with Admiral Rondeau, the president there, and I understand that what they're doing and I believe that they're doing great work, and it was a big challenge for us to go ahead and make those cuts. But we had to make everything balance at the end.

Mr. PANETTA. Well, I completely agree with you. They are doing great work and, hopefully, you saw that and will use that, going forward, and have that same attitude going forward when it comes to the budget.

How do you plan to mitigate any long-term risk of cutting these types of investments in education of our current and future leaders?

Mr. HARKER. We have other opportunities for education. We're trying to make sure we meet the minimums with professional military education as well as with, you know, all of the various capabilities, both at NPS [Naval Postgraduate School] as well as getting people out to the Naval War College. But this was, unfortunately, a challenge where we had to draw back on that area.

Mr. PANETTA. And are there any particular areas that you're looking to eliminate? Any specific educational programs you're looking to eliminate right now?

Mr. HARKER. No, sir. No specific programs we want to eliminate.

Mr. PANETTA. Okay. Well, just know that, obviously, we, out in the Central Coast of California, especially at the Navy Postgraduate School, and I can tell you, President Rondeau's doing one hell of a job and will continue to fight for our fair share because we know how important it is, not just to the U.S. Navy but to our country to have the education that has been provided and, hopefully, will be provided, going forward.

So I appreciate and look forward to working with you, and I yield back my time, Mr. Chairman. Thank you.

The CHAIRMAN. Dr. Jackson is recognized for 5 minutes.

Dr. JACKSON. Thank you, Mr. Chairman, Ranking Member Rogers, for holding this hearing today. I do appreciate the bipartisan leadership of this committee as we look forward to the nonpartisan topic of our national security and passing this year's NDAA.

Mr. Harker, Admiral Gilday, and General Berger, thank you all for being here today as well. Appreciate your time. The last year and a half have presented some unique set of challenges for all organizations. But the Department of the Navy is one team that had a mission that had to continue regardless of the circumstances.

We faced uncertainty and unrest at home and abroad as we dealt with the pandemic, but the Navy's mission had to remain—had to remain undeterred.

When reviewing the budget request this year, I noticed that we had decreased the number of V-22s the Department of Navy would procure relative to what last year's Future Years Defense Program had laid out.

Last year's budget request showed that we were planning to procure 13 V-22s to support the Department of the Navy. However, I'm only seeing eight requested this year.

Mr. Harker, is this a program that has seen a decrease because of the proposed overall budget decrease that is not in line with the National Defense Strategy, and can you tell us what has changed regarding the new request or requirement and what are the potential consequences of the reduced number of aircraft?

Mr. HARKER. Thank you, sir. That's a good question.

I think one of the things that we haven't really talked about is the growth in operations and maintenance costs over time. Our maintenance costs have increased by more than 2.5 percent above inflation.

Our personnel costs have also increased above inflation. So that as we look at our overall budget, we had to squeeze certain things out. The V-22 is a program that we believe in strongly and it is not something we wanted to cut.

But that cut was forced upon us by the growth in the cost of ship depot maintenance as well as the other costs that are growing greater than inflation.

Dr. JACKSON. Thank you, sir. I'll do my part to make sure that we make up that gap because I think that's an important program.

Next, I'd like to shift the remainder of my time to the nuclear triad. The Navy is the most survivable leg of the nuclear triad,

which is why I'm so proud to have all of the U.S. nuclear warheads that go out to the fleet assembled at the Pantex plant in my home district of Texas 13.

For decades, we have underfunded the National Nuclear Security Administration and there is too many single points of failure in the NNSA infrastructure. I would like to hear a bit about the importance of the NNSA budget to the United States Navy.

Admiral Gilday, can you highlight the importance of the NNSA budget to the Navy and can you explain the coordination between the Navy and the NNSA on the F-22 budget request, particularly with respect to the W-88 and the W-93 programs?

What steps are being taken to ensure that these vital programs are staying on time and on budget, and what message have you received from our U.K. [United Kingdom] counterparts on the W-93 and the importance of them keeping the program on time?

Admiral GILDAY. Yes, sir. Thanks for the question.

We are in lockstep with NNSA and work with them very closely, both our Office of Strategic Programs as well as nuclear reactors, and what we're trying to do with respect to the next—potentially, the next generation or the update to the—to the D-5 weapon is to make sure that we have that weapon on track and in place by about the ninth *Columbia* submarine. Right now, that's our estimation.

As you mentioned, we're also in lockstep with the Brits. That's a very special relationship that we share with respect to some of those systems.

But I would say that we are—we are a heavy proponent of NNSA's budget that it remain intact so that we can—we can field the systems that we need to field to conduct—to sustain that strategic deterrent that we need.

Dr. JACKSON. Yes, sir. Thank you.

Well, thank you—thank you all for your responses. In my opinion, we're losing to China in the Indo-Pacific and, candidly, on the global stage.

I think we really have to ensure that we don't lose focus on the threat posed by China, that we continue to invest heavily in our military so that America can remain the greatest global force for good.

I look forward to working with each of you and with my colleagues here on the committee to address these concerns so that we can provide our young men and women the training and the resources they need to accomplish their mission.

Thank you, Mr. Chairman. With that, I yield back my time. Thank you.

The CHAIRMAN. Thank you.

Mr. Horsford is recognized for 5 minutes.

Mr. HORSFORD. Thank you, Mr. Chairman and the ranking member, as well as to our witnesses for testifying today.

General Berger, I've been very encouraged by many of your statements [inaudible] teams down the squad and platoon level are more lethal, effective, and survivable. And while I'm confident that you share that understanding, I do remain concerned about the lack of diversity both in race and gender in the upper ranks of the Marine Corps.

In your written testimony today, you highlighted the long-term impacts of a lack of diversity in service academy nominations. As [inaudible]—

Mr. ROGERS. Mr. Horsford, you're breaking up. Can you hear us? Mr. Horsford, can you hear us?

We have completely lost you. I don't think he can hear us either.

Mr. Horsford, can you hear us?

We have lost all audio with Mr. Horsford. We'll come back to him. Oh, there you are.

The CHAIRMAN. Yeah, sorry. My bad. Mr. Horsford, I apologize, but your audio thing is not working. We cannot hear you. Doesn't look like you can hear us, either.

Mr. HORSFORD. Just—

The CHAIRMAN. Yeah. Mr. Horsford, we don't have you. So if we could suspend that, and in lieu of we'll recognize Mr. Carl for 5 minutes, and we'll try to get Horsford back.

Mr. CARL. Thank you, Mr. Chairman. Ranking Member Rogers, thank you, sir. I'd like to thank our witnesses for being here. Thank you for your service to this country, where we're first in all categories. We're there for a reason and I appreciate that.

Mr. Harker, you talked about our schools down in Mississippi. I would add those schools are in Alabama also. I know you know that. But we take great pride in that.

I've spent the last 10 years helping to recruit those young folks to get in those skills. It is so important we keep these shipyards moving and keep them busy. It's easy to recruit when jobs are needed. It's hard to keep their attention when the jobs aren't needed.

So I would appreciate your attention towards that. But I appreciate you pointing that out because it made 10 years of my life worthwhile all of a sudden when I heard you say it. So thank you.

Like many of the members on the committee here, I'm deeply concerned about the Navy's shipbuilding budget for the fiscal year 2022, and I know I'm going to repeat a lot of this, Admiral.

Specifically, I would like to highlight something from the Navy's report to Congress on the annual long-range plan for construction of Navy vessels that was published in December.

The report stated shipbuilding and supporting a vendor's base constitutes a national security and we must steadily support and grow to maintain these—this skillful workforce—basically, what we were talking about with the schools.

This budget doesn't request—does not come close to supporting our industry base. I'm sorry I'm stumbling here. I just ran back over from the other building.

This is of particular concern to me on the gulf coast and its playing a role for the Navy. Also in the December report it emphasizes the threat posed by the ever-growing Chinese navy.

So my question to you, Admiral, is very simple. The December report called for 12 ships in 2022. However, this budget requires—request calls for only eight ships of which four are warships.

This is—only serves harm to the institutional base, but also falls—fails to maintain the growth and the need for the 10 ships per year to reach the 355.

What are the changes? Why did we go from one number to the other here within just a few months?

Admiral GILDAY. So they were developing a budget [inaudible]—

The CHAIRMAN. You're drifting a little way away from the microphone there, Admiral. Sorry, we're losing you a little bit. Go ahead. Actually, I don't think your microphone is on.

Admiral GILDAY. Sir, did you get my first comment of—

Mr. CARL. I did.

Admiral GILDAY. Okay. The current direction we have is eight ships in this—in this plan, and so four of them are combatants and four are support ships.

But those support ships are ships that we can't wait on any longer, and so the two salvage ships, as an example, which some referred to as tugboats, those are desperately needed in combat.

I was on a combat-damaged ship in the Gulf War that actually was towed by one of those ships out of a minefield. So if we're not using a salvage ship to do that job, we're going to use another destroyer or we're going to use a littoral combat ship.

So there is a valid requirement. As you can imagine, the oiler that's on the—that's in the shipbuilding plan, we're short on those in order to fight as a distributed force. We need that sustainability to put—to put gas in the ships out at sea.

And, lastly, the T-AGOS ship is actually a ship with a very unique capability to do wide area search for submarines. If I look at Russia these days—well, not so long ago, Russia only operated their submarines during a certain period of the year. Now they're a pretty persistent threat against the east coast of the United States.

And so those kinds of capabilities become more and more important, and as I said a few minutes ago, this is the decade that we have to move on capabilities like this and we can't wait.

So there are tradeoffs in that—among those eight ships that we're—that we're requesting from the Congress to fund in this particular budget. But I think that every single one of them serves a valid purpose.

Mr. CARL. Okay. One more quick question for you. The Navy is making strides to meet the demands on maintenance of the fleet.

Given the large institution basis that we have based decisions that we're having—I'm messing this all up and I do apologize—has the Navy explored using more private companies versus using their own forces to repair and keep these ships maintained?

Admiral GILDAY. Yes, sir. We absolutely are. We do all of our work on nuclear vessels in a public—

The CHAIRMAN. I'm sorry. The gentleman's time has expired.

And I have a couple questions. I will turn it back over. I think we have Mr. Horsford back, but we'll get that in a second.

A lot of talk about the top line, and I know there's a lot of pressure on you. I will say that this is my, I think, 25th budget.

The entire time I've been here there has never been a budget, there has never been a time, when there was a single solitary person over at the Pentagon who didn't want more money. Okay.

I cannot recall a time whenever they came in, we're good. In fact, we can give you back \$10 billion. It's okay.

There is, literally, no number that any President can put out there that the Pentagon wouldn't all hustle around and say, gosh, they're killing us. Okay.

So we need to have that as a backdrop. It's also worth noting that last year's budget under President Trump was flatlined. It was less of an increase than this was and, you know, we didn't hear much of a hue and cry about that.

So there are a number of factors in there. But the part that I think is important in terms of how we approach this comes from the gentleman's comment about the NNSA and how critically underfunded the NNSA is.

I'm a little bitter about that because I've been fighting with them. A, they still have \$8 billion in uncostered balances. I want to live in a life where I have a personal budget that has something called uncostered balances. It's pretty good life. The Pentagon has a ton of that. Okay.

B, there's a little thing called the MOX [mixed-oxide] facility down in South Carolina that over the course of a dozen years, maybe a little more, they wasted \$7 billion on a project that everyone knew wasn't going anywhere.

Now, part of that, I will grant you, was congressional pressure from certain people trying to make sure they maintained that program. We also have, as was alluded to, the DDG-1000, the *Zumwalt*.

That didn't work out particularly well. We have three of them. They wound up way over budget. They don't fit the mission for a variety of different reasons.

We have the littoral combat ship in this—in this breathless desire to get to this artificial number like having 300—we could have 355 rowboats. Okay. It wouldn't help us. Capability is the issue.

So there is concern, and part of the reason I know that President Biden gave such a tight number is we're tired of wasting money. I talked about the F-35 quite a bit and its per unit cost and all that goes into that.

So rant aside, the question is—and I want to thank General Berger, by the way, when your comment about how you want to fund the future by—out of your own budget. Basically, find the savings to fund the future. Okay.

And that's not some sort of profound personal sacrifice. That's smart, okay, because no matter what you're doing, there's no doubt that there's money in there that's being wasted, that isn't being used properly.

So yes, we could just give you another \$30 billion, another 40, another 50, another 100. Okay. The question is, what are you doing right now that you don't need to be doing. It is absolutely certain that there is stuff in there, and some of that, I know, is driven by us. The 355-ship number didn't come from you. It came from us. Not from me, but it came from the broader committee.

So as you're looking at this budget and as we're, you know, bashing away at you for everything that you're not funding, what are you doing in your department right now that you look at and you go, we don't need to do that—we could save money on that?

Open to all three of you.

Admiral GILDAY. I'll start off with Aegis Ashore in places like Poland, Romania, and soon to be Guam. We have got sailors protecting dirt. That's not what we do. And so that's a mission. So those—that's an expenditure for the Navy that I believe ought to be owned by another service, as an example.

We're trying to decommission those 15 ships, sir, akin to what—to what General Berger is doing. We are trying to find modernization from the inside.

The CHAIRMAN. And let me drill down on one point on that. One of those cruisers that we're trying to decommission it's incredibly expensive just to keep those things afloat, right.

So we—you know, we sent a cruiser out just recently. As I understand it, it got a little ways out and said, yeah, it's not seaworthy. We got to send it back.

So we're—it's costing us money to keep trying to use these things that are past their useful life.

Admiral GILDAY. Sir, the cruisers right now in the modernization are running 175 to 200 percent above estimated cost. Hundreds of days' delay. These ships were intended to have a 30-year service life. We're out to 35.

We are trying to—they're not easy decisions to make and I accept the counterargument that we should keep these ships based on Admiral Davidson's comments.

But at some point, we need to—we need to turn and——

The CHAIRMAN. Thank you. I've taken more time than I should. I apologize. But you get the point. I want to get back to other members. But we can find savings in here and we're not doing our job if we just come in here and say, gosh, we need more money.

We all need more money. You can go to HHS [Department of Health and Human Services]. You can go to the Department of Education. I doubt you'd find a single person in any one of those buildings who didn't say they need more money. We got to do better than that.

Mr. Johnson is recognized for 5 minutes.

[Pause.]

Mr. JOHNSON. Thank you, Mr. Chairman. Sorry, I couldn't find the unmute.

Secretary Harker, my colleague, Steve Scalise, and I remain very interested in the Navy's plans for the Joint Reserve Base in New Orleans, specifically, with respect to VFA-204, and I understand the Navy is in the process of divesting legacy Hornets currently being flown by the VFA-204 and replacing them with the F-5 aircraft.

Although the Navy has been recapitalizing the Reserve fleet, concerns remain that the continued use of legacy aircraft will jeopardize this mission in the long term.

So the first question is, how will the Navy ensure that our Reserve squadrons continue to fly and are resourced with the most capable aircraft to fulfill its mission for the long term?

That's for Mr. Harker.

Mr. HARKER. Sir, sorry, I'm trying to understand the question.

So the F/A-18s we have been doing a lot to increase our readiness on those, and I'm not familiar with divestment of any of those. Is that——

Admiral GILDAY. I think he's talking about the single—the older Hornets is what he's talking about, divesting of the older Hornets, particularly, due to cost to own.

And so there is a plan, sir, to begin to have our Reserve squadrons transition to the Super Hornets.

Mr. JOHNSON. We're—obviously, our parochial concern is what the Navy is going to do to preserve the VFA-204's mission at Belle Chasse in the long term after the F-5s are no longer able to fly. Do you have any comment on that?

Admiral GILDAY. Sir, I'd have to get back to you with more specifics on that—on that transition plan. I want to do that. I don't have those details at this time.

[The information referred to can be found in the Appendix on page 154.]

Mr. JOHNSON. I'd appreciate that, the quick followup.

Obviously, the folks in that area are very concerned about that. I'm also interested in the Navy's successful implementation of key force structure changes in the coming years and it's my understanding the Navy intends to change the fleet architecture to reflect a more distributed fleet mix.

So we're talking about a smaller proportion of larger ships and a larger proportion of smaller ships, and that seems to make sense.

It seems the Coast Guard is going to be integral to the effort, and as you know, the Coast Guard's role as part of the naval service has expanded over the years to support a more global presence, notably, operating the 5th Fleet AOR [area of responsibility].

So do you believe the successes of the Coast Guard in the CENTCOM [United States Central Command] AOR can be carried over into the INDOPACOM [United States Indo-Pacific Command] AOR?

Mr. HARKER. Yes, sir. That's something where we have had a large degree of integration between the Coast Guard and the Navy, especially in the INDOPACOM AOR.

There were a couple of their new *Legend*-class national security cutters out there working with INDOPACOM over the last several years. They've done freedom of navigation operations, and we believe that working together with them is a great value add.

Admiral GILDAY. Sir, could I add something on that?

We just finished an exercise this week with two cutters out in the Pacific and three DDGs. They're the newest cutters that the Coast Guard have, as the secretary mentioned, our home port in Hawaii working very closely with the Coast Guard, sir.

Mr. JOHNSON. Thank you for that. In transitioning to a force structure of a greater number of smaller sized vessels, has the Navy considered the capabilities of the Coast Guard's *Sentinel*-class fast response cutter that could provide—it could provide to the fleet and the concept of operations and associated requirements that would support acquisition of those vessels?

Mr. HARKER. We work closely with the Coast Guard in integrating that into our joint maritime force. Both the CNO, the Commandant—my predecessor and the Commandant of the Coast Guard worked together to come up the tri-maritime agreement last winter, and CNO?

Mr. JOHNSON. I got about a minute left. Just upon that subject again—go ahead.

Admiral GILDAY. Sir, on that particular hull we ended up—we ended up settling with a different hull form for the next frigate. But we did consider the Coast Guard—the Coast Guard cutter.

Mr. JOHNSON. What smaller manned ships are being considered for potential inclusion in the fleet mix? I mean, when you say a different hull, could you give me a little more detail on that?

Admiral GILDAY. So the frigate that I've referred to that we're just starting to build now it'll deliver in fiscal year 2026. It's a *Constellation*-class frigate, sir. It's an Italian design.

So what we're doing with this particular vessel is we're taking a U.S. weapons systems and putting them on a known hull.

We have done this before with our transition from *Spruance*-class destroyers to *Ticonderoga*-class cruisers, and we have actually taken the weapons system on our cruisers and moved it to DDGs.

And so this is a technique that we used in the past pretty successfully, and we have high hopes that the FFG-62 is going to be a great ship.

Mr. JOHNSON. Thank you. I'm out of time. I yield back.

The CHAIRMAN. Thank you.

I am told that we have Mr. Horsford.

Mr. Horsford, are you with us?

Mr. HORSFORD. I am. Thank you, Mr. Chairman, for your patience.

The CHAIRMAN. You're recognized for 5 minutes.

Mr. HORSFORD. Thank you, Mr. Chairman, and to the ranking member and to our witnesses.

General Berger, I've been very encouraged by many of your past statements and actions regarding the importance of diversity in the Marine Corps. We know that integrated diverse teams down the squad and platoon level are more lethal, effective, and survivable.

And while I'm confident that you share that understanding, I do remain concerned about the lack of diversity both in race and gender in the upper ranks of the Marine Corps.

In your written testimony, you highlighted the long-term impacts of a lack of diversity in service academy nominations.

As this is, largely, a congressional issue, I'm committed to working with my colleagues and the Department to address it so we don't continue to face the same lack of diverse talent 20 or 30 years from now.

Last September, you spoke about your concerns related to women and people of color officers opting out of consideration for command positions and the impact that has on diversity in command and senior leadership positions.

So, General Berger, what have you learned since last year about the underlying causes of this issue and what steps has the Corps taken to address it?

General BERGER. One of the reasons would be intuitive, that from 2004 to a decade and 12, 14 years later and that—the speed, the tempo of deployments was so high that family pressures caused people to leave.

But that's, largely, behind us. Some of the members of this committee know the gentlemen who we're hiring we have hired for the past 2 months to look at the question that you raise.

What is it about everything from recruiting to retention to assignments that—within the military, and specifically within the Marine Corps, that we should look at differently.

And this is Charlie Bolden, and I asked Charlie because a couple years ago in a discussion and then last year in a deeper discussion, he highlighted a couple things for me in a perspective I didn't have.

So for 3 months he's going to look at us from beginning from very—from the very beginning of recruiting all the way through general officer level to tell us maybe how we might do it differently.

And I would agree with the CNO. Some of this is on the front end, but some of it has to do with the career paths, the management of their careers, the mentoring along the way, the key decision points where they're at a fork in the road, and we have to manage that actively. It can't be passively.

But I think in another 2, 3 weeks, Mr. Bolden, from what he learned as a Marine and what he learned at NASA [National Aeronautics and Space Administration], I think he's going to help the Marine Corps see this in a different light.

Mr. HORSFORD. Thank you.

Admiral Gilday, on a related note, the Department of the Navy's Task Force One Navy released a report in January highlighting 57 recommendations to improve diversity in the force.

Can you describe your progress in implementing Task Force One Navy's recommendations? Are there any recommendations that the Navy does not intend to implement that we should be aware of?

Admiral GILDAY. Sir, to your last question, there are no recommendations that I intend—I intend to implement every single one of those 57 recommendations, and we're moving out on that.

We do have a—we do have a framework, which we call the culture of excellence, and one of the lines of operation in that culture of excellence is diversity, equity, and inclusion.

So the intent in the Navy is not to just leave off—you know, put the—put the results of the task force on the shelf, but to actually hold ourselves accountable with measurable metrics against all of those recommendations.

We are moving out, sir, at pace. I'm happy to have a deeper conversation with you maybe to update you in a couple of months on where we stand.

Mr. HORSFORD. Thank you, Admiral. And I'll take this question offline, but I did want to talk about the issue of the manpower requirements and identifying the personnel cost implications.

So I'll submit that question and take your response offline. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Thank you. This is all the people we have lined up. I have said my pieces as a closing thing.

Mr. Rogers, do you have anything for the good of the order?

Mr. ROGERS. I do not. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

I want to thank all three of you. Three hours. Appreciate your stamina is the word I'm looking for, and your work. It's—you know, a lot to do within a limited budget and I appreciate that effort and

we'll definitely continue to work with you as we go through the rest of the process this year.

You know, just close by saying we have to pass some appropriations bill. We do not want a continuing resolution. We want to get you an appropriations bill as close to October 1 as possible and get you an authorizing bill within that time frame as well, and we will do our best to get there.

With that, we are adjourned.

[Whereupon, at 1:56 p.m., the committee was adjourned.]

A P P E N D I X

JUNE 15, 2021

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

JUNE 15, 2021

NOT FOR PUBLICATION
UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

THE HONORABLE THOMAS HARKER
ACTING SECRETARY OF THE NAVY

ON DEPARTMENT OF THE NAVY POSTURE

BEFORE THE
HOUSE ARMED SERVICES COMMITTEE

JUNE 15, 2021

NOT FOR PUBLICATION
UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

Introduction

Chairman Smith, Ranking Member Rogers, distinguished Members of the Committee, thank you for the opportunity to discuss the posture of the Department of the Navy (DON). I appreciate the hard work of the Members and Staff of this Committee to ensure funding stability and principled oversight for every Sailor and Marine now standing watch around the world.

The reemergence of long-term strategic competition from China and Russia is spurring a period of rapid transformation in the global security environment. The disruptions related to the COVID-19 pandemic underscore the need for agility and distributed readiness. Climate change is accelerating, and its impact on both our planet and force will continue to grow as significant weather events threaten our infrastructure, and the arctic opens to unprecedented activity.

In a world more interconnected and interdependent than ever before, a fully integrated and forward maneuverable Navy-Marine Corps Team has never been more important to the security of our Nation and the preservation of the rules-based international order. We must protect our nation, our allies and partners, and our global interests, while also leading on the urgent issues facing our personnel and planet, from the mental and physical health care needs of our people, to the scourge of sexual assault and harassment, to the need for diversity and inclusion at every echelon, to the ongoing threat of climate change.

General Berger, Admiral Gilday, and I stand united in our resolve to ensure your DON will be ready for the global challenges before us with the personnel, platforms, and technology to secure vital sea lanes, stand together with our allies, and protect the United States of America.

Defend the Nation

The President's Budget submission for FY 2022 (PB22) reflects hard choices to divest of less capable platforms and systems to invest in a powerful and superior future force. Throughout the budget process and in all aspects of capability acquisition, design, construction, and deployment, we must balance the urgent readiness needs of our force today with investments in the future force and effective business process reforms in order to ensure our Sailors and Marines are always ready to fight and win in any clime or place.

Force Posture

The presence and availability of naval forces must always reflect the strategic needs of the Nation, providing effective options for the President and Secretary of Defense to counter every challenge. To ensure preparedness, the DON provides maximum operational flexibility through warfighting concepts including Distributed Maritime Operations, Littoral Operations in a Contested Environment, and Expeditionary Advanced Base Operations, ensuring continual overmatch and flexibility in the battle space.

Secretary Austin has identified China as the pacing threat for our military forces, and we will continue to position our integrated global maritime force to lead in the Indo-Pacific. But ours is a global force with global responsibilities, including increased Russian presence in the Atlantic, terrorism and instability in the Arabian Gulf, an increasingly blue arctic, a global need for agile and ready Marine forces to respond to the unexpected in every domain, and the constant threat of cyberattacks to our force, support infrastructure, industrial base, and supply chain.

The DON FY22 budget request delivers ready maritime forces through sustained investment and performance improvement, developing more lethal, networked capabilities and concepts, closely integrated between the services and with our joint force and government partners. Within limited resources, we will field the right platforms and capability to maintain freedom of the seas, support international law, and stand by our allies as we continue to fly, sail and operate wherever international law allows.

That spirit is reflected in the guidance put forth by our services. I support Admiral Gilday's *Navigation Plan*, which refocuses our integrated all-domain naval power on the core functions of sea control and power projection we need to compete and win. It places a high priority on a more lethal and better connected fleet to project power from blue water, to the littorals, to the shoreline and beyond.

The guidance centers on four lines of effort:

- Deliver a More Ready Fleet. Deliver a Navy that is organized, trained, and equipped to deploy forward and win in day-to-day competition, in crisis, and in conflict.
- Deliver a More Lethal, Better-Connected Fleet. Deliver a Navy capable of projecting synchronized lethal and non-lethal effects across all domains.
- Deliver a Larger, Hybrid Fleet. Grow a larger, hybrid fleet of manned and unmanned platforms – under, on, and above the sea – that meets the strategic and operational demands of our force.
- Develop a Seasoned Team of Naval Warriors. Develop a dominant naval force that can outthink and outfight any adversary.

To meet the forward maneuverable force requirements of the Joint Force long into the future, the Marine Corps has put into motion an aggressive modernization of the Service. I support General Berger's *Force Design 2030*, which is not simply an improvement on its existing form and function. It is a transformational effort rooted in the anticipated challenges of the future operating environment. Building on the cooperative efforts of all of our sea services, the Marine Corps is reinvigorating the Fleet Marine Forces within existing resource constraints as an indispensable element to global maritime operations.

The goal of Force Design 2030 is to provide a Marine expeditionary assets that will:

- Successfully compete with peer adversaries in the maritime gray zone
- Deter, and if required, fight and win in support of naval campaigns
- Facilitate sea denial and sea control
- Win the reconnaissance and counter-reconnaissance competition
- Persist inside actively contested spaces
- Be capable of "rapidly sensing, making sense of, and acting upon information" inside an adversary's weapon engagement zone.

Across both services and throughout the DON, we are executing force designs centered on Naval Expeditionary force deployment, giving us a sustainable edge and a resilient capability to deliver the integrated all-domain naval power required by the Joint Force. We are investing in the readiness of the integration-ready platforms to ensure continued freedom of action throughout the maritime domain, from amphibious and ground element equipment, to agile warships and

submarines, to dominant aircraft carriers and air wings. Successful implementation of the concepts within the *Navigation Plan* and *Force Design 2030* will be pursued through a unified, integrated effort at every echelon.

Maintain the Edge

We greatly appreciate the Committee's efforts to ensure funding stability and predictability over the past several years. This has given our force the agility and flexibility needed to address emerging threats, to invest in critical future capabilities for our integrated naval force, while shifting away from less beneficial spending.

The DON is building on this foundation by aggressively pursuing better readiness, lethality, and capabilities in those areas of warfighting technology showing the greatest promise of delivering non-linear warfighting advantages. From artificial intelligence and cyber weapons to unmanned platforms and directed energy, we are on the cusp of technological breakthroughs that will define future conflict. Our future force will be defined by our decisions today.

We will continue to invest in key naval capabilities to control the seas and project power in every domain. We will field a resilient, networked, and dispersed fleet, connected through the Naval Operational Architecture to provide decision advantage in contested environments. We will continue to invest in advanced technologies such as long range hypersonic and directed energy capabilities to ensure maximum reach, survivability and decision space for our forces.

Our number one shipbuilding priority remains resourcing COLUMBIA SSBN for on-track delivery in order to ensure the future strength of the most survivable leg of our Nation's nuclear

triad. We are also advancing our asymmetric undersea attack advantage through the Tactical Submarine Evolution Plan, including follow-on Blocks VI and VII of the VIRGINIA Class, and the SSN(X) program. We are advancing battle force shipbuilding programs such as the CONSTELLATION class frigate and the GERALD R. FORD class carriers, as well as enhancing our fleet capabilities through additional battle force ships.

We are also extending the reach of our warriors from the sea with the addition of sea-based platforms such as USS MIGUEL KEITH, our third Expeditionary Sea Base, which was commissioned on May 8th. To ensure our Marines maintain their edge, we will continue to invest in key Marine Corps development programs that support the Marine Corps Force Design concept, such as the Ground Based Anti-Ship Missile, Ground Based Air Defense, Medium Altitude-Long Endurance Unmanned Aerial System, Long Range Unmanned Surface Vessel, and the Light Amphibious Warship. These enhance the ability of Marines to maneuver and deter competitors within range of enemy weapon systems.

Targeted investments in key emerging technologies and capabilities will enhance and sustain amphibious battlefield maneuverability ashore and superiority at sea, with the support of properly resourced facilities, infrastructure, and systems to sustain our frontline forces.

Continual Readiness

Hard experience has shown long term readiness cannot be sustainably achieved through “can do” and “make do” improvisation. Our front line personnel may be determined, adaptive, and skillful enough to get the job done in the face of equipment shortfalls and intense battle rhythms, but

relying on their adaptability is no substitute for genuine fleet readiness. We owe it to the Sailors and Marines out in the fleet to make sure they always have the tools they need to do the dangerous jobs we ask of them.

The changes generated from the Readiness Reform and Oversight Council (RROC) and other introspective efforts have enabled us to improve readiness, training, and maintenance processes at every level. For example, we've implemented a uniform readiness assessment and certification process that must be followed before a ship can be certified to return to the fleet. We have also increased opportunities for shipboard certification and skills enhancement, while adjusting manning schedules to maximize safety and improve quality of life and professional effectiveness for our personnel while underway. These and many other changes will result in a better prepared and equipped force.

We continue to build on our efforts to increase availability, improve maintenance, and maximize throughput, by making targeted shore investments designed to increase fleet readiness. The Navy's four public shipyards—Norfolk Naval Shipyard, Portsmouth Naval Shipyard, Puget Sound Naval Shipyard and Intermediate Maintenance Facility, and Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility—are critical infrastructure elements of America's national defense. In order to improve naval maintenance production capacity at these facilities, the DON is fully committed to the Shipyard Infrastructure Optimization Program (SIOP), comprising three primary focus areas: dry dock recapitalization, facility layout and optimization, and capital equipment and modernization. The DON is dedicating the resources and oversight necessary to ensure the required maintenance is completed across all shipyards as quickly as

possible, and has established a Program Office (PMS-555) to ensure integration of all elements of the plan.

Building on the successful Naval Aviation Enterprise efforts to meet Strike Fighter aircraft availability goals for both the Navy and Marine Corps, we are targeting greater aviation readiness across the force, incorporating commercial best practices to improve performance. Through the Performance to Plan initiative we're using data driven decision making to enable to remove the root causes of maintenance delays as well as operational mishaps. This data-driven approach is based on a "Get Real, Get Better" approach, demanding rigorous self-assessment, strong characterization of current performance, and detailed analysis backed by accountability and the opportunity to implement needed improvements.

We appreciate the Committee's interest in ensuring our Naval forces have the right facilities to train, fight, and win, even as various demands on the land, sea, and air reduce the available area for military training. Specifically, we are grateful for the Committee's continued attention to the urgent need to expand the Fallon Training Range Complex, which is necessary to the readiness of every Naval Aviator and Navy SEAL. We are listening to the interests of Tribal governments, environmental organizations, and the local community, as well as our counterparts across the Federal Government, and are committed to finding a favorable solution for everyone involved.

Combat Climate Change

The United States Navy and Marine Corps recognize the reality of global climate change, our responsibility to mitigate our contribution to it, and our need to prepare for its short and long

term effects. As we grapple with the effects of climate change on maritime operations around the globe, the DON must continue to lead and find ways to go farther, both in substantially reducing our impact on climate change and building a force that is resilient to its potential effects.

We must adapt our infrastructure for the coming changes with initiative and problem solving throughout the DON. In the past few months I have visited and recognized several Marine Corps and Navy installations that have demonstrated leadership in climate resiliency, environmental stewardship, and sustainable development. These facilities include Parris Island, Naval Base San Diego, Marine Corps Air Base Camp Pendleton, and Naval Base Point Loma. We will continue to invest in vehicles, infrastructure, and technology that increase our resiliency and efficiency, as we pursue the use and availability of alternative fuels. The DON is determined to lead from the front against the threat of climate change.

Take Care of Our People

The greatest source of readiness and strength for our force will always be the people who wear the uniform and comprise our civilian workforce, as well as the families that serve alongside them. We are committed to ensuring our Sailors, Marines, and Civilians are trained and equipped to execute the mission and return home safely, and that their families are provided with the housing, medical attention, and education they deserve.

Building the Future Force

To maintain a Fleet prepared to fight and win in long term strategic competition, we continue to evaluate and improve our capability to attract, retain, and develop a talented and diverse workforce. In the context of an intense competition for talent in our country, and in light of the rapidly evolving tactical and technical landscape, we are modernizing and enhancing our entire talent management approach to succeed.

We are continuously identifying opportunities for personnel to develop their leadership skills throughout the ranks, promoting equal opportunity in every aspect of our force. The DON is investing in the training, education, and professional development of our officers, enlisted personnel, and civilian teammates with special emphasis on partnerships with civilian institutions to enhance educational opportunities for our junior Sailors and Marines.

Eliminate Toxic Behaviors

It is a personal priority for all three of us to build a climate of trust, respect and inclusion throughout our force. A major focus of that effort must be on recognizing and stopping

destructive behaviors early and consistently, so leaders at every level can take appropriate and effective actions.

We remain determined to eliminate sexual assault, sexual harassment, and gender discrimination from every part of our force. These behaviors are a betrayal of those who have stepped forward to serve in uniform. We will continue to work with this Committee to share best practices and ideas, relentlessly pursuing a future where no Sailor, Marine, or civilian teammate ever has to fear for their own safety while protecting us all.

To assist leaders in this effort, we have developed *The Watch List: Top Five Signals of Risk for Sexual Assault*, a research-driven tool that used Navy and Marine Corps data to identify five of the key destructive behaviors that increase risk for sexual assault. These include sexual harassment, gender discrimination, lack of responsibility and intervention, lack of respect and cohesion, and workplace hostility behaviors. We have promulgated *The Watch List* throughout the Navy and Marine Corps and are actively working to develop tools that will provide operational commanders data on their units so they can take action to prevent incidents.

We are actively engaged in rooting out extremism throughout our force. In coordination with efforts across the joint force, the DON has conducted “Extremism Stand Downs” at every echelon. This process sparked important conversations and made the position of our leadership and force clear to every Sailor, Marine, and Civilian in the DON, and we will continue to build on these efforts.

Trust is at the heart of all our warriors do. Extremist ideologies are a strategic threat to that trust and have no place within the Navy and Marine Corps. We will persistently focus on this problem, and appreciate this Committee's partnership and involvement in this critical effort.

As leaders we must do all in our power to ensure that our people feel respected and valued. We cannot and will not tolerate discrimination or racism of any kind. Our core values and oath demand that we critically examine all of our policies and practices to remove inequity and unconscious bias.

Promote Mental Health

Mental health is a critical aspect of our readiness as a force – and our responsibility to our warriors and their families. We have made it a priority to ensure the ready availability of mental health professionals, chaplains, family counselors and other support professionals when our people are in need – or when they see the need in others.

I know from personal experience how helpful counseling can be during both personal and professional struggles. That's why as part of our recognition of May as Mental Health Awareness Month, I launched a series of videos encouraging leaders throughout the DON to share their personal stories of seeking and receiving counseling and help. I also emphasized this point to our newest officers at the US Naval Academy Commissioning Ceremony, and will continue promoting mental health care throughout the force. We have to remove the stigma and start the conversation, particularly as our warriors and their families contend with the added stressors related to COVID-19.

The DON is committed to ensuring the health, safety, and well-being for all members within our military community. The loss of any Sailor, Marine or civilian to suicide is one too many. The DON offers a variety of suicide prevention efforts, encouraging positive help-seeking behaviors, eliminating stigma, and increasing visibility and access to critical resources. We are constantly revisiting and revising the portfolio to meet the needs of our people, and have increased our investment in this area.

Take Care of Our People

We are reforming operating procedures and promotion practices to reward initiative, applied problem solving, and innovative thinking at every level. A top priority as we evaluate personnel practices are the needs and challenges of military families, particularly dual service families. Senior leaders are also taking a personal and hands-on approach to ensure enduring excellence in housing, dependent education, and other quality of life concerns for our military families.

Through a combination of non-monetary, quality of life, and customer service programs, we are increasing our responsiveness to the needs of the individual warfighters and their families, making continued service a viable and attractive option. We are expanding opportunities for civilians with prior service through the Targeted Reentry Program. We are also expanding avenues for personnel to learn, operate, and innovate with partners from the private sector, across the joint force, and alongside our allies.

Defeat COVID-19

With consistent personal and fleet discipline and continued refinement of best practices, we have ensured a robust, proactive, and coordinated COVID-19 response across the DON. We are preventing and containing outbreaks with minimal impact on fleet readiness, and are doing everything in our power to get the vaccine out to our Sailors, Marines and Civilians as quickly and effectively as possible.

The DON is also working with the Federal Emergency Management Agency to assist local, state, and tribal governments in the overall vaccination effort of the Nation, building on the proactive contributions to the urgent medical and security needs of the American civilian population, including the deployment of COMFORT and MERCY to our Nation's two most populous cities, and the deployment of medical personnel to facilities in communities across the country.

Like all Americans, the Navy and Marine Corps have adjusted to this global pandemic, from addressing outbreaks aboard ships, to changes in recruitment and training, to supporting our military families through extended deployments and virtual leaning. We have invested significant resources to upgrade the Navy and Marine Corps intranet to improve functionality and to enable telework for our military and civilian workforce.

The Navy and Marine Corps continue to operate under Force Health Protection measures to protect Marines, Sailors, civilians, contractors, and our military families. Across the DON, we've implemented flexibilities to help minimize risk to military personnel and their families, respond to evolving situations, and ensure the readiness of our force. We continue to use active testing

protocols to detect asymptomatic COVID-19 positive personnel, contain outbreaks aboard vessels, and conduct surveillance to detect and treat the disease as early as possible.

We will not relent in these critical measures. We are well positioned to emerge stronger than ever, as the pandemic has forced us to rethink and refine our recruitment, training, and personnel movements across the DON, as well as our shipyard operations, deployments, and maintenance schedules, with efficiencies and applications of technology that can continue to benefit our operations and throughput long after COVID-19 is in our wake.

Succeed Through Teamwork

A dominant naval force is central to the effective execution of our strategic goals. We must be ready at all times to execute as one integrated naval force – Navy and Marine Corps seamlessly linked at every level – with common logistics, infrastructure, practices and support networks – executing a fleet-wide emphasis on resilient and combat ready forces. These integrated connections must extend beyond the DON as well, encompassing our vital partners across the joint force and the whole of government, as well as our industry partners, shipyards, and allies and partners around the world.

Trust and Collaboration

Leaders throughout the DON are actively engaged with the joint force and the whole of government to meet the maritime challenges that face our nation. One key initiative of this collaboration is the Tri-Service Maritime Strategy, *Advantage at Sea*. This is was truly collaborative maritime strategic planning effort led jointly by all three of our Nation’s sea services – Navy, Marine Corps, and Coast Guard. In order to execute these goals, Admiral Gilday, General Berger, Admiral Schultz and I are working together in order to promote integration, communication, and collaboration as a warfighting priority. There can be no daylight between us as we strengthen the integrated all-domain Naval power of the United States.

Operationalizing the Audit

In my previous roles as Assistant Secretary of the Navy for Financial Management and Comptroller, and while Performing the Duties of Comptroller for the Department of Defense, I saw first-hand the importance of effective, transparent examination and oversight, and I witnessed the direct relationship of accountable financial controls to our frontline strength. In my

current role as Acting Secretary of the Navy, I am determined to strengthen this process in order to provide our Congressional oversight partners with complete visibility and accountability for every dime.

Central to this effort is building on the findings of our financial statement audit process, and improving that process moving forward. As I've emphasized to senior leaders across the Navy and Marine Corps, the audit is Commander's business. Accurate inventory, proper resource allocation, redundancy elimination are all directly connected to our end strength.

We are on the right path towards obtaining an audit opinion for the Navy and Marine Corps general funds, and the DON working capital fund. We have a detailed roadmap that will guide our effort, placing a strong emphasis on budgetary reform, including receipt, distribution, execution, and monitoring.

PB22 increases investment in DON oversight functions. In addition to our work on the financial statement audit, we are looking at ways to increase effective oversight going forward, removing redundancy and duplication of effort in every part of our enterprise through the performance audit process. I have met with leaders across the government and the DOD to discuss audit planning and understand areas of high risk, and am incorporating that feedback into the FY22 audit priorities direction provided to the Naval Audit Service and our internal control program under the Federal Managers Financial Integrity Act and OMB Circular A-123. Our top priority is to ensure that our oversight capabilities and capacity is as efficient and effective as possible in order to keep our promise to the American taxpayer and the warriors on the frontline.

Sustaining Maritime Information Superiority

Leaders in every functional unit and discipline have been directed to set business systems modernization on an integrated path that is sufficiently resourced and supported across the DON. We are using data driven decision-making to achieve tangible savings while consistently working to become more effective and more efficient.

Modernization of our information technology infrastructure is a critical warfighting priority for the DON. Effective use and management of data is key to our digital transformation, and will change how we will fight and win at every level. We are consolidating legacy systems and will have moved from ten financial systems to three by the end of this fiscal year. I have established top-down performance management efforts, driven by data, to ensure the cyber resilience and strength of our defense business and warfighting networks.

As an information age naval force, every DON warfighting function and mission area is dependent on data and information to rapidly inform decision-making throughout the entire competition to conflict continuum. The dependency on secure and reliable IT has grown exponentially over the last decade and is critical to maintaining a competitive warfighting advantage. Simply put, information is combat power.

In order to generate and sustain that power, the DON is building on the findings of our Cybersecurity Readiness Review with an Information Superiority Vision, detailing how the Navy and Marine Corps will:

- Modernize our infrastructure to bring the DON to parity with industry, move data and information from anywhere to anywhere securely.
- Innovate and leverage emerging technology including 5G and Artificial Intelligence to drive capability outcomes for competitive advantage at speed.
- Defend forward with robust information protection regardless of where data resides.

Through Operation FLANK SPEED, the DON is shifting enterprise collaboration and productivity services to an enduring cloud-based Microsoft Office 365 solution which will provide world-class security and collaboration tools to improve productivity across our distributed workforce.

This initiative will modernize our infrastructure to a more cloud-enabled, performant, and defensible network allowing data and information to move from anywhere to anywhere securely. It will also improve our overall cyber readiness posture by implementing key Zero-Trust-Architecture principles; securing devices and endpoints, establishing identity and user privileges, and introducing content and data rights management.

The Marine Corps has now completed the transition of all users to Microsoft Office 365, and I have directed the transition of over 470,000 users in the Navy no later than December 31, 2021. Flank Speed will create the capabilities needed to increase Naval lethality and our ability to fight and win.

Failure to invest now will result in this effort now would further delay much needed improvements to our core technology infrastructure and leave the workforce without a sustained follow-on capability once the DOD-provided Commercial Virtual Remote capability is sunset in June 2021, extending our reliance on outdated, duplicative and less secure legacy IT systems that cost more and deliver less, further eroding DON's competitive warfighting advantage.

Strengthen Relationships with Stakeholders

Working alongside our vital industry partners, we are aligning our efforts to produce the right platforms and capabilities for the warfighter, and ensure maximum availability and throughput from design to production to maintenance.

We're working closely with our partners and suppliers in the defense industrial base to ensure the continued viability of the crucial businesses and infrastructure needed to ensure our ships, aircraft, and ground equipment are available when needed for the defense of our nation, both during the current COVID-19 challenge and long into the future. A robust, resilient, and nimble industrial base and supply chain is critical to the long term strength of our Navy and Marine Corps. Funding predictability and long term planning are key elements in ensuring the efficiency of our acquisitions and maintenance processes in partnership with a supply chain calibrated to deliver maximum value to the taxpayer and warfighter.

At our public shipyards, the DON took aggressive steps at the start of the COVID-19 pandemic to implement and require safety measures to protect the personnel, civilians, contractors, and families. These steps have included maximum telework opportunities for shipyard employees, administrative leave for high-risk individuals unable to telework, altered shifts to maximize

social distancing, sanitization and hand-washing stations throughout the shipyard, cloth face coverings and face shields for the workforce, and screening checks at all workplace entry points.

Global Engagement

We cannot meet the global challenges our Nation faces alone. Readiness requires presence and rapid capabilities in every part of the world, as well as specialized and localized knowledge to handle evolving and challenging situations. The strategic maritime defense partnerships we maintain today with our partners and allies extend the reach and power of our force. They underscore the importance of cooperation and coordination in maintaining the rules-based international order that enables so much of our global prosperity and security.

Our personnel regularly train and operate alongside their foreign counterparts, test the interoperability of our systems, and build our collective readiness on the front lines of great power competition. Operational exercises, international port calls, joint Marine force training, and other interactions generate the personal contact that builds understanding, respect, and trust across national and functional lines. Our Sailors, Marines and civilian personnel know that through their service they are front-line diplomats for our nation. Their professionalism and dedication promotes the connections that strengthen our collective security and cultivate shared ideals that send the message that the United States is a friend worth having.

Conclusion

Our Sailors, Marines, and civilian teammates will always be our greatest source of strength in a challenging and changing world. On behalf of each of these brave patriots and the families that serve at their side, I once again thank the leadership and membership of this Committee for your attention, interest, and ongoing commitment to the defense of the United States of America. It is an honor to work with each of you, and I look forward to your questions.

The Honorable Thomas W. Harker
Acting Secretary of the Navy

Thomas W. Harker assumed duties as the Acting Secretary of the Navy Jan. 20, 2021. Previously, he was performing the duties of the Under Secretary of Defense (Comptroller). Harker was sworn in as Assistant Secretary of the Navy (Financial Management and Comptroller) Jan. 2, 2018.

Tom Harker graduated from the University of California Berkeley in 1990 and received an MBA from the University of Miami in 2000. A 20 year veteran of the U.S. Coast Guard, his career was marked by operational success including multi-ton drug seizures on the high seas. Ashore, he was assigned positions of increasing responsibility in budget, acquisition, internal controls, audit readiness and financial reporting. His leadership of the Coast Guard audit readiness and internal control program contributed to the Department of Homeland Security moving from 10 successive disclaimers to a clean audit opinion. Prior to leaving active duty, Harker served at Office of Management and Budget (OMB) where he led the Campaign to Cut Waste, updated OMB Circular A-136 and drafted government-wide financial policy.

Subsequently, Harker served as an auditor and consultant at a large public accounting firm, auditing CFO Act agencies (including the first audit of the United States Marine Corps). He also assisted the Joint Staff with developing and implementing an audit readiness plan, and improved Coast Guard's accountability for property as a consultant.

Upon his return to government, Harker led the Coast Guard financial reporting, policy, property management and audit readiness efforts. His efforts enabled the Department of Homeland Security to obtain consecutive clean audit opinions. Harker was appointed to the Senior Executive Service at the Department of Veterans Affairs (VA) as the Associate Deputy Assistant Secretary for Financial Policy. While in this position, he served as the Acting Principal Deputy Assistant Secretary for Management at the VA, and as the Acting Deputy CFO for Accounting and Financial Management at the Department of Housing and Urban Development.

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HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

ADMIRAL MICHAEL M. GILDAY,
CHIEF OF NAVAL OPERATIONS

ON THE POSTURE OF THE UNITED STATES NAVY

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

June 15, 2021

NOT FOR PUBLICATION UNTIL RELEASED BY
HOUSE ARMED SERVICES COMMITTEE

Chairman Smith, Ranking Member Rogers, distinguished members of the Committee, thank you for the opportunity to testify today on the posture of the United States Navy. Moreover, on behalf of all our Sailors, Navy civilians, and their families, thank you for your continued leadership and support. With the funding provided by Congress these last several years, we are building back our readiness, strengthening our advantages at sea, and keeping our fleet deployed forward where it matters.

This hearing comes at a critical time for our country. Multiple nations are working to undermine the free and open rules-based international system that has benefited so many for so long. Our rivals are rapidly modernizing their militaries to erode our advantages. The COVID-19 pandemic threatens the health and livelihood of our people. Climate change puts our coast lines at risk with rising seas levels and more severe weather. And the maritime environment – a vital source of our nation’s prosperity and protection – has become increasingly contested. America’s Navy is ready to meet these challenges. As we have done since our founding, we will set sail to defend our Nation, take care of our people, and succeed through teamwork.

The President has made it clear – America stands at an inflection point. The choices we make today will have a dramatic impact on the future of our nation. The very nature of the free and open international system is threatened. To defend our nation, safeguard economic opportunity, and secure the blessings of liberty for years to come, we must renew our enduring advantages and work in concert with our allies and partners to secure the rules-based order at sea.

America is a Maritime Nation – Our people depend on the freedom of the seas

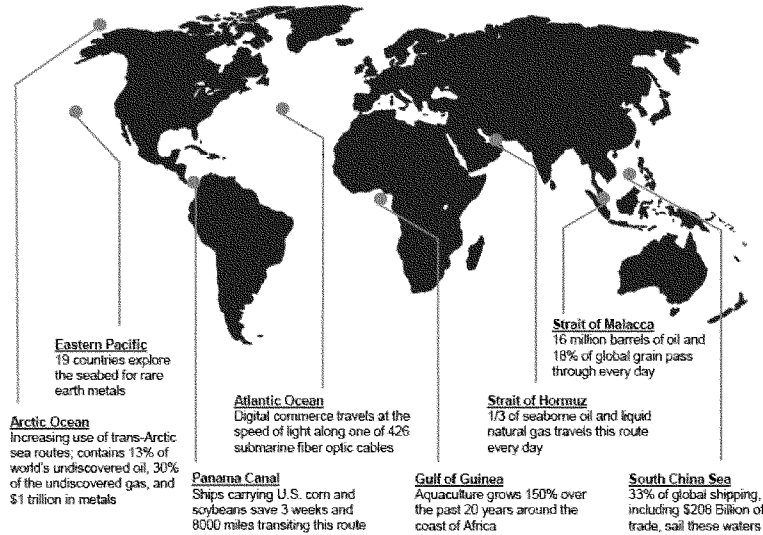
The United States Navy – alongside the Marine Corps and Coast Guard – provides a unique, enduring advantage to the American people. Since our nation was founded, Americans have relied on the seas for prosperity and protection. For 245 years, our Navy has deployed forward to ensure safe passage for our commerce and to keep fights far from our shores. Since the end of World War II, we have sailed with like-minded navies to build and sustain the open, rules-based international system at sea. Together, we have provided stability, deterred great power war, and ushered in prosperity for billions across the world.

Over time, our reliance on the seas has only grown. Today, 90 percent of global trade by volume travels by sea, facilitating \$3.7 trillion in U.S. commerce annually and supporting 31 million American jobs. 95 percent of global internet traffic travels along undersea cables, fueling our digital economy and accounting for \$10 trillion of financial transactions every day. The free flow of commerce – both physical and digital – cannot be taken for granted. It relies on the rules-based international system at sea and unimpeded access to markets through open waterways. Even minor disruptions can have extraordinary impacts. The recent grounding of the container ship *Ever Given* in the Suez Canal, which delayed hundreds of ships and cost the global economy an estimated \$9.6 billion per day, highlights the importance of predictable passage through the world’s strategic waterways. If a rival nation attempted to control passage through

the South China Sea – a strategic location where \$208 billion of U.S. commerce flows annually – the impact to the global economy would be extremely costly.

America Depends on the Seas

\$1.4 trillion U.S. exports
\$2.3 trillion U.S. imports



Meanwhile, the competition for offshore resources such as aquaculture, energy, and rare-earth minerals is increasing across the globe. Currently, 93 percent of the world's fishing stocks are overexploited, threatening a major protein source for 3.3 billion people. Several nations have deployed distant water fishing fleets and expanded the use of maritime militias in their quest to maintain their lucrative fishing industries. Additionally, many nations are increasingly looking to maritime sources of energy and mineral wealth. The global oil and gas industry, which generates an estimated \$3.3 trillion in annual revenue, is turning toward energy exploration along the seafloor to extract untapped reserves. With trillions of dollars in raw resources awaiting discovery on the unmapped ocean floor, states and multinational companies are racing to develop capabilities for deep-sea mining.

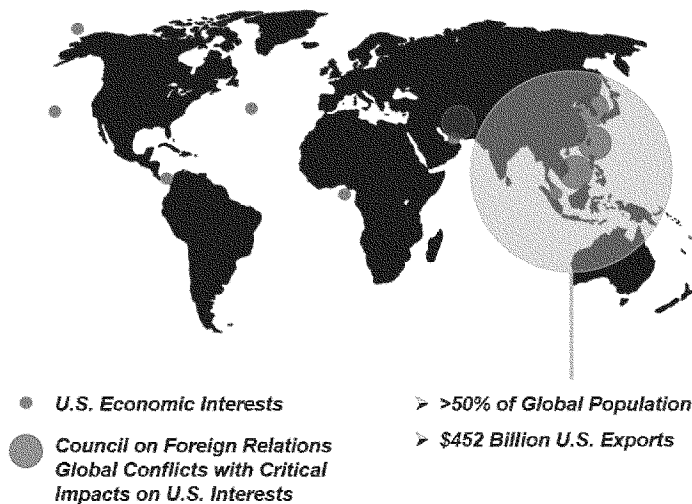
The world's oceans have always been a wellspring of wealth and prosperity. Today, and in the years ahead, they pose an increased risk of competition turning into conflict.

The Growing Challenge to the United States and the Open International System

Despite benefiting from free and open seas for decades, the People's Republic of China (PRC) and Russia are currently working to undermine the rules-based international system at sea. Both are attempting to control access to key waters and the resources that lie within these waters, inhibiting freedom of the seas and overflight. Both are intimidating their neighbors and attempting to enforce unlawful claims with the threat of force. Both are expanding sophisticated networks of sensors and long-range weapons to hold important waterways at risk. Both are leveraging offensive cyber tactics to advance their competitive advantage, illegitimately obtaining U.S. intellectual property to close research and development gaps and disrupt our industrial base. And both are attempting to replace the free and open international system with a more unilateral and self-serving one by turning incremental gains from their malign actions into long-term advantages – such as militarizing contested features in the South China Sea or illegally annexing the Crimean peninsula.

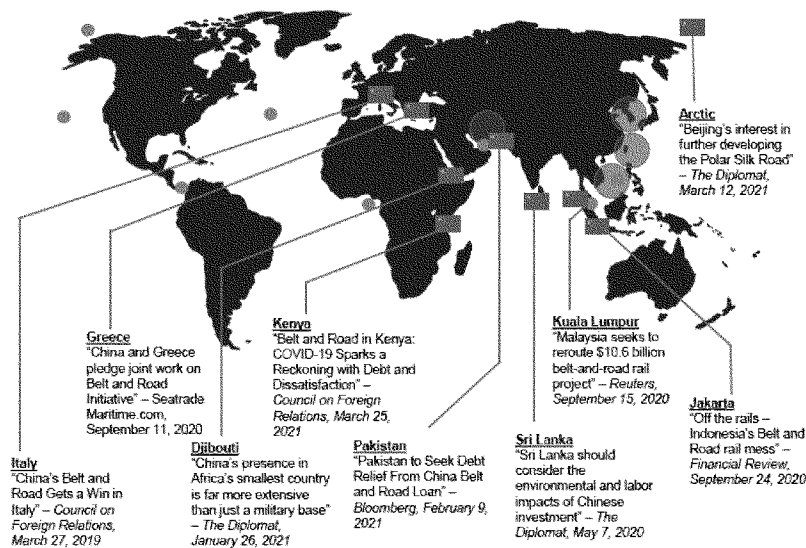
The PRC's and Russia's revisionist approaches at sea threaten U.S. interests, undermine alliances and partnerships, and degrade the free and open international order. Moreover, the PRC's and Russia's aggressive naval growth and modernization are eroding U.S. military advantages. Unchecked, these trends will leave the Navy unprepared to ensure our advantage at sea and protect national interests within the next decade.

Hotspots That Threaten Critical U.S. Interests



The PRC – our pacing challenge – is carrying out a strategy aimed at the heart of America’s maritime power. They are deliberately working to erode maritime governance, inhibit freedom of the seas and overflight, deter our engagement in regional disputes, and displace the United States as the partner of choice across the world. To achieve its strategic goals, the PRC has rapidly grown its Navy from 262 to 350 ships. Today, their fleet includes modern surface combatants, submarines, aircraft carriers, amphibious assault ships, and polar icebreakers. Expanding their robust naval force with a hundreds of Coast Guard and maritime militia vessels, they routinely harass neighbors to exert pressure at a level below traditional armed conflict. They have built the world’s largest missile force to target regional waters in an attempt to intimidate others. They have strengthened all dimensions of military power to contest the United States from the seafloor to space and in the information domain. Under the One Belt, One Road Initiative, they are extending their maritime infrastructure across the globe through aggressive investments, particularly in ports, to control access to critical waterways.

China’s One Belt, One Road: Maritime Expansion



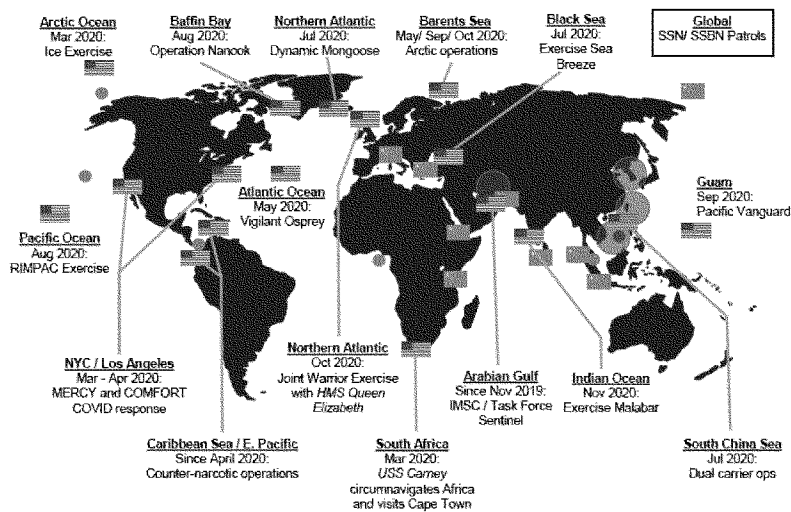
As our U.S. Indo-Pacific Commander recently stated, the greatest danger for America and our allies is the erosion of our conventional deterrence with respect to the PRC. Absent a convincing conventional deterrent, the PRC will continue to take action to undermine the free and open conditions at sea upon which our citizens rely. While the PRC is expanding its influence across

the globe, this challenge is most acutely present in the Indo-Pacific, including the East and South China Seas and increasingly in the Indian Ocean. History shows that a strong U.S. Navy provides a stabilizing influence across the world, assists in peaceful maritime dispute resolution, and expands economic opportunities for the American people. The future will prove no different.

U.S. Navy – Deployed Forward to Defend America and our Allies and Protect the Freedom of the Seas

The U.S. Navy is responding to the challenges to our free and open international system by demonstrating our global reach, enforcing common principles, sustaining the conditions that enable shared prosperity, strengthening our alliances and partnerships, and modernizing our fleet to control the seas in conflict and project power in contested environments. Today, over 42,000 Sailors are deployed on 111 ships and submarines to preserve freedom of the seas, deter conflict, and keep America and our allies safe. Together with the Marine Corps and Coast Guard, our Navy is delivering integrated all-domain naval power across the globe. And we are doing this in the midst of a global pandemic.

The U.S. Navy Deployed Around the World



Even with many parts of the world shut down in response to COVID-19, the worldwide demand for naval forces required us to maintain a high operational tempo, which included eight major Carrier Strike Group and Expeditionary Strike Group deployments in FY-20. Since I appeared

before you last year, the Navy has continued to steam and fly from the Arctic Circle to the Cape of Good Hope and from the Caribbean to the South China Sea. Our hospital ships provided relief to American communities; we executed underway training events for deployment certification; and we conducted exercises as part of the Joint Force and alongside our allies and partners. Our ability to sustain a forward posture rests on the individual commitments of over 600,000 Sailors and Navy civilians and their families. Their adaptive spirit and commitment to COVID-19 protocols kept the force healthy and our ships at sea.

The pandemic taught us a great deal about operating in a challenging environment. Our entire force learned how to adapt as we iterated and honed our COVID-19 Standardized Operational Guidance. Our logistics teams learned what it means to sustain our fleet with limited means. Our information technology workforce quickly scaled virtual private network licenses and supported the roll-out of virtual and remote environments to keep us connected. Our dedicated, patriotic shipyard and aviation depot workforce adapted to our COVID-19 protocols, came to work, and got our ships and aircraft back to sea. And we learned how brittle portions of our defense industrial base could be if not postured appropriately. We took every opportunity to learn throughout this dynamic year – and shared those lessons with our allies and partners – to improve the resiliency of our Navy in the years ahead.

We certainly did not address the challenges of continued maritime operations during this pandemic alone. Our broader Navy team – which includes Congress, industry, research institutions and laboratories, and our international allies and partners – overcame so much to design, build, and sustain our fleet through this pandemic. We cannot thank all of you enough. As our nation – and the world – emerges from this pandemic, we will continue to face the daunting challenge posed by long-term competition with the PRC and Russia. And we will need your support, now more than ever, as we modernize and recapitalize the Navy to sustain our enduring advantage at sea.

Timeless Roles of Sea Control and Power Projection

American security and prosperity is underpinned by the U.S. Navy's ability to control the seas and project power ashore in conflict. The world would be a less prosperous, more dangerous place if the seas were not open and free for the benefit of all. Every day, combat-credible naval forces operate forward to reassure our allies and partners, confront malign behavior, and deter potential adversaries from escalating into conflict. We preserve a stable and secure global maritime environment and advance prosperity through transit, trade, and the lawful pursuit of natural resources. Our ability to carry out these essential functions comes from our ability to credibly control the seas and project power ashore in conflict. These missions are timeless.

Controlling the seas protects friendly shipping, provides the Joint Force and our allies freedom to maneuver, and denies the use of the seas to our adversaries. In the past, sea control required us to

fight our adversaries on, under, and above the sea. Now, in our digital age, it requires us to also fight in space, cyberspace, and across the electromagnetic spectrum. In short, modern sea control demands the all-domain power of our Navy and Joint Force.

America also needs a Navy that can influence events ashore. This starts with deterring nuclear attack against our nation with our ballistic missile submarines – the most survivable leg of the nuclear triad. Projecting power and influence from the seas is vital to deterring aggression and resolving crises on acceptable terms to the United States. Our Navy must field capabilities in all domains – employing information warfare, cyber capabilities, special operations, and a host of conventional weapons launched from on, under, and above the sea – to convince our rivals they have no viable means of achieving their objectives through force. Our sea control and power projection capabilities, alongside our strategic deterrent, provide America and our allies their surest guarantee of peace. If the Navy fails to deliver a fleet that can control the seas and project power, our nation will lack the conventional deterrent needed to protect America and our allies and expand economic opportunities for the American people.

While America’s need for sea control and power projection capabilities has not changed over time, how we operate and what we operate with is changing. Emerging technologies have expanded modern fights at sea into all domains. Ubiquitous and persistent sensors, advanced battle networks, and long range weapons have made contested spaces more lethal. Advances in artificial intelligence have increased the importance of achieving decision superiority in combat. Additionally, autonomous systems have shown promise for an effective and affordable way for us to fight and win in contested spaces. These technologies offer clear advantages to the militaries that integrate them first. America cannot afford to fall behind.

Meanwhile, our fleet is adapting to operate in new ways. To preserve and promote the rules-based order, we are taking a more assertive posture in daily operations. We are challenging excessive maritime claims by sailing and flying wherever international law allows and expanding our decision advantage by persistently monitoring activities at sea to expose malign behavior that undermines the rules-based order. Our cyber teams are actively defending our networks and projecting power in the cyber domain to maintain a tactical advantage against our rivals. Furthermore, we are dynamically deploying our forces forward to deter our rivals from making incremental gains and to work alongside our allies and partners to keep the seas free and open.

Should deterrence fail, our Navy stands ready to confront aggression and decisively win a fight. Using concepts such as the Joint Warfighting Concept and Distributed Maritime Operations (DMO), we will mass sea- and shore-based fires from distributed forces. By maneuvering distributed forces across all domains, we will complicate adversary targeting, exploit uncertainty, and achieve surprise. Controlling the seas by constraining or destroying adversary fleets will enable freedom of movement at sea and power projection ashore. Working with the Joint Force and our allies and partners, Navy submarines, aircraft, and surface ships will launch massed volleys of networked weapons to overwhelm adversary defenses and compel a termination of

conflict on favorable terms. **Delivering an all-domain fleet that is capable of effectively executing these concepts is vital to maintaining a credible conventional deterrent with respect to the PRC and Russia.**

Delivering All-Domain Naval Power

To deliver the all-domain naval power America needs, our Navy must evolve our capabilities and grow our capacity. The Navy – working in close collaboration with the Joint Force – has studied, identified, and prioritized the future capabilities we need to execute our evolving warfighting concepts and maintain a credible deterrent with respect to the PRC. The PRC has invested heavily in anti-access capabilities. In conflict, they will seek to contest all domains and hold our forces at risk with sophisticated networks of sensors and a large number of long-range, precision weapons. To effectively deter the PRC as part of the Joint Force, our fleet must be imbued with distributed weapons of increasing range and speed, more magazine depth, more mobility, more stealth and deception, and more sustainability. This requires a deliberate adjustment to our naval force structure.

Based upon multiple rigorous, threat informed assessments conducted over the past five years – both inside and outside the Navy – it is my best military advice that America needs a larger Navy to counter the People’s Liberation Army Navy (PLAN) that is growing in both capability and capacity. To fill critical Joint Force demands, the Navy requires greater numbers of submarines, smaller and more numerous surface combatants, more lethal offensive capabilities, a host of integrated unmanned platforms – under, on, and above the seas – and a modern strategic deterrent. We also need a robust network infrastructure to link our distributed forces together and resilient logistics to sustain them. **In short, a balanced, hybrid fleet of manned and unmanned platforms is the most effective and affordable way to meet the security demands of our nation.**

Analysis has also confirmed that numbers are not the only factor – the composition and combat effectiveness of our fleet matters more. Naval power is not a function of ship numbers alone, nor is it simply a result of the lethal systems employed from those ships. It comes from the concepts that shape how we fight and the means to maintain, train, and equip our forces to win in combat. And it fundamentally comes from developing Sailors – the true source of our naval power – who can outthink and outfight an adversary.

Within the scope of the President’s FY-22 Budget request (PB-22), we are maximizing our Navy’s contribution to the Joint Force. We are prioritizing a fleet that is ready for combat over a larger fleet that is not ready to fight. We are divesting of legacy assets that do not bring sufficient lethality to the fight and investing in next-generation platforms and systems that close critical Joint capability gaps. Meanwhile, we are prioritizing the training and education needed to prepare our Sailors to outthink and outfight any adversary. And we are using every dollar we can to sustainably grow the fleet. As we prepare our fleet for long-term competition with the PRC,

we are focused on key objectives in the following areas – readiness, capabilities, capacity, and our Sailors.

Readiness

To sustain America’s advantage at sea, we must deliver combat-ready forces to deter aggression and keep the seas free and open. Deploying battle-ready ships, submarines, and squadrons around the world—from the South China Sea to the Arctic—deters aggression, reaffirms our commitment to allies and partners, and keeps the seas open and free. Readiness underpins our forward-engaged posture and touches all elements of the Navy, from our shipyards and aviation depots to the steaming and flying hours our Sailors use to hone their skills. With nearly 70 percent of the fleet we will have in 2030 already in service today, affordably sustaining our ships and aircraft is vital to meeting future demands. This is why PB-22 places such an emphasis on critical components of our Navy’s readiness.

Our force is in a higher state of readiness today than prior to 2017 with a healthier surge force, improved shipboard manning, better training for our crews, and improved parts availability. Increased funding, combined with cultural reforms throughout the fleet, have arrested the decline in our readiness and put us on a path to recovery. Still, we have much work to do.

Deploying combat-ready forces starts with taking expert care of our platforms. To this end, we are using data-driven reforms to improve maintenance processes, increase operational availability, and save taxpayer dollars. We have seen tremendous success with these methods in our aviation community. For years our F/A-18 aircraft were stuck at a 55 percent mission capable rate. At the time, we assumed only an increase in inputs – aircraft, manpower, or parts – could raise the number of ready jets available to our pilots. However, in FY-19 we shifted our focus to cultural reform and used the power of data-analytics to raise our F/A-18E/F mission capable rate to 80 percent – a rate we have continued to maintain throughout all of FY-20 and into FY-21. With higher numbers of aircraft available, our aircrew are more ready to fly and fight than at any point over the last decade.

We are now applying a similar approach to improving ship maintenance. On-time private shipyard surface ship availability completion rates rose from 37 percent in FY-19 to 67 percent in FY-20. Meanwhile, public shipyards reduced maintenance delay days by over 75 percent from FY-19 to FY-20. To generate these gains, we modified contracting strategies, increased dry dock capacity, and optimized facility and pier layouts. We improved planning and adjusted maintenance durations to better align workload with shipyard capacity. We also leveraged authorities provided by Congress, such as the three year “Other Procurement, Navy” pilot program, to increase flexibility and stabilize demand for our shipyard workforces.

Unfortunately, COVID-19 impacted our recent ship depot maintenance gains – as the need to protect our people caused delays in on-time completion of ship maintenance. Half of our

maintenance availabilities in both public and private shipyards are trending late due to workforce capacity reductions. To mitigate further impacts in our private shipyards, we accelerated awards of contract options and improved the cash positions of the industrial base. For our public shipyards, we mobilized over 1,300 skilled Navy Reserve Sailors, increased overtime usage, and rebalanced future workloads to address these delays. These efforts have stemmed the disruption COVID-19 caused to our shipyard maintenance and will mitigate work spilling over into FY-22. We are methodically and safely returning to normal operating conditions. Though some delays will continue to persist until the shipyards return to full strength, the production workforce in both public and private shipyards is returning to pre-pandemic levels.

Sustaining our advantage at sea requires us to make targeted investments in critical infrastructure. This includes ensuring our worldwide constellation of bases are postured to sustain and support our fleet at sea. Of particular importance are critical elements of our national defense industrial base such as our public shipyards and aviation depots. Our Shipyard Infrastructure and Optimization Program (SIOP) provides a strategic roadmap for necessary investments in dry-docks, capital equipment, and optimizing the layout of these vital national assets. We have already broken ground on a perimeter floodwall at Norfolk Naval Shipyard, and are building a new lock system at Portsmouth Naval Shipyard with many more projects on the horizon. We are also recapitalizing our aviation depot infrastructure. Through our Naval Aviation Fleet Infrastructure Optimization Plan (FIOP), we are developing a 10-year Master Plan that provides our aviation depots the capacity to sustain and modernize our aircraft, engines, components, and support equipment. Meanwhile, we are also transforming our Navy enterprise shore network infrastructure into a secure, resilient digital platform.

Sustaining our advantage also requires us to master all-domain fleet operations. To credibly deter aggression, we must integrate the all-domain power of the Navy with the Joint Force and our allies and partners. This starts with providing our Sailors adequate ranges to train for the high-end fight. The speed and scale of a potential fight for control of the seas has changed. The size of our premier Carrier Air Wing and SEAL training center – the Fallon Range Training Complex (FRTC) – is no longer sufficient. Within existing capacity, our Sailors cannot sufficiently train with longer-range weapons or practice the tactics and techniques they will need to employ against a near-peer threat. We will continue to work with Congress, tribal leadership, local communities, and key stakeholders in the year ahead to modernize the FRTC and ensure our Sailors have the infrastructure they need to train to win in combat.

Mastering all-domain fleet operations also requires a rigorous learning campaign. We are conducting a series of fleet battle problems, wargames, and exercises to refine our concepts and capabilities. For example, we recently conducted our most complex exercise to date involving unmanned systems, which brought unmanned surface vessels and aircraft under the control of a *Zumwalt*-class destroyer - the *USS Michael Monsoor* (DDG-1001). This summer we will conduct Large Scale Exercise 2021 – bringing together our fleets from across the globe to test out key components of our DMO concept. Overall, our campaign of experimentation and learning

prepares our Sailors for high-end warfighting and drives updated joint concepts, fleet requirements, and future naval capabilities.

Sustaining our advantage at sea depends on developing, training, and fielding battle ready surface force crews. As of the end of 2020, we have fully implemented all 111 Comprehensive Review/ Strategic Readiness Review recommendations. Over 1,700 junior officers have now graduated from our new Junior Officer of the Deck course with training aligned to International Maritime Organization's standards. We are broadening the use of instructor-led virtual reality training through the construction of two Mariner Skills Training Centers and the modernization of our Integrated Navigation Seamanship and Ship handling Trainers. With the support of Congress, we are investing in and employing meaningful reforms in how we man our surface fleet, train our crews, schedule and execute workups and deployments, and how we equip and maintain the surface force.

We will continue to invest in these key priorities and drive maximum efficiency from every dollar to deliver the naval power America needs. We are currently meeting operational demands while adapting to protect our Sailors and their families. But readiness recovery remains a long game and will require sustained funding over time to fully recover.

Capabilities

To sustain America's advantage at sea, we must deliver a more lethal and better connected fleet. The fight at sea is evolving rapidly. Emerging technologies have expanded into all domains and made contested spaces more lethal. Artificial intelligence and machine learning, autonomy, quantum computing, additive manufacturing, and new communications technologies are transforming the maritime environment. These changes emphasize the need for the Navy to develop sea control and power projection capabilities at speed and scale. That means more lethality, more survivability, better combat logistics, and a resilient network that connects command and control nodes, platforms, weapons, and sensors all together.

PB-22 prioritizes capabilities that amplify the fleet's ability to disperse and project synchronized lethal and non-lethal effects from multiple axes and in all domains. To achieve this vision, we are developing a Naval Operational Architecture (NOA) that integrates with Joint All-Domain Command and Control. The NOA is a collection of networks, infrastructure, data, and analytic tools that connects our distributed forces and provides decision advantage. Beyond recapitalization of our undersea nuclear deterrent, there is no higher development priority. We launched Task Force Overmatch this past October to align resources and expertise from across our force to field the NOA by the middle of this decade.

Developing longer-range, higher-speed weapons – such as hypersonic missiles – will give our warfighters the competitive advantage they need. Hypersonic missiles change the risk calculus for our rivals by providing a non-nuclear sea-based prompt, global strike capability. We are

working in close partnership with the Army to deliver a truly-joint, conventional hypersonic weapon across land and sea-based platforms. We conducted a successful test of our common hypersonic glide body in March 2020, which keeps our Conventional Prompt Strike program on-track to field this game changing capability by the mid-to-late 2020s. PB-22 signals our strong support for developing this vital joint capability.

Our adversaries are attempting to deter us with massive numbers of sea- and shore-based missiles. To complicate their ability to understand the potential battlespace, we are investing in Counter-Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting systems. Our response also includes fielding an inexhaustible directed-energy system that accurately and reliably defeats anti-ship cruise missiles (ASCM). The High Energy Laser Counter ASCM Project is expediting the development of critical technologies to protect our ships from the cruise missile threat. At the same time, we are pursuing other directed energy initiatives in parallel – such as the 150 kilowatt class laser weapon system – to accelerate learning and fielding of this critical capability. The recent demonstration onboard *USS Portland* showed how we can disable an unmanned aerial vehicle using directed energy. We will continue to invest in laser technology and non-kinetic defensive systems to increase fleet survivability while maintaining free magazine space for our offensive weapons.

Our logistics enterprise and strategic sealift capacity are also vital to sustaining our advantage at sea and keeping the Joint Force operating forward. Accordingly, we are modernizing networks and communication and navigation systems of our Combat Logistics Force to best posture this aging fleet to operate in a contested environment. We are also investing in increased fuel distribution capacity as well as improvements in our expeditionary rearm capabilities and resuscitative care surgery systems. Specific to the Sealift Fleet, which provides inter-theater lift capability to the Joint Force, we have accelerated recapitalization, leveraging a “buy used” strategy to replace our least ready vessels, and invested in service life extension for the net effect of increased readiness. We are grateful for Congress’s authorization to affordably revitalize our Sealift Fleet with used vessels. We are moving ahead with purchasing two used ships in 2021 and five used vessels in PB-22, signaling our continued support for this approach. We will continue to work with Congress to efficiently recapitalize this critical capability in the years ahead and request that Congress remove remaining obstacles to used ship procurement. Our longer-term plan is to construct new vessels to replace prepositioned vessels in the Maritime Prepositioning Force as those ships begin to reach expected service life at the end of this decade.

Pivoting toward the future and resourcing needed capabilities – especially in the Indo-Pacific region – requires tough choices. To invest in the next-generation capabilities we need to meet the challenge of near-peer competitors, we need to divest of our legacy capabilities that no longer bring sufficient lethality to the fight. We will work transparently with Congress to make these critical divestment decisions and free up resources to modernize the fleet.

Capacity

To sustain America's advantage at sea, we must field a larger, hybrid fleet that is designed for sea control and power projection. To provide a credible conventional deterrent in peace and win in war, we need to sustainably generate cost-effective platforms and mature unmanned systems. This transition will increase the capacity of the fleet, expand our ability to distribute our forces, and rebalance the fleet away from exquisite, manpower-intensive platforms and toward smaller, less-expensive ones. By growing a hybrid fleet – on, above, and below the seas – we will ensure our success across the continuum of day-to-day competition, crisis, and conflict.

As we design and build a larger, hybrid-fleet, our number one acquisition priority remains delivering the *Columbia*-class ballistic missile submarine on time. No mission is more important to our nation than providing a secure and reliable strategic nuclear deterrent. Our ballistic missile submarines are the most survivable portion of our nuclear triad and provide an assured response to any strategic nuclear attack on the United States. With our *Ohio*-class submarines nearing the end of their service life, we cannot afford to get behind in delivering on the *Columbia* program. The first submarine is starting construction this year with the second boat on-track for procurement in FY-24. We will continue to drive affordability, technology development, and integration efforts to ensure the program remains on schedule and our ballistic missile submarines remain on patrol in the decades ahead.

Meanwhile, our future fleet places a premium on expanding our undersea advantage. During conflict, sea control and sea denial from beneath the waves are among our Navy's core advantages – we cannot afford to yield any ground to our competitors. We are now planning to construct the tenth Block V *Virginia*-class submarine with a Virginia Payload Module (VPM). PB-22 underscores our sustained support for procuring two *Virginia*-class submarines per year. Sustainable production of the *Virginia*-class submarine, in addition to the development of a follow-on attack submarine program, is key to sustaining our undersea advantage in the years ahead.

As we shift our focus toward smaller platforms that can operate in a more dispersed manner, there is a clear need to rapidly incorporate unmanned systems into our fleet architecture. They expand our intelligence, surveillance, and reconnaissance advantage, add depth to our missile magazines, enhance fleet survivability, and provide more risk-worthy vessels to operate inside the weapons engagement zone of any adversary. In other words, they give our operational commanders flexible and effective options to maneuver within a contested environment. The Navy is taking a deliberate approach to developing unmanned systems through our Unmanned Campaign Framework. Our framework lays out an overarching vision on how we intend to produce tested and proven systems at scale, as well as develop the core technologies required to successfully integrate unmanned systems on, below, and above the sea. By the end of this decade, our Sailors must have a high degree of confidence and skill operating alongside proven

unmanned platforms. The combined capability of manned and unmanned systems will provide our operational forces the advantage we need in a future fight.

Nuclear powered aircraft carriers are the most survivable and versatile airfields in the world. For decades to come, they will remain a cornerstone of the Navy's forward presence, sea control, and power projection capabilities. *USS Gerald R. Ford* (CVN 78) represents a generational leap in the aircraft carrier's capacity to project power. Over the past year, *Ford* has been underway, executing over 7,100 total launches and recoveries with the Electromagnetic Aircraft Launch System and Advanced Arresting Gear. Additionally, over 30,000 pounds of ordnance has been moved, loaded and expended by embarked F/A-18 aircraft using Advanced Weapons Elevators (AWEs). Seven of *Ford's* AWEs have completed certification and the remaining four are on track to certify by this summer. We expect *Ford* to be cleared for blue water operations later this year and ready for employment in 2022.

The striking power of our Carrier Air Wing is vital to controlling the seas and projecting power in a high-end fight, and the adaptability of the air wing keeps our carriers relevant for 50-plus years of life. The air wing of today is currently transforming with the addition of the F-35C, the E-2D Advanced Hawkeye, and the CMV-22B Osprey. PB-22 increases our F-35 inventory to get the fleet closer to a fourth generation and fifth generation fighter mix. Carrier Air Wing TWO – which includes the first operational F-35C squadron – is currently undergoing pre-deployment training and will deploy later this year. Meanwhile, we are rapidly developing the MQ-25 Stingray – the Air Wing's first unmanned platform – to extend the striking range of our fleet. And we are laying the groundwork for the highly networked air wing of the future – a 6th generation family of systems that leverages manned-unmanned teaming – which will deliver overwhelming firepower in contested spaces in the years ahead. Delivering a 6th generation family of systems is vital to keeping pace with PRC fighter development and sustaining our advantage over the seas. America cannot afford to fall behind.

We are also going through a surface combatant reset on ship design and construction to provide the next enduring hull forms for small and large surface combatants. Our surface combatant inventory is aging with limited options for future upgrades. At the same time, our future fleet design places an emphasis on greater numbers of small surface combatants. The *Constellation*-class frigate is a versatile, multi-mission platform capable of supporting day-to-day operations and the high-end fight. We began cutting steel on *Constellation* this year, and we are excited to incorporate this ship into the fleet in 2026. Meanwhile, the future large surface combatant (DDG(X)) will bring the space, weight, and power needed to incorporate future capabilities for the high-end fight such as high power lasers, long-range strike, and sensor growth. Together, both ship classes will bring more lethality, more survivability, more endurance, and more self-sufficiency to the fleet.

We are not just building better ships – we are building ships better. The Navy is mindful of past shipbuilding efforts that did not perform to plan, which is why we are moving ahead in ways

that deliberately reduce risk. Early and sustained industry involvement, robust land based testing, and focused design maturity are foundational to our shipbuilding approach. We appreciate the strong support from Congress in FY-21. Delivering ships on time, on budget, and within performance targets is our priority.

Sailors

To sustain America's advantage at sea, we must recruit, develop, and retain a seasoned team of naval warriors. The strength of our naval power depends on the strength of our Sailors – active and reserve, uniformed and civilian. In the long-term strategic competition we face today, every Sailor must be able to outthink and outfight any adversary. Our Navy must remain the best trained, finest educated, and most ready maritime force in the world. We recognize the strength we gain from a diverse force and our actively pursuing combat-minded Sailors with varied backgrounds, experiences, and thought to build up our readiness and resilience. As we take care of our Sailors, we will accelerate their development and harness their talents to keep America safe and prosperous.

As we modernize our fleet, we are modernizing our talent management systems to better recruit, train, retain, and support our Sailors. We achieved our accession goal of 39,600 new active duty Sailors in FY-20 to further improve afloat manning and filled operational billets to their highest point in six years. PB-22 makes a slight reduction in our end-strength with the divestment of legacy ships. However, the demand for a highly trained, diverse force has not abated. We are grateful to Congress for the generous pay raises and personnel reforms. The Navy is leveraging both – alongside our talent management initiatives – to better recruit and retain our incredibly talented force. Meanwhile, we continue to transform our MyNavyHR infrastructure to rapidly deliver services to our Sailors and families at a reduced cost. This includes the DOD-leading mobile applications that help with the challenge of military moves and finding childcare or housing and the MyNavy Career Centers which proved vital during the COVID-19 pandemic.

We are continuing to cultivate a culture of excellence across the fleet, which builds resilience and strengthens our Navy's enduring standards of professional competence and personal character. Over the past year, our culture of excellence campaign has strengthened the signature behaviors that define our service to prevent the occurrence of destructive behaviors – such as sexual harassment or discrimination. At the same time, we have maintained a resolute focus on preventing the scourge of sexual assault within our ranks. PB-22 increases our civilian Sexual Assault Prevention and Response workforce to provide greater support for our Sailors and drive down investigation timelines. Overall, we are providing more training, more tools, and more resources so every Sailor receives the support they need.

We are also actively building a workforce that represents the full diversity of America and the strength it brings. Task Force One Navy (TF1N) was launched last year to analyze and evaluate issues in our military that detract from Navy cohesiveness and readiness. The task force released

their report in January 2021 and highlighted 56 recommendations that will elevate a culture of diversity, equity, and inclusion throughout the fleet. Respect and the promise of opportunity are core to our Navy, and we are committed to implementing TF1N reforms and ridding discrimination, sexism, and other forms of structural biases from our ranks.

Without a doubt, the vast majority of Sailors in the U.S. Navy serve every day with honor, character, and integrity. However, we cannot be under any illusions that extremist behaviors do not exist in our Navy. As directed by the Secretary of Defense, each command across the fleet conducted a stand down to address extremism within our ranks. Racism, injustice, indignity, and disrespect keeps us from reaching our potential – an inclusive, respectful, professional fighting force that answers the Nation’s call with unparalleled readiness and lethality. The stand down was only a starting point; this will be an ongoing fight. We are committed to eliminating extremist behavior and all of its corrosive effects on our fighting force.

The intellectual investments we make in each Sailor provide a key advantage over our rivals. To strengthen our advantage in this area, we are aligning the curriculum and research of the Navy’s education enterprise to deliver warfighting advantage in our operations at sea and in how we design, deliver, and generate our forces. Additionally, the Naval Community College is on track to provide our Sailors opportunities for education in fields that strengthen the service. Maintaining educational relationships with our international partners through exchanges and scholarships remains a priority for us to deepen enduring relationships and broaden understanding between likeminded navies.

To ensure our Sailors are ready for any challenge on the horizon, we are scaling Ready Relevant Learning (RRL) and Live, Virtual, Constructive (LVC) training. RRL provides the right training, at the right time, in the right way for our Sailors. It replaces “one-and-done” classroom training events with career-long learning continuums through a mix of in-classroom instruction and modern training methods. LVC technology blends the intensity of underway operation with high-fidelity synthetic training, allowing our Sailors to master high-end tactics in secure and controllable conditions. Our force will always fall back to their baseline under the stress of combat – RRL and LVC will raise their baseline.

Conclusion

Let there be no doubt – America is a maritime nation. Our security and prosperity are inextricably linked to the seas. For 245 years – in both calm and rough waters -- your Navy has stood the watch to protect our homeland, preserve the freedom of the seas, and defend our way of life. For generations, we have provided a bulwark against aggression and have underwritten the international order that led to an unprecedented era of peace and prosperity. Now that order is under threat.

As the President stated, we are at an inflection point. The PRC's rapid military growth and aggressive behavior at sea has put it on a trajectory that will challenge our maritime advantage in the years ahead. Our naval forces – and the American people – must maintain a clear-eyed resolve to compete, deter, and – if necessary – defeat our rivals, while accelerating the development of a larger and more lethal future fleet. We must do so while integrating more closely with the Marine Corps and Coast Guard to generate integrated all-domain naval Power. Only by working as a team and taking care of our people will we be able to defend the nation in the years ahead. We must move deliberately, but also with speed. Our actions this decade will shape the maritime balance of power for the rest of this century.

On behalf of more than 600,000 active and reserve Sailors and Navy Civilians, thank you for giving me the opportunity to testify today. I am grateful to this committee, and to all of your colleagues in Congress, for your steadfast commitment to the Navy. We look forward to sailing alongside you to sustain our advantage at sea.

Admiral Michael Gilday
Chief of Naval Operations

Adm. Mike Gilday is the son of a Navy Sailor. A surface warfare officer, he is a native of Lowell, Massachusetts and a graduate of the U.S. Naval Academy. He holds master's degrees from the Harvard Kennedy School and the National War College.

At sea, he deployed with USS Chandler (DDG 996), USS Princeton (CG 59), and USS Gettysburg (CG 64). He commanded destroyers USS Higgins (DDG 76) and USS Benfold (DDG 65) and subsequently, commanded Destroyer Squadron 7, serving as sea combat commander for the Ronald Reagan Carrier Strike Group.

As a flag officer, he served as commander Carrier Strike Group 8 embarked aboard USS Dwight D. Eisenhower (CVN 69), and as commander, U.S. Fleet Cyber Command and U.S. 10th Fleet. His staff assignments include the Bureau of Naval Personnel; staff of the Chief of Naval Operations, and staff of the Vice Chief of Naval Operations. Joint assignments include executive assistant to the Chairman of the Joint Chiefs of Staff and naval aide to the President.

As a flag officer, he served in joint positions as director of operations for NATO's Joint Force Command Lisbon; as chief of staff for Naval Striking and Support Forces NATO; director of operations, J3, for U.S. Cyber Command; and as director of operations, J3, for the Joint Staff. He recently served as director, Joint Staff.

He has served on teams that have been recognized with numerous awards and is the recipient of the Defense Distinguished Service Medal, Distinguished Service Medal, Defense Superior Service Medal (four awards), Legion of Merit (three awards), Bronze Star, Navy and Marine Corps Commendation Medal with Combat "V," and the Combat Action Ribbon.

Gilday began serving as the 32nd Chief of Naval Operations August 22, 2019.

STATEMENT
OF
GENERAL DAVID H. BERGER
COMMANDANT OF THE MARINE CORPS
AS DELIVERED TO THE
HOUSE ARMED SERVICES COMMITTEE
ON
THE POSTURE OF THE UNITED STATES MARINE CORPS

Introduction

Chairman Smith, Ranking Member Rogers, and distinguished members of this committee, thank you for this opportunity to present the annual report on the Marine Corps. More importantly, thank you for your continued support and leadership over this challenging year. I believe strongly that major change in existing force structure and ways of doing business are needed in this era of renewed great power competition. The strategic environment the Marine Corps and joint force operate in has changed, as has the domestic context as a result of the ongoing COVID-19 and related relief measures. We must therefore make appropriate adjustments to our investment plans to ensure a proper return on the taxpayers' investment. The promotion and sustainment of the Marine Corps that our nation and fleets will need in 2030 and beyond requires your continued active support.

Since testifying last year, our nation has engaged in a long overdue conversation on race and social justice sparked by several visible incidents of institutional racism, and perhaps more importantly – how to remedy the inequities of the present. As with all other Americans, I – and every other Marine – have acknowledged these challenges, and will continue to do our part to overcome them once and for all. While confronting issues of inequality, we have simultaneously endured the adverse consequences of the COVID-19 pandemic. Like millions of others, Marines and their families across the country and globe suffered the consequences of isolation, closure of our public schools, and increased childcare demands; and like those millions of other Americans, Marines made the necessary sacrifices to stop the spread. I am proud of every one of those Marines with their collective leadership and of their ability to rapidly adapt and lead by example.

Our nation witnessed a small but violent minority attempt to subvert the rule of law through an overt act of violent coercion on January 6, 2021. Like most every other American, I was shocked by this attack on our democracy. I was even more dismayed to learn that some of those engaged in that attack had previously served in the military – to include the United States Marine Corps. Thankfully, we as a nation and military have done as we always do – learned, endured, and grown stronger. We have and will continue to actively work to identify recruits and Marines who hold extremist views and we look forward to participating in the Secretary of Defense's new Countering Extremism Working Group to develop additional methods of keeping extremists from within our ranks.

Over the past year, I have continued to communicate my understanding of the future demands of naval expeditionary warfare and maritime gray zone competition. Related to the future of naval campaigns, I have articulated a case for change to reinforce and expand existing naval warfighting advantages and create future strategic advantages. It is abundantly clear that a future operating environment characterized by a maturing and proliferating precision strike regime will place heavy demands on our Nation's Naval Services. We are not yet organized, trained, equipped, or postured to meet those demands and support fleet operations. This is no longer a controversial assertion as it was when my predecessor first uttered it. The vast majority of defense professionals – including the Members of the bipartisan *Future of Defense Task Force* – perceive the same challenges I do in the emerging operating environment, as well as the urgent need for real innovation and rapid change in response. Although there is an ongoing, healthy debate about how and what we should change across the Armed Services, there are very few

lining up to defend the status quo. We must continue to discuss these changes, but defense professionals have almost unanimously acknowledged that real change is required – and soon.

Though some things require substantial change, we should be clear to acknowledge those foundational tenets which remain as relevant and operationally suitable today as they have been over the previous 70 years. In 1952, Members of Congress noted the Marine Corps “can prevent the growth of potentially large conflagrations by prompt and vigorous action during their incipient stages. The nation’s shock troops must be the most ready when the nation is least ready...to provide a balanced force-in-readiness for a naval campaign and, at the same time, a ground and air striking force ready to suppress or contain international disturbances short of large-scale war...” This role as the nation’s force-in-readiness, prepared to create strategic advantage via its ability to be quickest to respond to either crisis or conflict, and prepared to both prevent and contain conflict below the threshold of traditional armed conflict remains as valid today as it was when first articulated.

Personnel and Talent Management

None of our *Force Design 2030* aspirations are possible without addressing the people within our ranks. As Secretary Austin highlighted, “our most critical asset...is our people.” I believe this is even more relevant within the Marine Corps. Marines are the heart and soul of the Corps.

Almost all of your 225,000 Marines serve honorably every day, representing the very best of our country and your constituencies. No institution, however, is without flaws. As I noted last year, malignant individuals and small malignant subcultures continue to exist within your Marine Corps. In this era of profound ideological division within our nation, some individual Marines

regrettably bring with them, or fall victim to while in service, misogynistic, racist, and homophobic/transphobic ideologies driven by hate, fear, and ignorance. While I have instituted even more rigorous policies than previously existed to ensure we identify such individuals during enlistment and accession screening, I remain committed to identifying and holding accountable any Marine unable to uphold our core values and to adhere to our unapologetically high standards. This is what you should expect from me, and you will get it.

Within the context of the larger national conversation on race, social justice, and equality, it became clear to me early in my Commandancy that there were symbols and behaviors within our Corps that challenged the cohesion and unity essential to military effectiveness. The Confederate Battle flag stood out as one such symbol. I am not a historian and do not take a position as to the true meaning of this ancient banner, but some in today's world have rallied around the colors of that defeated rebellion to foster division and hate. As a result, I prohibited its display aboard all Marine Corps installations beginning last spring. My primary responsibility is to prepare Marines to fight and win in combat, and we cannot tolerate artificial division driving wedges among your Marines – especially ones so easy to identify and remove. I will do everything within my authority to remove any obstacle preventing equality and cohesion. Signs or symbols that support or endorse hatred, ignorance, or injustice have no place in our Corps.

While these acknowledgements of past prejudice are good first steps, we must do more than simply look over our shoulders at the past. We must acknowledge the real bias and obstacles in the system today. We must promote and retain the very best Marines; however, it is clear to me

that a degree of structural racism and sexism exists within our current system. We must create a system of structural equality that ensures all Marines – of all backgrounds – are able to use their best talents to solve the problems we soon will face. The diversity of thought and actions each Marine brings will help us find more creative and innovative solutions to these future challenges. We must actively work to retain and grow this diversity of thought through a more diverse group of talented individuals, while at the same time protecting against extremism.

Over the past decade and in close coordination with Congress, we've prioritized the prevention of sexual harassment and sexual assault as well as dedicated tremendous effort into providing the appropriate response to these criminal acts. I am convinced of the linkage between sexual harassment and sexual assault, thus we will continue to make every effort to eliminate both from our ranks with your continued assistance. We have increased the number of Victim Legal Counselors dedicated to supporting sexual assault victims over the past 12 months. However, all of these efforts are dedicated to the response after a tragic event has occurred. We must do better at the prevention in order to stop sexual assault and sexual harassment before they occur. Although we conduct regular training aimed at preventing this from happening, we are still working to overcome unhealthy attitudes and behaviors recruits arrive with to Recruit Training. We must develop practices that identify those negative behaviors before they turn into heinous acts and prevent such behaviors from occurring in the first place.

Improving the capabilities and proficiencies of the individual Marine necessitates we must also have the very best senior leaders for those Marines. I am humbled to serve alongside the General Officers and Flag Officers within the Department of the Navy. But even one instance of

misconduct or misbehavior within our General Officer ranks is too many. Over the past decade, the Marine Corps has selected several officers for promotion to brigadier general who subsequently failed to be confirmed by the Senate. This is unacceptable. Over the coming months, I will announce several major policy changes related to talent management to include how we screen and select our commanders and most senior leaders. We are currently reviewing the efficacy of implementing a 360-degree review for all lieutenant colonels and colonels eligible for command selection and all colonels eligible for selection to brigadier general, to help ensure we identify the absolute best who have earned the trust and respect of juniors, peers, and seniors alike. In addition to these issues related to screening, I remain concerned at the absence of Black officers within the senior ranks of our aviation enterprise and specifically within the ranks of our fixed-wing pilots, as well as the paucity of female general officers. We are currently studying both issues, and will share the results of those studies once completed.

As you are aware, we cannot create new senior leaders in a day. If we are to correct our gap in diversity at the senior ranks, we must also address diversity at accessions. The largest single source of commissioning within the Marine Corps is the U. S. Naval Academy, accounting for nearly 20% of officer commissions each year. A recently released study identified that almost 75% of the nominations to our service academies were given to white students. The diversity of this population has a direct impact on what leaders are available for selection to our senior ranks.

It is not enough that we recruit and train the very best. Once Marines have joined our ranks, we must nurture and incentivize them along their individual journeys through a modern talent

management system flexible enough to account for changing career interests and common life choices over time. Without such a system, we will increasingly struggle to retain the very best people in an ever more competitive marketplace. Our one-size-fits-all, industrial-era approach that treats individuals as interchangeable cogs within a larger machine does not appropriately incentivize the most talented individuals to remain in service. We are currently reviewing policy options that will offer Marines greater flexibility when it comes to tour lengths based on an individual's circumstances – most notably when a Marine has a child entering or completing high school. Our Marines must not be forced to choose between being good parents or being good Marines. Those sterling goals must be compatible. I remain committed to improving the lives of our Marines as they become parents and we are looking into ways that would prevent them from having to choose between the newborn and continued service as a Marine. I truly desire a Marine Corps known for being the best within the joint force for our treatment of new parents and families – and not just our warfighting prowess.

It is a well-known issue that the Marine Corps is struggling to recruit and retain Americans possessing the crucial science, technology, engineering, and mathematical skills and competencies required for the future. Technology companies present exciting and challenging opportunities for software developers, cyber professionals, and engineers. We must offer opportunities that allow someone to choose both service *and* professional reward. In addition, we must do a better job targeting the application of our NROTC scholarships to these individuals, as well as explore new possibilities with Historically Black Colleges and Universities to satisfy these shortfalls.

The military services - including your Marine Corps – continue to lose the competition with the civilian airline industry for pilots and maintainers, even with the adverse impacts of COVID-19 on the airline industry. We are not maintaining sufficient numbers of naval aviators and F-35 maintainers to sustain either our existing inventory of aircraft or aircraft programmed for the years to come. Within our F-35 community, we have a shortfall of both pilots and maintainers. I am concerned that if we do not remedy these shortfalls in the very near future, we may be in a situation in which we are directed by Congress to procure aircraft for which we have insufficient pilots and maintainers.

Training and Education

A key element of our larger force design transformation is our need to adopt an information age approach to training and education that produces better leaders and warfighters more effectively and efficiently. The essence of this approach is to focus on identifying, developing, and sustaining the unique talents of individual Marines, not turning out MOS-shaped cogs to fit MOS-shaped slots in a machine. Better warfighters in an era of exponential change means adaptive, critical thinkers who are also tactical and operational masters of their profession. Among many implications of this shift will be higher expectations and intellectual standards for Marines, especially commissioned officers, at every stage of their selection for and attendance at formal schools. We still need standardized training and education to set a baseline and inculcate our core Service values and ethos, but there are significant aspects of entry-level training that must be adapted. Much of our current understanding of future warfighting requirements, associated concepts, and force design point to a more highly trained force from the entry-level onward. We need to change *how* we train and educate as well. We have known for a long time

that rote repetition and even “perfect practice” against static, unresisting targets is only the barest beginning of mastery. Consistent opportunities to make tactical and operational decisions against a thinking enemy must be a critical part of our curricula at all levels. This kind of force-on-force wargaming and training must stand on a solid foundation of military history and theory – games, simulations, and exercises are necessary, but not sufficient. We will develop that foundation in school, but sustain it by rigorous, accountable, self-directed effort. We must address the question of “standards” transparently and head-on to create the force we desire, and to create the force we advertise. In an initial step to creating a philosophy and culture of a learning organization, last year I signed the first all-new service doctrine since 1998; *MCDP 7 Learning* was released in February and *MCDP 1-4 Competing* in December. In addition to releasing new doctrine, we have elevated command of our Training and Education Command to a three-star general, equal to all other Deputy Commandants, and are in the process of re-establishing a robust Futures Directorate.

Achieving diversity of thought requires fixing our entry-level instruction to allow every new recruit and officer candidate the same opportunity to master these skills without it impeding their future career opportunities. Not every young man or woman who joins our ranks grew up participating in activities relevant to individual battlefield skills such as marksmanship, orienteering, water survival, or technical skills. As a matter of longstanding practice, however, we continue to assess potential at the very earliest stages of our recruit and officer training programs based on performance in precisely those skills. There is no doubt of the continuing importance of these military basics, but we cannot expect every new Marine to master those individual skills with the same amount of in-service instruction, regardless of previous

experience. A new recruit who has never touched a rifle cannot be expected to master marksmanship in the same amount of time as a recruit who grew up handling rifles regularly, and a Marine who never learned to swim should not compete unaided for job placement with a Marine who grew up as a competitive swimmer. In effect, we penalize Marines who fail to master these basic skills because they did not start with the same knowledge or skill base. While holding the line on the standard of basic competencies that define a Marine, our entry-level training must provide the instruction necessary for every recruit and officer candidate to achieve mastery in basic skills, regardless of how much time it takes.

The COVID-19 pandemic brought new challenges and opportunities to your Marine Corps. During the entire time, your force-in-readiness continued recruiting, training, operating, and deploying around the globe. Although we did not stop any of our activities, we did learn many lessons from the pandemic that we can continue to use going forward to make a more resilient and capable force. We devised new methods of virtually connecting with potential recruits and with our force, internally. For entry-level training, we spread out recruits while they slept and installed more handwashing stations, which has virtually eliminated the inevitable illness that the new recruits will pass around as they come in from all over the country. A key factor in this success has been the level of discipline instilled by small unit leaders which prevented any significant outbreaks and kept Marines healthy. Your Marines continue to serve their communities by establishing federal COVID-19 vaccine sites in local communities in support of the Federal Emergency Management Agency. As President Biden highlighted, we don't have enough people to provide vaccination shots – put the shots in people's arms – so Marines are filling in this immediate shortfall.

Gender Integrated Training

The FY 2020 NDAA directed the Marine Corps to integrate training at both Marine Corps Recruit Depots Parris Island and San Diego. Since the signing of the law, we have trained multiple integrated companies at MCRD Parris Island. In February, the recruits of Lima Company were the first gender-integrated company at MCRD San Diego in the installation's 100-year existence. To train the first females at MCRD San Diego, we graduated the first gender-integrated class at Drill Instructor School in San Diego in December and relocated female drill instructors from MCRD Parris Island. We will take the lessons learned from this company as well as a concurrent study to identify the requirements needed to fulfill the 2020 NDAA within the prescribed timelines. However, as I have publicly stated several times, we will prioritize options that provide the best training and most efficient use of resources to ensure Marines graduating from boot camp are ready for the rigors of service in an elite organization during challenging times.

Force Design

Shortly after I testified before this Committee in the spring of 2020, I published the *Force Design 2030* report. *Force Design 2030* is how your Marine Corps is changing its trajectory to create advantage for the fleets and joint force in both maritime gray zone competition and more traditional conflict. Although we need new capabilities to deter adversaries, we must fundamentally change how we think about armed conflict. We can no longer view warfare through the binary lens of war and peace, but should recognize the existence of a cyclical continuum of competition that occurs every day and involves all elements of national power. Historically, the military viewed maintaining the peace as deterring war through denial or by

punishment. *Force Design 2030* offers a third option in addition to those two that will counter strategies below the threshold of armed-conflict by winning the reconnaissance and counter-reconnaissance competition and facilitating deterrence by detection.

At its core, *Force Design 2030* is a campaign of learning. Through wargames, analysis, and limited experimentation, it has become clear the joint force needs a capability that operates persistently and with maximum organic mobility and dispersion to compete and deter in the contact and blunt layers. The vulnerability of large fixed bases and shore-based infrastructure to long-range precision strike, combined with the impracticality of defending such infrastructure from the pacing threat's emerging capabilities at any politically-feasible level of resourcing and regional posture, necessitates that the stand-in force be able to perform these functions from a strictly expeditionary and highly mobile and resilient naval posture. This refined analysis and understanding is what is driving our *Force Design 2030* to support concepts like *Expeditionary Advanced Base Operations* (EABO), as well as informing the recently released *Tentative Manual on Expeditionary Advanced Based Operations*. We will continue to refine and update the *Tentative Manual* with the lessons learned from our FMF experimentation. In the near future, we will release our latest concept – *Stand-In Forces*.

Much as our 29th Commandant codified maneuver warfare in our principal doctrine *MCDP-1 Warfighting* to instill a maneuver warfare mindset into every Marine, I felt it necessary to codify how we compete every day around the globe. We recently released a doctrinal publication entitled *Competing* to instill a competitive mindset into every Marine, whether above or below the threshold of armed conflict. Marines – and the military as a whole – must be aware that

every action or inaction has an effect on reassuring our partners and allies and deterring our competitors. All that we do, from our force laydown, to the activity at each location, to the equipment we buy, signals our commitment to reassure and deter. In a globally connected operating environment, we no longer have the luxury of maintaining a binary combat or garrison mindset; our posture and mindset must be one of continuous competition.

Naval Expeditionary Stand-In Forces

Expeditionary advanced bases are a platform for small, mission-tailored groups of Marines to distribute and hide in plain sight with the assistance of advanced camouflage, cover, concealment, detection, and deception (C3D2) capabilities against a competitor who is seeking to locate our forces. Expeditionary advanced bases will enable the convergence of capabilities from multiple domains and create the virtues of mass without concentration. The Marine Littoral Regiment (MLR) – the base unit for our future force – will provide fleet and joint force commanders with persistent, survivable forces that will enable the generation of effects within areas that our adversaries hope to deny to us through their integrated systems of anti-access and area-denial capabilities. In terms of hardware, Marine capabilities will include anti-ship Naval Strike Missiles (NSM) loaded on the unmanned Remotely Operated Ground Unit Expeditionary (ROGUE) Fires; self-sustainment and mobility with the Light Amphibious Warship (LAW); and, long-loiter aerial reconnaissance in an expeditionary environment with the Medium Altitude, Long Endurance (MALE) Group 5 unmanned aerial systems (UAS). Future infantry units operating within the MLR construct will be equipped with organic precision fires to include loitering munitions. The MLRs will be networked with our F-35 capabilities, providing a further layer of combat credibility and sensing. In the future, these forces could employ more advanced

munitions such as Tomahawk Land Attack Munitions (TLAM), Maritime Strike Tomahawks (MST), SM-6 containerized anti-ship missiles; and a wide array of unmanned or optionally manned systems to enhance deterrence. Without these long-range precision fires, the MLRs will not be suitable to support the fleets and will lack the ability to influence the vast maritime area your Marine Corps must do.

In the even more critical human domain, these capabilities will encompass the necessary training and education to produce leaders who understand how to deter competitors and provide civilian leadership strategic options across a wider spectrum. The MLRs will offer deterrence by detection through constant surveillance of the competitor, complicating their decision-making calculus if they attempt fait accompli gambits, and doing so while networked into the larger architecture of naval and joint command, control, computers, communications, cyber, intelligence, surveillance, reconnaissance, and tracking (C5ISR-T) articulated in the Joint All-Domain Command and Control (JADC2) concept and previous discussions on Mosaic Warfare.

With global sensors becoming ubiquitous, the value of reconnaissance and counter-reconnaissance or scouting and counter-scouting will increase. *Force Design 2030* offers civilian leaders strategic options to identify, deter, and hold accountable competitors challenging U.S. interests or infringing on international norms at any point on the globe. It creates advantage by providing uniformed and civilian leadership with a force capable of denying key maritime terrain to an adversary or to force a change in decision calculus and facilitate de-escalation. Those naval expeditionary forces will also be capable of rapidly sensing, making sense, and acting upon information from inside the enemy's weapon engagement zone (WEZ) in support of

the fleet and larger joint force, further complicating adversary decision calculus. These stand-in forces will be able to support anti-submarine warfare (ASW) efforts and help sanitize key maritime straits, thus expanding our strategic undersea warfare advantage. Your Marine Corps is transforming into a force capable of competing and winning the hider/finder competition by proliferating sensors to detect adversary presence, employing advanced C3D2 for resilience, and maintaining a lethal array of long-range precision fires to prosecute targets at a time and place of our choosing – whether ashore or afloat or in the air. Stand-in forces will simultaneously satisfy traditional requirements from the fleet and combatant commanders for a modern, resilient crisis response force capable of responding across the range of military operations. And, as noted in the most recent testimony by the Commander, USINDOPACOM, these stand-in expeditionary forces are further required as the forward leading-edge to any strategic defense in the Indo-Pacific and any maritime defense-in-depth.

From our continued wargaming and experimentation, we have learned much about the utility of multi-domain reconnaissance. As a result, over the coming months a new Marine reconnaissance enterprise will consolidate disparate elements of existing organizations within a structure capable of generating a coherent, persistent, forward-presence focused on key maritime terrain that is vital to U.S. national security interests. The next step will be the development of our Mobile Reconnaissance framework which will deliver expanded all-domain capabilities to our naval expeditionary forces and fleets via a combination of Marine Commandos, manned and unmanned surface platforms to include the Long-Range, Unmanned Surface Vessels (LRUSV) and small boats, manned and unmanned ground Ultra-Light Tactical Vehicles (ULTV), unmanned aerial systems, and unmanned subsurface vehicles. As with other force design efforts,

these forces will be fully capable of networking with our 5th generation F-35 capabilities as well as connecting with the larger joint architecture.

In addition to offering continuous surveillance in the contact layer, the MLR increases lethality, disbursement, mobility, and survivability in a way that our current stable of large, expensive, high-signature platforms cannot match to deter and counter aggression in critical regions. The MLRs will provide a unique expeditionary advanced base capability, but they will not be the sole definition of the FMF as our Marine Expeditionary Units will remain our “crown jewel.” Your Marine Corps can compete, deter, and win as part of a naval expeditionary force operating in international waters and with light footprints ashore on the territory of local allies and partners. It does not require the sustained presence of heavy ground forces or the regular deployment of large, land-based aviation elements. These unique capabilities make the Marine Corps the ideal choice for a force-in-readiness that serves as the backbone of the contact layer because our forces can cooperate with allied and partnered nations without burdening their local infrastructure, whether for steady-state operations or disaster response operations. Additionally, the sensing elements of the FMF coupled with lethality are key attributes in preventing conflict.

Posture

21st century strategic competition requires a new posture to deter modern threats. Our current force posture is strikingly similar to the one designed coming out of the Korean War. That posture was designed to deter and confront a Soviet threat that consisted of strategic bombers and Intercontinental Ballistic Missiles. Over the last two decades, our strategic competitors took note of our strengths and designed forces specifically to counter them. We must now adjust our

posture against the pacing threat of China due to its ability to hold our fleet at stand-off ranges and prevent significant force projections. This does not mean abandoning our forward position of advantage, but rather adopting a more robust and resilient forward-deployed posture as described in testimony by Admiral Davidson as part of a larger defense-in-depth.

Marine forces working with Navy ships must occupy space within the contested first and second island chains in the Indo-Pacific with the ability to effectively operate in all domains. Guam remains one of our most important strategic locations as it is US territory located closest to contested maritime regions. In order to effectively deter by detection, our forces must be within sensor and striking range to impose cost on the adversary through their allocation of limited CSISR-T assets or determining that the cost is too high to attempt anything that would cross the line of established international laws and norms. However, while Guam remains a strategically important location within our larger defense-in-depth, we must not ignore the potential impacts to it due to the adverse effects of climate change. We must take the necessary steps to protect Guam and the strategic advantage it provides.

Our posture includes more than the laydown of our forces around the world, it also must include what our forces are doing in those locations. As Secretary Austin has told us, “our success will depend on how closely we work with our friends around the world to secure our common interests and promote our shared values.” Marines regularly conduct training with allies and partners globally. This training is beneficial to building trusting relationships and interoperability. These relationships are not - and should not be – one way, in that US Forces tell partners and allies how to operate. We can learn from other nations as much as we can teach.

For example, the Japanese Amphibious Rapid Deployment Brigade may have used the U. S. Marine Corps as an example in its development, but we have much to learn from them based on how quickly they designed, assembled, tested, and operationalized the brigade. Our commitment to working with allies and partners creates a mutually beneficial relationship for our military organizations while simultaneously signaling our resolve to competitors. Initiatives like the Pacific Deterrence and the European Deterrence are so important in supporting our posture.

Competition and Risk

Some critics of our *Force Design 2030* suggest that non-stealthy platforms such as the LAW, LPD-17 class amphibious ship, and the current Group 5 UAS are operationally unsuitable for high-end warfighting. This critique's foundational assumption is that our decades-old stealth technology or military-standard naval architecture will be overcome with technological countermeasures and that stealth technologies will become affordable enough to proliferate the operating environment in large quantities. Survivability under such conditions is likely to prove far more a matter of quantity, dispersion, signature management, and distributed lethality than of being able to avoid technical detection or defend against all threats. We must view survivability in terms of the entire system – the entire system must be able to survive long enough to accomplish the mission vice an individual platform. The expeditionary system of platforms our Marines employ – and the networks they operate on – must be capable of competing and deterring below the level of armed conflict as well as fight at the high-end to reassure our partners and allies as well as demonstrate a credible capability to a would-be adversary. For example, while not a part of the currently envisioned program, LAWs operating in plain sight with containerized missiles could effectively compete and deter. Such a reimagining of the

program could involve greater costs, so we will have to study the benefits and make resource informed decisions about tradeoffs in capabilities and capacity. Traditional amphibious ships, such as the LPD-17s, possessing tactical advantages derived from well-decks will confound adversaries and force them to consume resources attempting to positively identify those capabilities loaded inside – whether unmanned surface vessels, unmanned underwater vessels, or more traditional capabilities. Long-endurance Group 5 UAS, like the MQ-9, also provides the persistent presence necessary to win the hider /finder competition for the fleet. Additionally, a proven platform like the MQ-9 supports quickly learning the platform through the experience of the US Air Force while continuing adaptation and innovation over time as we procure the future system.

If competition expands from opening volleys or punishment strikes to large-scale conflict, the Fleet Marine Force offers the Joint Force Commander a persistent stand-in force capable of conducting reconnaissance, counter-reconnaissance, and targeting in the blunt layer. A stand-in force with the ability to support allies and partners while striking the adversary with long range precision fires, 5th generation short take-off and vertical landing aircraft, and a host of electronic warfare options combined with the mobility of the Amphibious Combat Vehicle (ACV), LAW, and unmanned surface and undersea vehicles provides a survivable option to buy time for the remainder of the joint force to bring war-winning capabilities.

Logistics and Resilience

Sustaining the force we are developing now becomes even more critical in the years ahead. The relative ease with which we have been able to project power into the Middle East over the last

few decades has lulled us into a false sense of security. As a result, we have optimized service logistics efforts to support requirements without regard to the threat actions that could disrupt them. My predecessor said “we are going to have to fight to get to the fight.” I will take that a step further by saying we will have to fight to sustain our warfighting efforts over time. The Joint Logistics Enterprise must connect our emerging operational concepts at the tactical edge all the way back to the defense industrial base. We have been an end user of the system, but that needs to change. We must develop new methods for the Naval Force to enable broader joint force sustainment efforts. On a day-to-day basis, today’s distributed force strains our systems to the limits. This will only get more challenging considering the dynamic, evolving threats that competitors can apply against our supply chains, manufacturing bases, and global sustainment network.

Based on anticipated funding levels and the additional budget uncertainty that has been introduced by the COVID-19 response, we must clearly consider risk as we move forward. Our force design efforts for the future will provide the context necessary to make the difficult choices for our installations and logistics enterprise. We can no longer accept the inefficiencies inherent in legacy bureaucratic processes nor accept incremental improvements. In order for our installations and logistics organizations to change effectively, we must better understand the implications that *Force Design 2030* will have on the FMF across multiple time horizons so we can resource our installations and logistics enterprise appropriately. In coordination with partners both inside and outside the service, we will evolve our organization to meet the future FMF’s operational requirements in the air, on land, and at sea while continuing to provide world-class support to the force today. This may require a change in the existing command

relationships between the bases and stations and the forces they support. I will keep the committee fully informed of any such changes as our understanding evolves.

Finally, in an effort to modernize our bases and stations in a manner commensurate with our overall force design, we are experimenting with advanced force protection systems enabled by artificial intelligence at several of our installations. This capability is promising and may provide the service an opportunity to greatly enhance the protection of our installations while drastically cutting personnel costs.

Major Defense Acquisition Programs

I have always operated under the assumption that evidence, wargame findings, modeling and simulations, and my own best military advice as Commandant would persuade people across the defense enterprise and within Congress that we need change now. While I remain convinced that this assumption remains valid and look forward to a continued dialogue with the Committee, we have more work to do to persuade key audiences of the merits of our desired changes.

Congressional support for Ground Based Anti-Ship Missiles (GBASM); LRUSV; Medium Altitude, Long Endurance UAS; and I believe that Light Amphibious Warship (LAW) will be essential to our modernization efforts. We will continue to work with the Congress to demonstrate the importance of a rapid acquisition of these critical capabilities. I have repeatedly asked for Congressional support to change legacy programs that are no longer operationally relevant or have become cost prohibitive, as well as support for new initiatives that create a relative warfighting advantage. This is the kind of agility we will need going forward in order to sustain that warfighting advantage.

Based on my understanding of the strategic challenges before us and my desire to remain the best steward of taxpayer dollars, I am convinced that we must be willing to critically assess the scope of current Programs of Record for our Major Defense Acquisition Programs (MDAP). As we reduce the end strength of the Marine Corps in order to internally fund our modernization, each MDAP must be reevaluated for capacity and sustainability. We will need the continued support of Congress to re-scope any program that exceeds our requirement or is unaffordable to procure, man, and sustain.

In addition, we should acknowledge that up to three quarters of a weapon system's cost occurs in sustainment-- the operational and maintenance upkeep after the initial acquisition. With the new procurement of large weapon systems like the F-35B/C, CH-53K, MV-22, JLTV, and ACV – to name but a few – we should be prepared to modify programs of records to ensure affordability and viability throughout the entire lifecycle of each program. Prioritizing high-end platforms without resourcing the supplies and infrastructure needed to sustain its operational capability is fundamentally irresponsible; the result would be a hollow force.

With every dollar we expend to upgrade a legacy platform that is no longer survivable against a peer competitor, we are slowing our rate of transformation. Our competitors no longer wait to see what America does and follow suit; they have embarked on their own trajectory, which currently outpaces ours. Our *Force Design 2030* addresses this problem by forcing the competitor to adapt to us through the tactical, operational, and strategic challenges a truly modern force presents. This does create domestic dilemmas as we are forced to transition from legacy platforms built in certain districts to modern and relevant equipment that may be built

elsewhere. However, if we are to succeed in this great power competition, we must make those difficult choices. I remain confident that this can occur in a responsible and balanced way, without creating winners and losers, and look forward to discussions with each of you on a way ahead that satisfies shared interests.

The Marine Corps remains constrained by an acquisition process that tries to eliminate risk – risk poorly defined as uncertainty. We must recognize that incrementally better versions of the current Marine Corps is not going to be enough for real great power competition. As noted in the House Armed Services Committee’s *Future of Defense Task Force Report 2020*, our acquisition process is too sluggish to work effectively at scale with many technology companies, as they need to innovate and compete daily to survive in their dynamic industry. With the rapid transition we need to make over the next decade, we must be willing to incur some short-term risk to better prepare and compete in the future. The ability to prototype new technologies, then aggressively experiment and exercise with prototype equipment to understand its full capability on the battlefield is paramount. Lastly, I agree with the *Report’s* recommendation that we need a process that better bridges the “valley of death” to transition critical prototype equipment into full-scale fielding without taking years through the traditional planning, programming, budgeting, and execution process.

Readiness and Strategic Advantage

As we build a more capable and lethal force, we must also take into consideration the readiness of that force. Since 2017, the Marine Corps has significantly increased the availability of forces to Combatant Commanders based on the generous funding of Congress. As Marines deploy

forward in support of operational requirements, they buy down today's risk by deterring competitors from violating international norms while assuring allies and partners of the strength of our commitments. However, the mere availability of those Marines does not equal readiness to compete in the maritime gray zone, nor does it create strategic advantage to deter or defeat rapidly evolving threats. It is time for us to embrace a more sophisticated and balanced understanding of military readiness and cease using availability as the primary metric in our readiness evaluations. This antiquated model is hugely consumptive and forces us to spend limited resources ensuring the availability of platforms designated for retirement and replacement. This also applies to equipment that we are attempting to transition to more modern capabilities. For example, every dollar spent to make a 4th generation aircraft that has exceeded its intended service life is a dollar that cannot be spent to accelerate the fielding of 5th generation very low-observable aircraft and advanced UAS. We must invest in future capabilities that create, maintain, and expand warfighting advantage to ensure a ready force tomorrow that maintains its ability to compete and deter.

During the most recent conflict between Armenia and Azerbaijan, Armenian ground forces that we would have labeled ready based on availability, were easily targeted and destroyed by Azerbaijani forces employing elements of a precision strike regime to include swarms of loitering munitions and lethal unmanned systems. While Armenia's tanks and infantry fighting vehicles were available, they were not operationally suitable, thus not ready for the conflict. As our competitors continue to expand their capabilities, we will soon find ourselves outmatched unless we change our readiness framework. To do so, we should embrace a new readiness paradigm in which availability ranks behind generating a relative warfighting advantage. A

ready capability in the future must be one that is both available when we need it and creates a strategic warfighting advantage against a specific threat in great power competition and conflict.

A ready force that creates a strategic advantage over the pacing threat must be organized to generate faster decision cycles against the enemy. A large part of our *Force Design 2030* efforts is aimed at developing the right capabilities for the future force, but just as important is devising the correct organizational model to employ those capabilities. I do not support creating more or larger headquarters organizations to accommodate the larger quantities of data coming in as I feel this will only slow the decision-making process. I'm also not committed to organizations that we have employed in the past if they don't work to fulfill our future requirements. In addition to right-sizing our FMF, I've also directed an ongoing assessment to reduce 15% of our personnel across Headquarters Marine Corps to generate savings that we can reinvest into our warfighting capabilities without losing the institutional processes necessary to support an adaptable force.

Your Marine Corps, and the Naval Service as a whole, have a proven record when it comes to driving change. Both the People's Republic of China and Russia modernized their militaries over the past decade based on what they assessed as our strengths and our competitive warfighting advantages. They adapted their operational and strategic approaches to counter us and now we must modernize in order to remedy shortfalls and drive the next cycle of change. Simply making our legacy platforms better or more of them available will not force our competitors to change course, nor will it create the strategic advantage required. I concur with the Air Force Chief of Staff General CQ Brown: we must accelerate change or lose.

One way we can accelerate change is by seeking a more nuanced understanding of readiness as it applies to each service or even common force elements within each service, and to ask – how many forces-in-readiness can we collectively afford? A critical factor of understanding readiness is identifying when a joint force will need a capability in accordance with a detailed mobilization plan. The Marine Corps – as well as other critical elements of the joint force – will always be at the front of the timelines because we are the force who is present before conflict and deters an adversary’s early escalation. Serving as the foundational element of our persistent contact layer allows time for the joint force to mobilize and surge the war winning capabilities of the other services. However, without your Marines forward deployed to tamp back the aggressor and create decision space, the joint force will not have the time and opportunity to deploy.

Fleet Design and Naval Integration

Thus far, my comments have focused on issues germane to my role as Commandant of the Marine Corps – to organize, train, and equip Marine Corps forces in support of the Fleets and Combatant Commanders. Please now allow me to share a few thoughts with you as one of the three senior naval officials testifying before you and also as a member of the Joint Chiefs of Staff. My experience and role as a senior Naval officer requires that I share my best military advice in the ongoing fleet design conversation. One thing is clear: serious naval professionals both in and out of service agree that the status quo fleet will not provide the strategic advantages required in an era of great power competition, and must change.

I would like to state for the record my thanks to the CNO and his OPNAV staff for their continued support redesigning the fleet and the amphibious / naval expeditionary portion of it

without reservation or hesitation in support of our shared understanding of the operational dilemmas created by peer adversaries. The CNO is leading a major change in future fleet design and I wish to acknowledge that for the record, and formally communicate my support. I agree with the CNO that the Navy does not need to be “reimagined” or “reinvented,” and neither does the Marine Corps for that matter. However, as the CNO has noted, *how* we perform our core roles and functions of deterrence, maritime security, power projection, and sea control must change – just as it has many times in the past.

Being physically present within the area of responsibility is no longer evidence of success, and we should no longer think presence somehow produces deterrence in and of itself. For naval presence to deter competitors, physical positioning must create real strategic advantage. The specific capabilities present must provide a competitive warfighting advantage against specific peer threats and do so in a resource neutral manner. Dispersing large numbers of militarized fishing vessels with a nuclear aircraft carrier may result in the temporary absence of those adversary vessels in key maritime terrain, but it comes at a fiscally prohibitive cost, not to mention the operational cost of not having that warfighting capability postured to project power via its carrier air wing. However, having a robust inventory of submarines, frigates, light amphibious warships, and networked unmanned or optionally manned surface vessels – or even T-AGOS and military sealift vessels – operating in the same region would provide a competitive warfighting advantage without resource prohibitive operating costs. Such a fleet would further reinforce our strategic advantages in undersea warfare through their modern ASW capabilities and our advantages in naval expeditionary warfare. The process of redesigning the fleet will not be an easy or inexpensive, nor will it be accomplished quickly, but it can be done with your

continued oversight and support. I wish to thank the Secretary, the CNO, and the members of this committee for their continued commitment to the construction and sustainment of our ships necessary to support amphibious operations.

Not that long ago, the Amphibious Ready Group (ARG) that comprised the Navy ships for the Marine Expeditionary Unit (MEU) consisted of five ships with a combined gross tonnage of approximately 73,000 tonnes. Today, our standard three ship ARG/MEUs operate in a distributed manner from platforms with a combined gross tonnage of approximately 86,000 tonnes. As with many other systems and capabilities across the joint force, our ARG/MEU has become smaller yet heavier, while simultaneously being asked to be more agile. Distributed Maritime Operations is not only the future of naval operations, but in reality – the present. As we modernize our Marine forces as part of our force design efforts, we must also modernize the ARG/MEU. We have seen the great value of disaggregating the ARG/MEU with each individual ship conducting its own mission within the same Area of Operational Responsibility for a Combatant Commander. Greater numbers of smaller ships would allow us to disaggregate for a greater number of mission sets while maintaining the ability to reassemble into a large force with expansive mission sets. Defining our future operational concept will also help drive us to better understand what we need from LXX – or the next class of amphibious ships. We know they will need to be smaller, faster, more lethal, and better networked, but we don't yet know to what degree we need these characteristics. As we continue our analysis with the Navy, we know that they must be affordable so that we can purchase and maintain the number of ships we need to operate globally. Therefore, our requirements will be matched to a program that is affordable and sustainable over the long-term.

Finally, I wish to state my support for the observations, positions, and conclusions articulated by Admiral Davidson in his most recent testimony. The vision he articulated for a strategic defense to include a defense-in-depth with naval expeditionary forces postured forward and west of the international dateline is one I share, and have attempted to communicate as often as possible over the previous 22 months. I share his conclusion that highly lethal and distributable expeditionary forces than can generate the effects of mass without the liabilities of concentration are of the highest utility, and am doing everything possible to create such forces via my force design efforts with the Marine Littoral Regiment.

Conclusion

The American people expect us to be our own toughest critics, and we are. We have significant strides to make in the near future, but I know the leadership and support of this Congress will help us to revolutionize our approach to competition and conflict. I pledge to keep you informed and involved in the transformation of your Marine Corps. The American people are counting on their Marines, Navy, and joint force to maintain our ideals and way of life now and into the future. The dustbin of history is crammed with once successful militaries, businesses, and organizations that recognized the world was changing and attempted to meet that change through merely incremental improvements in existing ways of doing business. Despite their previous successes, these institutions failed in the new environment because they could not make the fundamental changes necessary to remain on top. We are now in the midst of just such a period of change, and we will need all the help and support of this Congress to ensure we continue our long history of successful innovation and adaptation.

While our aspirations and expectations are great, I am certain that you expect nothing less from your Marine Corps. With your continued support, we shall succeed. We will achieve our goals of transformation, both in our culture and warfighting capability, to best support the naval campaign and the joint force.

General David H. Berger
Commandant of the Marine Corps

General David H. Berger assumed the duties of Commandant of the Marine Corps on July 11, 2019.

A native of Woodbine, Maryland, General Berger graduated from Tulane University and was commissioned in 1981. He commanded at every level – including a Reconnaissance Company; 3d Battalion, 8th Marines in Haiti during Operation SECURE TOMORROW; Regimental Combat Team 8 in Fallujah, Iraq during Operation IRAQI FREEDOM.

As a General Officer, he commanded 1st Marine Division (Forward) in Afghanistan during Operation ENDURING FREEDOM; I Marine Expeditionary Force; U.S. Marine Corps Forces Pacific/Fleet Marine Forces Pacific; and Marine Corps Combat Development Command.

General Berger's staff and joint assignments include serving as Assistant Division Commander of 2d Marine Division; policy planner in the Strategic Plans and Policy Directorate, J-5; Chief of Staff for Kosovo Force (KFOR) Headquarters in Pristina, Kosovo; and Director of Operations in Plans, Policies, and Operations, Headquarters, U.S. Marine Corps; Deputy Commandant for Combat Development and Integration.

General Berger's formal military education includes the U.S. Army Infantry Officer Advanced Course, U.S. Marine Corps Command and Staff College, and U.S. Marine Corps School of Advanced Warfighting. He holds multiple advanced degrees including a Master of International Public Policy from Johns Hopkins University School of Advanced International Studies.

DOCUMENTS SUBMITTED FOR THE RECORD

JUNE 15, 2021

Memo Behind this page

Acting Navy Secretary's Call to Cancel Nuclear Sea-Launched Cruise Missile

The following are details regarding Thomas Harkin's call to cancel the Nuclear Sea-Launched Cruise Missile.

- Acting Secretary of the Navy Thomas Harker signed a memo on 4 June 2021 that calls for the Navy to "Defund Sea-Launched Cruise Missile - Nuclear development efforts." This memo is subject-titled: Secretary of the Navy Strategic Guidance for Revised Program Objective Memorandum 2023.
- According to testimony before the Senate Armed Services Committee on 10 June 2021 (Defense Budget Posture in Review of the Defense Authorization Request for FY22), the following military members said the following:
 - SECDEF Austin:
 - "Senator, I -- I have not seen the memo but -- but I would say that, you know, all of us, all of the services and the department are -- are, again, making tough choices in terms of where -- what to prioritize and -- and where to accept risk that. That -- that memo has to be predecisional because -- because of where we are in the process. And so I don't feel comfortable in commenting on his -- his memo. I would just say that again I am committed to a -- a -- our posture review, to make sure that we adequate -- adequately analyzed what our capabilities are, what is needed in the future and that we -- that we maintain the right balance in our nuclear forces going forward."
 - Chairman Milley:
 - "I am not familiar with the memo, nor was I consulted. But as soon as we're done here I'll go find that memo and get consulted."
- Some additional details from Ryan Tully:
 - The 2018 Trump Nuclear Posture review directed that a new nuclear capable Sea Launched Cruise Missile (SLCM-N) be developed to increase deterrence and counter Russian and Chinese emerging capabilities.
 - In 2019 and 2020 the Department of Defense began an Analysis of Alternatives to (AoA) to examine exactly what the SLCM-N would look like and how much it would cost.
 - The Biden FY22 Budget included \$5.2 million for the completion of the AoA and to begin design work. It also included \$10 million to start work on the warhead, a variant of the W80-4 that will go on LRSO.
 - The Biden administration has also announced that it will begin its Nuclear Posture Review that will commence shortly and be completed in December 2021/January 2022.
 - On June 4, 2021, a leaked memo from the Acting Secretary of the Navy canceled all funding for the SLCM-N in FY2023, before the completion of the AoA and NPR.
 - SECDEF Austin, Chairman Milley, and Admiral Richard all read about the memo in the news and have called it "pre-decisional."
 - The SECDEF and CJCS Milley support the FY22 funding in the FY22 budget.
 - The Commander of U.S. Strategic Command recently told the HASC Strategic Forces Subcommittee that a new nuclear sea launched cruise missile (SLCM-N) "will bring a needed non-strategic regional presence and an assured response capability. It does not require host nation support and provides additional diversity in platforms, range, and survivability. The SLCM-N will provide assurance to our Allies and partners through tailored response options in vast operating areas where forward basing may not be possible. Limited U.S. response options, such as the SLCM-N, is intended to provide a more credible deterrent to limited attack against the U.S., Allies and partners rather than relying primarily on the threat of large-scale nuclear responses. It will enhance our ability to tailor deterrence and assurance while expanding the range of credible U.S. options."

Adm. Richard
Commander Strat. Com.



THE SECRETARY OF THE NAVY
WASHINGTON DC 20350-1000

June 4, 2021

MEMORANDUM FOR UNDER SECRETARY OF THE NAVY
ASSISTANT SECRETARIES OF THE NAVY
COMMANDANT OF THE MARINE CORPS
CHIEF OF NAVAL OPERATIONS
GENERAL COUNSEL OF THE NAVY
CHIEF INFORMATION OFFICER

SUBJECT: Secretary of the Navy Strategic Guidance for Revised Program Objective
Memorandum 2023

The Office of the Secretary of Defense recently reissued Fiscal Guidance to support development of Program Objective Memorandum (POM) 2023 to support the Future Years Defense Program (FYDP). The Interim National Security-Strategic Guidance and the Secretary of Defense's Message to the Force provide overarching guidance for the Military Departments. Accordingly the following POM 23 guidance is provided:

Defend the Nation

- Fully fund strategic deterrence recapitalization efforts (COLUMBIA, Trident D5 Life Extension 2, and the TACAMO replacement) to Independent Cost Estimate or Service Cost Position, as appropriate.
- When pricing DDG 51, SSN, and MH-53K, assume the Department of the Navy (DON) will maximize use of acquisition authorities such as Multi-year Procurements and Economic Order Quantity to most efficiently utilize taxpayer dollars while providing stability to the industrial base.
- The Navy cannot afford to simultaneously develop the next generation of air, surface, and subsurface platforms and must prioritize these programs balancing the cost of developing next generation capabilities against maintaining current capabilities. As part of the POM 23 budget, the Navy should prioritize one of the following capabilities and re-phase the other two after an assessment of operational, financial, and technical risk.
- Operationalize initiatives that connect warfighters and weapons systems with the data necessary to achieve precision effects. Scope requirements and fully fund Project Overmatch to enable both increased battlespace awareness and long range fires as well as support the seamless transition to assured unmanned operations.
- The Navy cannot afford to own, operate, and maintain its current infrastructure and must prioritize demolition to achieve long-term sustainment; the Chief of Naval Operations is directed to develop a 10-year infrastructure reset strategy, similar to the Marine Corps, to achieve

See Next Page for
Line on STEM-N

SUBJECT: Secretary of the Navy Strategic Guidance for Revised Program Objective Memorandum 2023

a 1 percent facility footprint reduction measured in square feet per year over 10 years. Due 1 November 2021.

- Maintain programs for mitigation of encroachment at installations and training and test range complexes.
- Tag prior year investments in climate resiliency in Program Budget Information System database to provide apples to apples comparison; prioritize increase in climate resiliency during POM 23.
- Defund Sea-Launched Cruise Missile – Nuclear development efforts.
- Prioritize Master Chief Petty Officer of the Navy safety initiatives, including a Level 1 Damage Control and Firefighting Trainer at Recruit Training Command.

Take Care of Our People

- Fully fund efforts to institute and sustain enduring telework capability; accelerate implementation of M365 and other cloud-based Information Technology (IT) capabilities across the Navy and Marine Corps, including complete decommissioning of legacy infrastructure which M365 has made obsolete; to include on premise storage, chat, on premise SharePoint, video and audio teleconferencing, and other collaboration and productivity tools.
- Fully resource education programs that directly contribute to naval warfighting and enhance the current training and education structure to shape the future naval force. Specifically, ensure the Naval Community College is resourced to support 5,000 students in Fiscal Year (FY) 23.
- Continue President's Budget (PB) 22 funding investment across the FYDP to support integrated violence prevention programs to combat suicide, sexual assault, and sexual harassment.
- Increase investment in mental health capability/capacity enhancements funded in PB 22, building off of the eight programs/initiatives resourced to optimize and build on the current state, including investment in additional mental health professionals to meet requirements and access to care mitigation strategies. Fund Navy Embedded Mental Health services within recruit, early career, and special duty assignment training environments, ensuring positive integration into the fleet and fleet marine force, establishing healthy coping strategies and fortifying resilience.
- Diversity, Equity and Inclusion (DEI) are critical to the readiness of our Navy and Marine Corps team, and ultimately to our mission success. As part of the POM 23 process, the DON shall provide funding and manpower necessary to establish and appropriately staff and resource an office of primary responsibility to comply with Department of Defense and DON DEI policies, guidance, and activities. Funding priorities for programs will be directed towards enhancing or sustaining recruitment, career development, retention, and training programs that

SUBJECT: Secretary of the Navy Strategic Guidance for Revised Program Objective Memorandum 2023


reduce/eliminate barriers to service or advancement and deliver resources and benefits equitable to all.

- Fully resource and implement Safety and Occupational Health (SOH) programs to include development of the Risk Management Information System supporting cloud-based collection of all safety mishap/SOH program management.

Succeed Through Teamwork

- The Navy must operate its shore business model more efficiently. Identify five percent savings each year in Base Operating Support funding over the FYDP by reforming shore business and financial processes; reducing shore-based personnel; eliminating missions, functions and tasks; and restructuring organizations.
- Identify candidate DON Defense Business Systems (DBS) that would benefit from a shift in funding from service programs to Secretariat, and then execute that shift in resource sponsorship over POM 23-POM 24. Implement streamlined, transparent, and accountable governance structures for all DON Business Systems. Re-phase programs of record across all business systems to match funding and prioritize demonstrated success.
- Fund the aggressive modernization and consolidation of our disparate IT networks into a single, cloud-enabled, Naval Enterprise Network for all classification levels and drive the divestment of our legacy IT Infrastructures, redundant software, and outdated platforms. Complete transition to a Zero-Trust Architecture supported by a flatter, defensible, performant unified transport layer and a single Naval Identity Management Service.
- Consolidate data analysis capabilities into the DON enterprise data environment and eliminate duplicative investments. Disparate command and organizational-level corporate data warehouses shall transition to DON Jupiter beginning no later than FY23. The Navy Working Capital Fund data warehouses are directed to do the same.

The DON's Total Obligation Authority has essentially remained constant since FY18 in real terms while the Navy's ship count has increased. Prioritization of programs of leadership interest will best ensure alignment with the Secretary of Defense's guidance and deliver a force aligned with the will of the American people. This high level guidance is provided to shape discussions and programming decisions which will be made following detailed analysis; close coordination between the Military Services and the cognizant Assistant Secretary of the Navy or Chief Information Officer will be critical to ensure development of a balanced POM that meets this guidance.


Thomas W. Harker
Acting

**WITNESS RESPONSES TO QUESTIONS ASKED DURING
THE HEARING**

JUNE 15, 2021

RESPONSE TO QUESTION SUBMITTED BY MR. LANGEVIN

Admiral GILDAY. The technology that makes up the cyber domain changes daily, and we can never have 100% confidence that we don't have somebody in one of our systems that we have to get after. I am confident that we're taking the necessary steps to harden our systems against cyber attacks and train our workforce to fight through any resulting system degradations. Navy is moving at pace to cloud—starting with enterprise services used by our entire workforce. Our new unclassified Microsoft 365 cloud implements key aspects of Zero Trust security to better protect our data and infrastructure. The purpose-built integrated cybersecurity capabilities we're using deliver tighter access control to and better insight into the activity on our network than we've ever had before.

While the Navy acquisition process includes cybersecurity during design and development of our weapons systems, nearly 70% of the fleet we will have in 2030 is in service today. Defense in depth protection for systems that will not transition to the cloud, including weapons systems, remains a requirement. Navy developed the Defense-in-Depth (DiD) Functional Implementation Architecture (DFIA) to provide a tiered security architecture to detect, protect, react, and restore information systems in the event of cyber attacks. We leverage Joint and Navy solutions to deliver a secure architecture that is dynamic and adaptable. [See page 15.]

RESPONSE TO QUESTION SUBMITTED BY MR. BROWN

Mr. HARKER. In accordance with SECNAV INSTRUCTION 5354.2, "Department of the Navy Equal Opportunity, Equal Employment Opportunity, and Diversity Oversight" the Assistant Secretary of the Navy for Manpower and Reserve Affairs (ASN (M&RA)) is designated as the DON official authorized and responsible for policy and oversight relating to Diversity, Equity and Inclusion (DE&I). While our current policy addresses the overall intent of the legislation, we plan to update policy to meet new legislation and DOD policy to include specific designation of ASN (M&RA) as the Senior Advisor. Additionally, ASN (M&RA) hired a Highly Qualified Expert to lead a team to develop the DON strategic vision, governance, implementation strategy, measures of effectiveness and organizational structure for the DE&I Program. The focus is to create an enduring program linked to our naval culture. [See page 29.]

RESPONSE TO QUESTION SUBMITTED BY MR. GOLDEN

Mr. HARKER. The Navy has been using multi-year procurement (MYP) authority with the support of Congress to efficiently procure DDG-51 destroyers in quantities that support stable production and a healthy industrial base. Over the course of the FY 2018–2022 MYP, the Navy will procure a total of 11 Flight III DDGs, more than the original ten ship procurement. The Navy continues to support the use of MYP contracts for procuring DDG-51 class ships. [See page 43.]

RESPONSES TO QUESTIONS SUBMITTED BY MR. BACON

Admiral GILDAY. In October 2020, DOD released its Electromagnetic Spectrum (EMS) Superiority Strategy. We are awaiting release of the DOD EMS Superiority Strategy Implementation Plan, which includes 123 specified tasks for the Services and components of the Joint Staff. Upon release of the Implementation Plan, the Navy will prepare an impact estimate for DOD that will serve as the basis for follow-on tasks to develop a supporting Naval EMS strategy and governance structure. I intend to then develop and implement a tri-service EMS strategy with the Marine Corps and Coast Guard along with a governance structure for Navy use of the EMS. [See page 44.]

General BERGER. The Marine Corps is drafting its Electromagnetic Spectrum Operations (EMSO) Service Strategy. The strategy will focus on the vision to ensure

the Marine Corps is prepared to operate in the EMS throughout all domains in a contested, congested, and constrained environment against adversaries ranging from the pacing threat to non state actors and across the competition continuum. We anticipate the strategy will be completed and signed in fall 2021.

The Marine Corps EMSO strategy identifies the need to compete within the EMS across all domains. Additionally, the strategy describes the critical enablers that will be required in order to achieve EMS superiority: EMS Battlespace Awareness, Assured Command and Control, Dynamic EMS Management, and EMS Maneuver. These enablers affect each of the warfighting functions and Marine Forces' ability to successfully execute operations. The Marine Corps must be capable of using the EMS as a maneuver space, just like the land, air, maritime, cyberspace, and space domains, seizing and maintain the initiative, and placing the enemy in a position of disadvantage. The strategy will identify clear lines of effort in order to achieve this objective.

Additionally, the Marine Corps is supporting the DOD EMS Superiority Strategy's implementation plan, which is informing our EMSO strategy and the development of future requirements. Since the Marine Corps does not fight alone, we must be interoperable with Joint and other Services' electromagnetic battle management systems and tools that enable spectrum maneuver, agile operational functionality, and are capable of sharing EMS data supporting EMS awareness and understanding. [See page 44.]

RESPONSE TO QUESTION SUBMITTED BY MRS. LURIA

Admiral GILDAY. The Concept acquisition program baseline (APB) in 1998 was for a quantity of 32 ships. The Development APB in 2005 was for a quantity of ten ships. [See page 46.]

RESPONSE TO QUESTION SUBMITTED BY MR. KAHELE

Admiral GILDAY. The Navy has prioritized the recapitalization of the Barking Sands Tactical Underwater Range (BARSTUR) and Barking Sands Underwater Range Expansion (BSURE). A full replacement of BARSTUR/BSURE, at Pacific Missile Range Facility (PMRF) was programmed into the PB18 OPN budget as part of the Undersea Warfare Training Range (USWTR) Program of Record (POR). Recapitalizing BARSTUR and BSURE concurrently, vice as two separate and distinct projects, is estimated to provide an overall program cost avoidance of approximately \$20M. The \$33.56M provided in the PB 22 budget represents the first year of funding of a multi-year effort. The Navy has reported the PB21 programmed budget in the Barking Sands Tactical Underwater Range (BARSTUR) and Barking Sands Undersea Range Expansion (BSURE) response to House Report 133 dated 4 June 2021. The budget includes all planned funding through IOC.

BARSTUR is past its design life, however 30 of 42 nodes remain operational. Three of the nonoperational nodes are located in close proximity to each other, which has created a gap in tracking coverage on the southwest corner of the range. This loss of coverage has not had a detrimental effect on fleet training operations or participant safety. Engineering analysis conducted by Naval Undersea Warfare Center, Newport indicates that the range will remain viable until 2025. Based on the program schedule, there is a narrow window of opportunity to accelerate the recapitalization of the BARSTUR/BSURE range. Should additional funding be provided, it may allow for the earlier procurement of long lead materials, possible acceleration of early program activities allowing compression of the schedule, and could support an earlier IOC, which would generate a savings in government labor and engineering support towards the end of the project.

Acceleration opportunities would be dependent upon the amount and timing of additional funding appropriated. The Navy has an executable and resourced plan that will ensure the long-term viability of the BARSTUR/BSURE range, while limiting disruptions to USW training. The contract award is on track to award in early 4QFY21 with Initial Operating Capability (IOC) in FY25. [See page 51.]

RESPONSE TO QUESTION SUBMITTED BY MR. JOHNSON

Admiral GILDAY. As the Navy Divests from Legacy F/A-18s within the Reserve Component, VFA-204's aircraft will be replaced with F-5N/F Tiger IIs as its mission is focused on providing Adversary support for Active Component Counter Air Training while providing the Navy with Strategic Depth in the form of a pool of

highly trained and experienced aircrew. The Navy's current F-5 Fleet will have sufficient service life to last through the 2030s. Currently, the Navy is in the initial stages of market research into developing an Adversary variant of an advanced jet trainer, which may also consider similar USAF efforts. This jet trainer Adversary variant could begin to replace F-5N/F aircraft within the Navy's Adversary force in the early 2030s. [See page 60.]

RESPONSE TO QUESTION SUBMITTED BY MR. LAMBORN

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QUESTIONS SUBMITTED BY MEMBERS POST HEARING

JUNE 15, 2021

QUESTIONS SUBMITTED BY MR. LANGEVIN

Mr. LANGEVIN. Vice Admiral Gilday, you mentioned that you had high confidence in hypervelocity projectiles, a railgun technology, as part of layered defense, but the Navy cut that program in this year's budget request. Why did you cut the program if you have a high confidence in it?

Admiral GILDAY. We have confidence in the capabilities of the HVP, which can be launched from both conventional and railguns, as a result of multiple successful demonstrations conducted by the Navy and the Strategic Capabilities Office (SCO). Those demonstrations include: 40+ successful flight tests of HVP in counter air and surface threat scenarios. (Feb 2018—Jun 2021) First round of a three-round salvo of HVPs intercepted a BQM-167A cruise missile target during US Air Force's Joint All-Domain Command and Control Advanced Battle Management System On-Ramp 2. (Sep 2020) Unguided HVP rounds were successfully integrated with the 5-inch Mk45 Mod 4 gun and fired at-sea from USS DEWEY (DDG 105). (Jul 2018) Through these demonstrations, and a large body of other work, we have achieved the technology-development objectives of the original HVP project. We aren't cutting the project; we are bringing the technical-development activity to a successful close consistent with the approved project baseline.

The Navy continues to assess multiple Terminal Defense and Ship Self Defense options, including HVP, to determine the best mix of capabilities that will optimize mission effectiveness, cost, speed to Fleet, and other criteria. Acquisition for Gun Launch Guided Projectiles (GLGP), of which HVP is a part, remains in consideration. In addition, the Office of Naval Research (ONR) is continuing to advance HVP-related technology by considering options for fire-control architectures that are more cost effective for Navy Combat System integration and are extensible to multiple weapons including existing 5-inch Mk45 Mod 4 gun.

Mr. LANGEVIN. General Berger, how do you envision the Marine Corps using directed energy?

General BERGER. Directed energy has potential for use in the future, especially as large numbers of low-cost adversary weapons proliferate the battlefield. The Marine Corps currently employs directed energy through a program known as the Compact Laser Weapons System (CLaWS), which is a high energy laser system.

The Marine Corps uses CLaWS for air defense to counter small unmanned aircraft systems as part of our fixed-site base defenses. Since 2018, the Marine Corps has deployed four systems that have had multiple successful engagements in theater. These systems have helped the Marine Corps draft policy challenges, learn how to best employ directed energy, and refine our tactics, techniques and procedures. CLaWS is the Marine Corps first step in this realm, and we are seeking to improve our capability and increase the variety of systems for use against the multitude of threats.

Specifically, our first focus area is on countering the emergence of autonomous drone swarm threats. Significant challenges—and areas of research and development—involve reducing the size of these systems so that the systems can be employed by Marines in an expeditionary environment, and developing energy storage and power density needed to make such systems more viable for the Marine Corps. Directed energy involves not only high energy lasers, but also high power microwave and high power radio frequency systems.

The Marine Corps Warfighting Laboratory and Marine Corps Systems Command, in partnership with the DOD's research and development enterprise, are prototyping and evaluating other directed energy modalities that can provide capabilities that answer challenges across the range of military operations: from abilities to counter missiles and aircraft in an asymmetric manner that reduces the "magazine depth" challenge faced by traditional integrated air defense systems, to non-lethal effects applicable during non-combatant evacuation operations or installation defense where the Marine Corps desires to minimize collateral damage and avoid the use of lethal force.

The Marine Corps efforts in the directed energy space are largely focused on giving commanders a greater number of options to choose from, building a capable and

resilient force that reduces the costs curve, and providing asymmetric answers to the full spectrum of threats facing our Marines today and in the future.

QUESTION SUBMITTED BY MR. COURTNEY

Mr. COURTNEY. General Berger, would you agree that even if changes are made to the CH-53K program of record due to Force Design 2030, it remains critical that these aircraft remain affordable? Would you agree that it's important to keep the CH-53K production ramp moving upwards to reduce costs today for the Marine Corps, regardless of what the final program of record is?

General BERGER. Yes, I believe the CH-53K should remain an affordable aircraft. The Navy and Marine Corps are working closely with industry partners to reduce the cost of each aircraft, and the cost "trend line" is moving in the right direction. In regards to the CH-53K production ramp, the Marine Corps budgets for the capabilities it can afford. The Marine Corps evaluates its entire budget as a whole, seeking to build the best possible force that our Nation can afford. In terms of overall quantity, we have not yet determined what the final number of each aircraft will be. Regardless, we will continue to work with our industry partners to ensure costs remain affordable.

QUESTIONS SUBMITTED BY MS. SPEIER

Ms. SPEIER. I am very concerned about the findings in GAO Report 21-366 on Navy surface ship manning and fatigue management. GAO found that, as of September 2020, Navy surface ships were undermanned by about 15% below the number of sailors required for safe operation, and that the situation has worsened since 2016, when ships were 8% undermanned. Additionally, GAO found that the Navy is not enforcing its fatigue management policies, with sailors routinely working more than 12 hours a day and receiving less than 5 hours of sleep. I have several questions about GAO's findings and what action the Navy is taking in response.

The data in the GAO report on undermanning of the surface fleet shows no clear trend of improvement and that, in fact, things are getting worse. Why has the Navy failed to improve ship manning, as a percentage of required crew for safe operation, since 2017?

Who is responsible for ensuring that Navy ships are crewed with the required number of sailors for safe operation?

Why has the Navy failed to enforce its fatigue-management policies that were adopted after the McCain and Fitzgerald collisions in 2017?

Who is responsible for implementing fatigue-management policies?

Given these failures, how has the risk of a repeat of the McCain and Fitzgerald collisions changed?

What are you doing now to ensure that ships have required manning and fatigue policies are enforced?

Why has the Navy failed to request sufficient funds and end-strength to fully crew surface ships at the required level for safe operation?

Mr. HARKER. Navy continues to increase the number of available personnel through aggressive personnel force management actions that increase recruiting, improve retention, and increase sailor sea duty readiness. Our continuous review and revision of manpower requirements, increased resourcing against these requirements, and a renewed commitment to robustly fund total ownership costs will result in increased manning at sea. For instance, the *Arleigh Burke* Class Destroyer (DDG) will average 285 enlisted requirements per ship in 2023, up from an average of 268 enlisted requirements per ship in 2020. As the system responds to the increased demand signal, Navy expects a steady increase in sailors at sea. Overall, the number of sailors at sea is increasing from a low point in fiscal year 2016 and is expected to continue in a positive direction.

The Chief of Naval Personnel, with input from Commander, United States Fleet Forces Command and Commander, United States Pacific Fleet, is responsible for ensuring Navy ships are crewed with the required number of sailors for safe operation.

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ship in 2020. As the system responds to the increased demand signal, Navy expects a steady increase in sailors at sea. Overall, the number of sailors at sea is increasing from a low point in fiscal year 2016 and is expected to continue in a positive direction.

Commander, Naval Surface Forces (CNSF) published the Comprehensive Fatigue and Endurance Management Policy in 2017 and updated it in 2020. Individual unit Commanding Officers (CO) are required to implement and enforce the Crew Endurance and Fatigue Management Program. The Surface Type Commanders ensure adherence by COs through regular Defense Organizational Climate Surveys, Force Afloat Safety Climate Assessment Surveys, Afloat Training Group assessments during the Basic Phase, self-assessments by ships during the other phases of the Optimized Fleet Response Plan, focus group discussions during Afloat Culture Workshops pierside, and direct observations by our post-major command CO Mentors during Afloat Bridge Resource Management Culture Workshops at sea.

Additionally, CNSF is working with the Naval Health Research Center (NHRC), Naval War Command, industry, and academic partners to directly monitor crew fatigue in near real-time and enable development of appropriate interventions to ensure process improvement, consistency in application, and full policy implementation of fatigue management.

Navy has requested and received sufficient funds and end-strength to man surface ships for safe operations. As background, from 2001–2010, the Navy implemented a number of optimal manning initiatives. When the optimal manning era ended in 2010, DDGs had an average of 274 total officer and enlisted billets. Manpower reviews of workload and watchstanding requirements were conducted in 2011, 2018 and 2019. Based on the results of those reviews, Navy has steadily increased the number of funded billets on DDGs.

In FY21 Navy funded 314 DDG billets and the destroyer billet base is programmed to increase to 339 funded billets by FY24. Navy continually assesses all aspects of ship operations and sustainment—manpower, maintenance, modernization, training and new construction funding—to optimize Surface Force lethality.

Ms. SPEIER. The Navy's FY22 budget request cuts the Naval Audit Service budget in half and reduces the number of auditors by 200. The Navy has said that duplication of duties justify the cuts, but a recent information paper stated that the Naval Audit Service conducted performance audits that are not conducted by other entities. There is also a pending DOD commissioned study on service audit agencies providing independent assessment about potential duplication and performance improvement.

Why is the Navy not waiting for the results of the DOD study of audit services before making such a large cut to the NAS?

What other entity will assume responsibility for conducting performance audits for the Navy?

To what positions is the Navy re-assigning the 200 personnel that are being cut from the NAS?

Mr. HARKER. The President's Budget request for fiscal year 2022 proposes reshaping the Naval Audit Service (NAS) workforce while balancing resources across a multitude of work and functions across the Department of the Navy (DON). The DON determined that NAS right-sizing was appropriate, based on its planned audits, historical workloads of completed audits, and the assessing and realigning of resources to meet DON oversight requirements. However, in my July 9, 2021, letter to you, I have since confirmed that the DON will not undertake any involuntary placements of NAS employees or redirect funding from the NAS.

In the Department of the Navy, performance audits will be conducted by a combination of NAS, DOD Office of Inspector General, and Government Accountability Office auditors.

To date, no involuntary management directed reassignments of NAS personnel have taken place with respect to the proposed NAS budget reductions. As stated previously, the DON will not undertake any involuntary placements of NAS employees.

Ms. SPEIER. Admiral Gilday, I am very concerned about the findings in GAO Report 21–366 on Navy surface ship manning and fatigue management. GAO found that, as of September 2020, Navy surface ships were undermanned by about 15% below the number of sailors required for safe operation, and that the situation has worsened since 2016, when ships were 8% undermanned. Additionally, GAO found that the Navy is not enforcing its fatigue management policies, with sailors routinely working more than 12 hours a day and receiving less than 5 hours of sleep. I have several questions about GAO's findings and what action the Navy is taking in response.

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Given these failures, how has the risk of a repeat of the McCain and Fitzgerald collisions changed?

What are you doing now to ensure that ships have required manning and fatigue policies are enforced?

Why has the Navy failed to request sufficient funds and end-strength to fully crew surface ships at the required level for safe operation?

Admiral GILDAY. Navy continues to increase the number of available personnel through aggressive personnel force management actions that increase recruiting, improve retention, and increase sailor sea duty readiness. Our continuous review and revision of manpower requirements, increased resourcing against these requirements, and a renewed commitment to robustly fund total ownership costs will result in increased manning at sea. For instance, the Arleigh Burke Class Destroyer (DDG) will average 285 enlisted requirements per ship in 2023, up from an average of 268 enlisted requirements per ship in 2020. As the system responds to the increased demand signal, Navy expects a steady increase in sailors at sea. Overall, the number of sailors at sea is increasing from a low point in fiscal year 2016 and is expected to continue in a positive direction.

Who is responsible for ensuring that Navy ships are crewed with the required number of sailors for safe operation?

The Chief of Naval Personnel, with input from Commander, United States Fleet Forces Command and Commander, United States Pacific Fleet, is responsible for ensuring Navy ships are crewed with the required number of sailors for safe operation.

What are you doing now to ensure that ships have required manning and fatigue policies are enforced?

Navy continues to increase the number of available personnel through aggressive personnel force management actions that increase recruiting, improve retention, and increase sailor sea duty readiness. Our continuous review and revision of manpower requirements, increased resourcing against these requirements, and a renewed commitment to robustly fund total ownership costs will result in increased manning at sea. For instance, the Arleigh Burke Class Destroyer (DDG) will average 285 enlisted requirements per ship in 2023, up from an average of 268 enlisted requirements per ship in 2020. As the system responds to the increased demand signal, Navy expects a steady increase in sailors at sea.

Overall, the number of sailors at sea is increasing from a low point in fiscal year 2016 and is expected to continue in a positive direction. Commander, Naval Surface Forces (CNSF) published the Comprehensive Fatigue and Endurance Management Policy in 2017 and updated it in 2020. Individual unit Commanding Officers (CO) are required to implement and enforce the Crew Endurance and Fatigue Management Program. The Surface Type Commanders ensure adherence by COs through regular Defense Organizational Climate Surveys, Force Afloat Safety Climate Assessment Surveys, Afloat Training Group assessments during the Basic Phase, self-assessments by ships during the other phases of the Optimized Fleet Response Plan, focus group discussions during Afloat Culture Workshops pierside, and direct observations by our post-major command CO Mentors during Afloat Bridge Resource Management Culture Workshops at sea.

Additionally, CNSF is working with the Naval Health Research Center (NHRC), Naval War Command, industry, and academic partners to directly monitor crew fatigue in near real-time and enable development of appropriate interventions to ensure process improvement, consistency in application, and full policy implementation of fatigue management.

Ms. SPEIER. Admiral Gilday, the Navy has said that each littoral combat ship (LCS) costs \$50 million per year to operate and support, on average, and isn't performing many of the missions it was intended for. This strikes me as a disproportionately high cost, given that a much larger and more capable Arleigh Burke-class Destroyer costs about \$80 million per year to operate, and it has three times the crew. I have several questions about the high operational costs of the LCS.

When the LCS program was approved, what was Navy's goal or target annual O&S cost for each LCS variant? What is the actual average O&S cost for each LCS variant?

What accounts for the difference between the Navy's actual cost for LCS O&S and the original target O&S cost, for each LCS variant?

What actions are you taking to decrease the O&S cost and increase the reliability of each LCS variant? What actions are you considering to decrease the O&S cost and increase the reliability of each LCS variant?

How feasible would it be to move some LCS maintenance responsibilities from contractors to sailors, and what impact might this have on LCS O&S costs?

How will the eventual full implementation of the mission packages affect O&S costs for each LCS variant?

Admiral GILDAY. *When the LCS program was approved, what was Navy's goal or target annual O&S cost for each LCS variant? What is the actual average O&S cost for each LCS variant?*

The Navy did not develop an O&S estimate or O&S target cost when establishing the program in the 2004 Acquisition Program Baseline (APB), published 27 May 2004, as the initial program strategy used RDT&E prototype ships. The Navy provided the first O&S estimate in December 2010 within the Navy Service Cost Position and OSD Independent Cost Estimate, which was developed and approved in support of the February 2011 LCS Seaframe Milestone B decision. The current APB (April 2011) includes O&S cost estimation from that source. O&S cost estimations did not differentiate between variant and did not include O&S costs associated with Mission Module and Mission Package embarkation. The LCS Seaframe O&S cost estimate in the Acquisition Program Baseline (approved April 2011) was \$36.7 million per ship/per year in FY 2010 dollars and reported in the 2011 Selected Acquisition Record (SAR). The current LCS Seaframe O&S actuals are approximately \$50 million per year in current year funds (adjusted to approximately \$41.5 million per year in FY 2010 dollars, compared to the \$36.7 million per ship/per year APB estimate).

What accounts for the difference between the Navy's actual cost for LCS O&S and the original target O&S cost, for each LCS variant?

Multiple factors account for the difference between the current actual LCS Seaframe O&S cost and the original estimated LCS Seaframe O&S cost in the 2011 APB. These include changes to operational deployment cycles, increases to crew manning requirements to improve operational impacts and organic repair capabilities, maturation of maintenance requirements, unanticipated materiel design and fabrication issues, evolving operational employment concepts, and related ship mission profiles. These factors apply to both LCS variants.

What actions are you taking to decrease the O&S cost and increase the reliability of each LCS variant? What actions are you considering to decrease the O&S cost and increase the reliability of each LCS variant?

The Navy has begun to implement LCS reliability fixes through component upgrades, increasing organic maintenance self-sufficiency (decreasing reliance on fly-away contractor support), and improved provisioning on key systems such as water jets, main propulsion diesel engines, launch and recovery equipment, and electrical plant components. The Navy will base future actions on data analysis to prioritize fixes that continue to increase reliability. The Navy expects that reliability improvements will reduce costly, unplanned, and emergent repairs affecting O&S costs.

How feasible would it be to move some LCS maintenance responsibilities from contractors to sailors, and what impact might this have on LCS O&S costs?

The Navy has begun to establish Maintenance Execution Teams (METs) consisting of sailors to complete significant portions of required preventative maintenance tasks for LCS and execute proof-of-concept maintenance availabilities on deployed LCS. These sailor-led teams conduct maintenance previously completed by contractors. The Navy is evaluating the O&S costs impact from this initiative.

How will the eventual full implementation of the mission packages affect O&S costs for each LCS variant?

Full implementation of the mission packages should not affect LCS Seaframe O&S costs.

Ms. SPEIER. Admiral Gilday, I am concerned that the Navy and Marine Corps only provides secondary caregivers—mostly new fathers—with 2 weeks of caregiver leave, whereas the Army and the Air Force provide 3 weeks, and Federal employees get 12 weeks. It's just as important for fathers and other secondary caregivers to bond with their newborns. Research shows that when fathers take paternity leave, new mothers have better health outcomes and higher labor force participation and wages; marriages are more stable; and children's educational attainment and emotional stability are improved.

Why doesn't the Navy provide the full amount of secondary caregiver leave authorized by law—3 weeks—to sailors?

Admiral GILDAY. While the Department of the Navy recognizes the value of secondary caregiver leave, the expeditionary nature of our service requires us to balance any additional nonchargeable leave with maintaining operational readiness. With more than 17,000 sailors becoming a non-birth parent every year, expanding secondary caregiver leave from two weeks to three weeks would result in more than 325 work years of additional time off. Many of those lost work years would affect operational ships, submarines, and squadrons whose broad mission portfolios already stretch the capacity of their assigned crews. Similarly, approximately 10,000 Marines become a non-birth parent each year, equating to over 190 lost work years, primarily from operational units.

Ms. SPEIER. General Berger, I understand that you testified that you want to expand maternity leave for Marines. Under current law, Marines and sailors who are primary caregivers get 6 weeks of caregiver leave, compared with 12 weeks for Federal employees. Birth mothers can get an additional 6 weeks of convalescent leave, but adoptive parents get no more than the 6 weeks of caregiver leave. I have introduced legislation (the Servicemember Parental Leave Equity Act, H.R. 3122) to expand caregiver leave for servicemembers to 12 weeks for both new mothers and fathers.

Also, the Navy and Marine Corps only provide secondary caregivers with 2 weeks of caregiver leave, whereas the Army and the Air Force provide 3 weeks, and Federal employees get 12 weeks. It's just as important for fathers and other secondary caregivers to bond with their newborns. Research shows that when fathers take paternity leave, new mothers have better health outcomes and higher labor force participation and wages; marriages are more stable; and children's educational attainment and emotional stability are improved.

How many weeks of caregiver leave would you propose that Congress authorize for primary caregivers?

Why doesn't the Marine Corps provide the full amount of secondary caregiver leave authorized by law—3 weeks—to Marines?

General BERGER. We know for a Marine to be successful on the job and to remain on the job, they must feel secure, supported, and satisfied at home. Retaining Marines is critical to the combat effectiveness of the Marine Corps; many new parents are at a point in their career where they are highly trained and qualified. It is in the Marine Corps best interest to have the right policy to enable Marines to be the best parent and best Marine possible. Strong support to parents can have a positive influence on retention as we seek to retain the best talent.

We are proactively focused on improving our support for families, although this must always be balanced with overall military readiness. As it stands today, a Marine, through use of multiple convalescence and other paid leave authorities, can take as much as 4½ months of paid leave and can do so in flexible increments. We continue to explore more avenues to provide support to all our Marines and look forward to soliciting insight from Congressional Members and staffers and work in close coordination with the Department of Defense to find the best ways to support our Marines. We are comfortable with the 14 days of secondary caregiver leave and believe the balance between providing support to Marine parents and maintain readiness is well struck.

QUESTIONS SUBMITTED BY MR. KELLY

Mr. KELLY. Peering into the future, if NGAD does continue to be delayed and the Super Hornet line has been forced to close—the F-35C will be the only game in town for nearly a decade. It costs over \$100 million to buy one of those aircraft and, today, the Navy's own data suggest that it costs \$55,000 per hour to fly one. Additionally—GAO has recently concluded that the current 2027 goal for finalizing the \$14 billion F-35 Block IV modernization is “not achievable.” Is the Navy's tactical aviation fleet on a sustainable path? Will you be able to maintain the operational tempo demanded by this security environment—by the Chinese threat in particular—if procurement and O&S costs rapidly escalate?

Mr. HARKER. In order to meet the operational tempo demanded by the current security environment—specifically regarding the challenges posed by peer competitors such as China—the Navy requires a mixture of 4th/5th generation aircraft (details available at a higher classification) to meet both the capacity AND capability required to win in highly contested environments in the 2020s.

Beginning in the 2030s, the Navy must transition to the Next Generation Air Dominance (NGAD) Family of Systems (FoS) in order to compete with advanced threats in support of the objectives of the National Defense Strategy (NDS). Continued investments in 4th generation aircraft (F/A-18E/F), in lieu of 5th generation

platforms (F-35C) and the development of future technologies (NGAD FoS), would have a detrimental impact on the Navy's ability to support the objectives as outlined in the NDS—especially in the most stressing scenarios against advanced adversaries, such as China.

The Navy remains on a sustainable path to meet 4th and 5th generation capacity and capability requirements in the 2020s while making critical investments in future technologies, such as the NGAD FoS, that will be required to win in the 2030s and beyond. With the impending delivery of 78 new production Block III F/A-18E/Fs and the ongoing Service Life Management (SLM) to extend airframe life at roughly 1/3 the cost of new procurement, the Navy has sufficient capacity of 4th generation aircraft to meet the needs of the security environment.

Additional procurement of new F/A-18E/F Block III aircraft beyond FY21 is not required to mitigate near- or long-term strike-fighter shortfall (SFSF) risk, as these aircraft would not deliver until after the SFSF has been eliminated in FY25. The DoN assesses that new F/A-18E/F procurement beyond FY21 would arrive late-to-need to address near-term SFSF challenges—which are actively being managed—and excess-to-need for 4th generation aircraft capacity to meet the demands of the NDS.

The active F-35C production line and the F/A-18E/F SLM efforts are the risk mitigations for the Navy to manage strike-fighter inventory into the 2030s, ensuring the service maintains the capacity required to meet Global Force Management (GFM) demand while investing in the new technologies required to compete with peer adversaries.

In order to deliver the 5th generation capabilities required to compete in the 2020s, the Navy remains committed to reducing the cost to procure and operate these platforms. Between FY16 (Lot 10) and FY20 (Lot 14), the F-35C has realized a 22.2% reduction in per-unit recurring flyaway cost, driving the procurement of 5th generation capabilities to well below \$100M per tail with expected further reductions in future contracts.

Current predictions for FY21–23 sustainment contracts show a continued reduction in cost per flight hour (CPFH) across all three F-35 variants. The F-35 Joint Program Office continues to prioritize and identify efficiencies to accelerate critical Block IV capabilities. These combined efforts demonstrate the Navy's path to deliver the right mix of 4th and 5th generation capabilities it requires to win in the 2020s on a budget that is sustainable and affordable.

The NGAD program is on schedule (concept refinement) and the Navy remains committed to accelerating the development of the NGAD FoS (details available at higher classification) to ensure it can continue to support the objectives of the NDS and compete with peer adversaries in the 2030s and beyond. Consistent, stable resourcing today will ensure the program remains on budget and on schedule, delivering critical warfighting capabilities that are required to win in future high intensity conflict in support of national security objectives.

Mr. KELLY. The Navy says it needs two Block III Super Hornet squadrons per carrier air wing by 2027 (i.e., 20 squadrons) to meet operational requirements. Is this still on track, given the unanticipated challenges to SLM? What's the risk associated with that delay?

Mr. HARKER. [The information referred to was not available at the time of printing.]

Mr. KELLY. The Super Hornet is being considered for purchase by a number of close U.S. allies as they replace aging fighter fleets. Can you talk about the benefits to the U.S. Navy and combat synergy when our allies operate the same systems?

Mr. HARKER. There are strategic, operational, financial, and logistical benefits and combat synergies associated with operating the same or similar major weapons system as our allies. Coalition forces operating common weapon systems allow joint interoperability, additional contingency support, and the ability to cost-share capability upgrades. Additionally, continued production of parts allows increased quantity in the supply system and the ability to combat obsolescence.

- Financial and Logistical Benefits—Reduction of cost to US for system sustainment and capability upgrades if shared by international partner
- Software development
- Engineering Change Proposals (ECPs)
- Obsolescence—USN benefits from a partner nation purchasing desired but unfunded capabilities
- AIM-9X Sidewinder on EA-18G Growler stations 2 and 10
- Non-recurring Engineering (NRE) of the Large Area Display (LAD) in the Advanced Cockpit in Super Hornet Block III and Growler—Active FMS Production line reduces risk from Diminishing Manufacturing Sources and Material Shortages (DMSMS)

- Increases quantity and demand of parts in supply system from manufacturer—Acquisition and Cross-Servicing Agreements (ACSA) and other Third-Party agreements provide re-supply and repair opportunities increasing US logistics resilience worldwide
- Strategic and Operational Benefits and Combat Synergies—Security Cooperation develops military capabilities for our partner nations for their self-defense and multinational operations providing US Forces with peacetime and contingency access to host nations—FMS partners support Coalition forces. Operating common systems significantly contributes to “integration” of partner nations into operations, increases chances of “interoperability”, and is initial step toward being “interchangeable”—Strategically, the threat actor must consider the partner nation has the same capability as the US platform so they can be used as a deterrent or “threat-in-being”.

Mr. KELLY. Over the last two years, we’ve seen the Air Force go all-in procuring new F-15EX jets, as they have clearly recognized the value of having more than one tactical fighter in production and reaping the benefits of a significantly lower cost-to-operate jet. We’ve seen F-35A unit cost come down in response. Do you have any concerns about what happens to F-35C pricing with no competitive pressure from the Super Hornet?

Admiral GILDAY. F-35C per unit costs have been coming down year over year for the past 5 years. The per unit cost for a Lot 10 (FY16) aircraft was \$121M per aircraft compared to \$94.4M per aircraft for Lot 14 (FY20). The Navy has been reaping the benefits of per unit cost reduction initiatives such as the Economic Order Quantity (EOQ) used to purchase the Lot 12–14 aircraft. The Lot 15–17 (FY21–23) procurement, still in negotiations, continue to point towards a reduction in URF cost. There are no indications that closure of the F/A-18 line will correlate to an increase in F-35C cost. The reduction in Cost per Tail (CPT) was driven, internal to the F-35 program, by EOQ, larger procurement numbers, and reductions in span time. In the future we can expect the program will hit a steady state but indicators continue to point at a reduction in CPT into Lot 17.

Mr. KELLY. The Navy says it needs two Block III Super Hornet squadrons per carrier air wing by 2027 (i.e., 20 squadrons) to meet operational requirements. Is this still on track, given the unanticipated challenges to SLM? What’s the risk associated with that delay?

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partner nation has the same capability as the US platform so they can be used as a deterrent or “threat-in-being”

QUESTIONS SUBMITTED BY MR. GALLAGHER

Mr. GALLAGHER. On 5 February 2021, you signed a letter and submitted it to the Armed Service Committees on shipboard manning ... that indicated “there were 95 ships identified in the enclosed report that fell below the 87 percent fit/90 percent fill levels for Quarter 1. This represents 35.1 percent of the covered ships in the Naval Vessel Register. Of those 95 ships, 52 ships are in the maintenance period and 30 ships are in the training and certification period. There are 13 operationally tasked ships below the 87/90 percent threshold, which is a slight decrease from 18 on the Quarter 4 report.” When you consider this report with the Navy’s FY22 budget request that seeks to decrease overall end-strength it seems we have a manning issue in the Navy. I’d like to understand how much risk the Navy is accepting by not fully manning its Forward Deployed Naval Forces (FDFNF) at the same time its planning to take a cut in end-strength?

Mr. HARKER. Until the Navy attains personnel inventory equal to 100% of the manpower requirement plus friction, manning levels will always be less than 100% when measured against the validated requirement. The cut in end strength is pursuant to cuts in force structure and the use of unmanned platforms in the deterrence of Strategic Competition. Risk associated with reduced manning levels is difficult to measure and comes in various forms.

Predominantly, risk can be categorized into: efficiency of maintenance and operations over the lifecycle of a platform; increased workload and workhours per sailor; unit cohesion; quality of life; and job satisfaction. To best prioritize manning for operational units, the Fleets, in coordination with the Chief of Naval Personnel (CNP) and Office of The Chief of Naval Operations OPNAV N1 as Manning Control Authority, allocate personnel resources to those units deployed, forward deployed, and preparing to deploy as the priority.

Per the Joint Commander, U.S. Fleet Forces Command and Commander, U.S. Pacific Fleet notice from 12 February 2021, Navy prioritizes manning its FDFNF and deployed units just below strategic nuclear forces and special operations forces. The manning target per this notice varies by platform and in most cases is 92 percent Fit and 95 percent Fill. Currently, FDFNF units are manned at an average of 90.2% Fit and 97.1% Fill, and operational sea duty units are manned at an average of 89.1% Fit and 94.5% Fill.

On efficiency of maintenance and operations over the lifecycle of a platform: In 2020, Navy began tracking crew-manning levels to both Billets Authorized (BA) and the full Ship Manpower Document (SMD) requirement in various senior level Navy forums. Tracking crew-manning levels to the full SMD requirement allows for a more comprehensive assessment of personnel readiness levels. As recommended by the recent U.S. Government Accountability Office report, Navy is developing crew manning thresholds based on analysis and assessment of risk. Current manning targets ensure safe operations and readiness, while increased manning to the full SMD ensures optimal performance over the lifecycle of the platform and multiple Optimized Fleet Response Plan cycles.

Personnel manning actions sourced from units earlier in their force generation cycle as well as prioritizing fills for units closer to deployment to meet training and deployment goals results in units in depot maintenance and while operating, at sea, in the basic training phase in the 75–85% manning range.

Analysis by the Surface Force show a corresponding effect of limited manpower during maintenance to on time completion performance. As of 10 June 2021, there are 7,829 operational gaps, and 15,154 all-sea gaps (includes units in pre-commissioning and long-term maintenance) at sea.

On increased workload and workhours per sailor: Not having the personnel requirements fully funded with the associated personnel onboard also results in increased workload for sailors aboard operational units. Using the DDG–51 class as an example, in FY–21 there are ~287 BA for 318 SMD. Manning to the Fleet Commander directed floor of 95% fill target for deployment results in 272 current onboard.

Since the Navy at sea work week is 67 hours or 7 days a week, this equates to an 18% increase in workload per sailor per week (an additional 11.7 hours per sailor per week) to meet watch standing, operational, maintenance, sanitation and training requirements. For our DDG example inport, manning in the maintenance phase is averaging 86% fill. At this level, the workload per sailor per week is an additional 12.0 hours per sailor per week. This is based on an inport week of 40 hour or 5

days a week, equating to a 30% increase in workload per sailor per week against 100% of the manpower requirement.

On unit cohesion: Low distributable inventory results in missing manning date (M-date) targets which are designed to have the core crew onboard for the entire training cycle and deployment, typically one year before deployment. On average, M-Date is missed by ~8 months. Missing M-Date results in increased personnel manning actions to fill gaps for operations and deployment occurring just before the final advanced training exercise just prior to deployment. The entire crew experiences challenges and some stress when incorporating sailors added at the end of the training cycle.

On quality of life and job satisfaction: The Navy no longer has an exit survey (formerly, the Argus Survey captured quality of life and job satisfaction information). Absent hard data, common observations from the workforce and operational commanders reinforce that reduced manning levels detract from quality of life (longer hours) and job satisfaction (less predictability due to the potential for reassignment to deploying units). As the Navy continues to address fatigue and sleep concerns via implementation of circadian rhythm watchbills, this effort will continue to be hampered when funded billets are less than the full/validated manpower requirement.

Progress is being made, but full personnel inventory plus friction cannot come fast enough. Overall, more sailors are on our ships today than just several years ago. The Navy is addressing the BA to SMD operating deficit through the Perform-to-Plan and Program Objective Memorandum processes. Using the DDG-51 class as an example: in 2020, the DDG-51 class average BA was funded to 90.1% of requirement and grows to 93.4% in FY-22, and up to 98% in FY-24; average DDG-51 manning has grown from 240 sailors onboard in FY-12, to 265 in FY-20 and is projected to be 285 by FY-23.

Adding manpower will not happen overnight, and those new apprentice level sailors will take years to mature to the journeymen and supervisors we require at sea. Throughout, the Fleets, with the coordination with CNP and OPNAV N1 as Manning Control Authority will continue to manage scarcity and align manpower resources with those units deployed, forward deployed, and preparing to deploy as the priority. POC: My point of contact for this matter is CAPT Donald R. Wilkinson, N1 Deputy Director, COMM: (757)-836-5254, DSN: 836-5254, or e-mail: donald.r.wilkinson.mil@us.navy.mil.

Mr. GALLAGHER. President Biden's FY22 Defense Department budget indicates a decrease of 2,529 Navy servicemembers across the Active and Reserve Components from FY21 to FY22. This seems like a significant reduction in Navy personnel in a short period of time. What is Navy's plan for end strength across the FYDP (Future Year's Defense Program)?

Admiral GILDAY. Navy's end strength is driven by force structure and fluctuates year to year in response to overall force structure changes, such as decommissioning ships, the introduction of new platforms and capabilities, and an increase in billets authorized on our operational platforms. Navy will continue to fund operational readiness to ensure the Fleet is properly manned, with the right sailors, in the right place, at the right time, with the right training. Details on the Navy's end strength across the FYDP will be provided with the President's Budget for FY2023.

Mr. GALLAGHER. Commandant Berger, the FY22 PB request includes the divestment of the Navy's Mark VI patrol boats. I think that those boats could provide the Marine Corps with an excellent opportunity to experiment in support of your force design efforts and further reinforce your role as the stand-in force within contested littorals, particularly if they were integrated with a loitering munition or anti-ship missile capability. Would those platforms help with your force design efforts within the first island chain and other maritime spaces and would you support a transfer of those boats to the Marine Corps?

General BERGER. The Marine Corps is examining surface mobility and loitering munition capabilities for the contested littorals, and the Marine Corps current effort is the Long Range Unmanned Surface Vessel. The Marine Corps III Marine Expeditionary Force (MEF) examined the MK VI and determined the platform is capable but expensive to own and operate. Moving forward, the Marine Corps seeks a balance between capability and affordability.

Mr. GALLAGHER. CMC, I'm very supportive of your desire to develop an inventory of Light Amphibious Warships. While it is clear to me that the LAW is a critical requirement to your overall force design, I'm afraid not everyone understands the LAW or its function within your vision. Can you explain to us why the LAW is so important and what the consequences will be if we don't develop the LAW with a sense of urgency and in concert with forward-deployed Marine Littoral Regiments (MLRs)?

General BERGER. The Light Amphibious Warship (LAW) will provide the Marine Corps new Marine Littoral Regiments (MLRs) with a beachable ship to transport Marines within the Indo-Pacific region. As the Marine Corps undertakes a significant transformation to focus on countering peer adversaries, a vital element will be the establishment of three Marine Littoral Regiments (MLRs). These new units will be task-organized and dispersed across key maritime terrain in the Indo-Pacific region. The MLR capabilities will augment and reinforce a host nation's ability to monitor, expose, and challenge malign behavior, but the MLRs will also be fully capable of operating without host-nation support if required.

Additionally, the MLRs will be highly mobile, constantly changing their positioning and posture to increase ambiguity and increase the adversary's challenge of monitoring and targeting MLR units, thus reducing an adversary's confidence and encouraging off-ramps from conflict.

Critical to the MLR is the development and fielding of the LAW, which offers low-signature maneuverability, sustainment capacity, and the ability to provide tactical and intra-theater lift. The LAW will be complementary to traditional amphibious ships. Without the LAW, the Marine Corps will lack in its ability to maneuver and sustain itself within the global littorals.

The Navy is conducting an Analysis of Alternatives and will then commence with Concept Studies and Preliminary Design. Studies will primarily focus on commercial designs tailored for military application to enable maneuver and mobility for our integrated naval forces conducting Distributed Maritime Operations. The Department is driving towards a lead ship contract award in FY 2023 that will support the Marine Corps future Marine Littoral Regiments in the Indo-Pacific region. The Light Amphibious Warship is complementary to traditional large amphibious ships; both types of ships are required to deliver Marine Corps forces to expeditionary locations.

The current requirement, after a deliberate analysis process, is 35 LAWs and would support three future Marine Littoral Regiments. Within the constraints of the current fiscal reality, we will work together with the Navy to prioritize the acquisition strategy to provide the Naval Expeditionary Force with the best value in platform capability and capacity.

Mr. GALLAGHER. My understanding is that the Marine Corps overall pilot inventory is at 81% of your target inventory. By my calculations ... that makes you short ~730 pilots relative to the target inventory. How is the Marine Corps getting after this issue of pilot throughput and how are you mitigating this risk to your existing missions?

General BERGER. The Corps is focused on overcoming the current aviator inventory challenges. We seek to increase retention of high quality Marine aviators through the use of monetary and non-monetary incentives in order to fill personnel shortages. Aviation retention must be viewed holistically, and cannot be solved by bonuses alone. Monetary incentives influence an individual's decision to depart or remain in the service, but are not the only factor in such a decision.

Pilot retention is also impacted by availability of flight hours, the opportunity to train and execute the mission, and other non-monetary factors. We, as a service, are looking at monetary and non-monetary incentives, improving aircraft readiness rates and flying hours, and increasing the production pipeline throughput, all of which will support increased operational readiness.

For the FY21 Aviation Bonus, the Marine Corps is pursuing increased inventory stability across its entire aviation officer population. A stable inventory is critical while materiel readiness improvements positively influence the flight hours and readiness rates of both operational and training squadrons. The Marine Corps tailored the FY21 Aviation Bonus through targeted obligation periods and monetary incentives compared to the FY20 Aviation Bonus due to each community's current and forecasted inventory health. FY21 Aviation bonuses:

- [F-35, F/A-18, AV-8B, KC-130] \$35,000 per year in return for 5 or 6 years of obligated service, \$25,000 per year for 4 years of obligated service, and \$15,000 per year for 3 years of obligated service.
- [Osprey] \$25,000 per year in return for 5 years of obligated service, \$20,000 per year for 4 years of obligated service.
- [Rotary Wing] \$15,000 per year in return for 5 years of obligated service; \$10,000 per year for 4 years of obligated service.

QUESTIONS SUBMITTED BY MS. HOULAHAN

Ms. HOULAHAN. Year after year, we see that demand for child care services in the military exceeds availability, seriously threatening readiness and retention. I appreciate that the Navy has made efforts to reduce the child care waitlist in recent

years, yet your budget acknowledges that 7,000 children will still be forced to wait. I recognize you have asked for a modest increase for Family Child Care Homes, but the request for child development centers remains unchanged from last year, and neither of these requests come close to the FY 2020 funding level.

Can you provide some insights and context into the decision making behind the child care portions of the Navy and Marine Corps budget requests?

Why do the Child Development Centers remain stagnant while a modest bump is requested for Family Child Care Homes? What will these proposals mean for military families?

What more can Congress do to help you meet demand for child care services in the military?

Mr. HARKER. While Military Construction projects are necessary for expanding child care capacity, it is only one solution in meeting current and future childcare capacity demands. Navy continues to lean forward to better meet the high demand for child care through a multipronged approach and is working on several initiatives to expand capacity outside of traditional MILCON projects.

In addition to the expansion efforts for Family Child Care, Navy is also pursuing expansion efforts through initiatives such as community partnerships (e.g., Armed Services YMCA), commercial leasing, repurposing of underutilized facilities, adding Mobile Learning Centers and increasing fee assistance spaces. Military Construction projects are being developed for consideration in future President's Budget requests. FY 2021 funded enacted for a Child Development Center in Bangor, Washington will provide 300 spaces to replace current inadequate facilities and add an additional 150 spaces to the inventory.

Ms. HOULAHAN. I appreciate that the Navy's Budget request includes a modest increase for family housing, indicating it is the "funding level necessary to provide safe and adequate housing either through the community or in government quarters." I serve on the Military Personnel Subcommittee where we have been closely examining the troubling allegations surrounding substandard conditions in privatized housing, from infestations to rodents and exposure to mold, and their impact to morale and readiness.

Can you provide some specific details on how the Navy's proposed budget increase will improve living conditions for families living in privatized housing?

Do you have any recommendations for Congressional consideration on how we can continue to help you make progress to ensure all our military families have access to livable housing?

Mr. HARKER. *Can you provide some specific details on how the Navy's proposed budget increase will improve living conditions for families living in privatized housing?*

The proposed budget increase will allow the DON to maintain the increased housing personnel providing the necessary oversight for our privatized housing. The DON is also initiating the third party housing inspections required by Section 3051 of the National Defense Authorization Act for Fiscal Year 2020 (FY 2020 NDAA) and continuing to conduct the annual Tenant Satisfaction Survey measuring the satisfaction of our residents residing in privatized housing.

Do you have any recommendations for Congressional consideration on how we can continue to help you make progress to ensure all our military families have access to livable housing?

The DON continues implementing the requirements provided in the National Defense Authorization Act for Fiscal Years 2020 and 2021. The DON has increased active leadership by installation, regional, and unit Commanders; improved oversight of project owner compliance with Military Housing Privatization Initiative (MHPI) agreements, and improved communications to regain resident trust. The DON is committed to providing safe, high-quality, well-maintained homes to its Service Members and their families.

Ms. HOULAHAN. The Navy's FY2022 shipbuilding budget request appears relatively flat but with expected cost increases in shipbuilding programs, like in carrier construction and carrier re-fueling and overhauls—how have you accounted for the workforce needs in shipbuilding and repairs industry?

Mr. HARKER. "The Department carefully balanced resources and requirements, weighing the effects of FY 2022 program decisions on the industrial base to ensure our nation maintains the skills, capabilities, and capacities critical to our national defense. In FY 2022, the DON requested funding for eight battle force ships, keeping the shipbuilding industrial base loaded at an executable level that encourages industry investment in capital improvements, capital expansion, and a properly sized world-class workforce."

Ms. HOULAHAN. Year after year, we see that demand for child care services in the military exceeds availability, seriously threatening readiness and retention. I appre-

ciate that the Navy has made efforts to reduce the child care waitlist in recent years, yet your budget acknowledges that 7,000 children will still be forced to wait. I recognize you have asked for a modest increase for Family Child Care Homes, but the request for child development centers remains unchanged from last year, and neither of these requests come close to the FY 2020 funding level.

Can you provide some insights and context into the decision making behind the child care portions of the Navy and Marine Corps budget requests?

Why do the Child Development Centers remain stagnant while a modest bump is requested for Family Child Care Homes? What will these proposals mean for military families?

What more can Congress do to help you meet demand for child care services in the military?

General BERGER. The adage “we recruit Marines, we retain families” remains as true today as ever. CDCs and other quality of life programs are a very important way to influence retention and readiness of our Marines and families. High-quality child care is a family-readiness priority for the Marine Corps. We appreciate the additional \$20M provided in FY20 to update and repair our child care facilities, as well as the additional \$26M provided this fiscal year to hire additional employees and increase hourly wages to maintain a professional workforce.

In FY20, our child development programs served 42,000 children at 14 installations. COVID-19 and the resulting protocols have significantly impacted our child care capacity. We understand the impact waitlists have on our families and have assessed that they are due to a shortage of qualified workers, high turnover/low pay, and lengthy hiring processes. Certainly, ongoing challenges with COVID-19 have played a significant role in our ability to staff CDCs just like countless industries across America who face workforce shortfalls. There is a 47% annual employee turnover. We are addressing these issues through increased hiring and a non-competitive child care employee transfer program. We added additional funding in FY21 to hire more employees and will increase wages to help retain a professional workforce. We also added funding starting in FY22 to sustain these hiring efforts.

Our fee assistance program helps provide child care and reduce child care waitlists. In FY20, the Marine Corps served 853 children in the Off-base Fee Assistance Program with a total of 436 providers. The usage rate is down in FY20 due to COVID-19; numerous community-based programs closed their doors reducing off-base child care spaces. Per ChildCare Aware of America, it is estimated that 30–50 percent of child care providers closed due to the pandemic. However, enrollment numbers have steadily risen since February 2021 signaling increased community based opportunities. We will also participate in an OSD-led pilot program in FY22 to provide in-home child career opportunities.

Ms. HOULAHAN. I was pleased to see you highlight the importance of talent retention in STEM fields in the commandant’s planning guide.

While I agree its not solely a Marine Corps problem, but rather a joint force problem, I am curious about the “precision options” you noted in the guide to ensure you retain talented forces? I only see “critical skills retention bonuses” listed in your budget documents, so can you also share what this looks like and what types of investments you have planned to retain these forces?

What—if anything—can we in Congress do to help ensure you have sufficient tools to retain talent in STEM fields?

General BERGER. We are currently assessing our manpower model to maximize our ability to retain the right Marines for modern and future challenges, including members in STEM fields. The incentives-based model we are shaping will offer us the ability to target incentives to specific individuals the Service wants to retain to meet the manpower requirements associated with our Force Design concept. This includes increasing our skillset and capabilities to develop a “new-collar” workforce at our depots. Ensuring we have the right incentives to grow, develop, and retain modern skillsets in our industrial base is critical. We appreciate consistency in Congressional funding and avoiding continuing resolutions to allow us to appropriately forecast how we meet these requirements.

QUESTIONS SUBMITTED BY MR. WALTZ

Mr. WALTZ. In the 2020 China Military Power Report, DOD stated that “China is the top ship-producing nation in the world by tonnage,” adding that the country is currently striving to increase “its shipbuilding capacity and capability for all naval classes.” China is building are cruisers, destroyers, and corvettes, which the Department of Defense says “will significantly upgrade the PLAN’s air defense, anti-ship, and antisubmarine capabilities.” It worries me that many of our drydocks

currently serving our Los Angeles-class attack submarines are wholly inadequate for their replacement. According to an analysis of the Navy's Shipyard Infrastructure Optimization Plan (SIOP) by the Heritage Foundation, even if everything went according to plan, the SIOP would still not sufficiently expand shipyard capacity to service the fleet we have now, let alone the fleet we plan to grow in the future. Furthermore, despite being only 3 years old, the 20 year SIOP is already behind schedule. Acting Secretary Harker, what do you attribute these delays to? Would installing a senior project leader, with full decision authority, help bring the SIOP back on schedule and prevent it from going further over budget?

Mr. HARKER. The Navy will submit a five-year plan to Congress regarding the feasibility of accelerating the Shipyard Infrastructure Optimization Program (SIOP) by September 2021. SIOP currently has a program manager who has all the authorities needed to properly execute the program's mission to optimize our public shipyards to sustain the fleet of the future.

Mr. WALTZ. The US Navy has continued to invest in anti-submarine warfare through a number of high-visibility and highly successful programs, among them the P-8A which uses deployable sonobuoys as the critical element of its combat system.

I appreciate the large numbers of sonobuoys required to keep pace with the ever-evolving threat of our near-peers and adversaries. It's not lost on anyone that adversary submarines even operate right off our coast in the western Atlantic. Sonobuoys help the P-8A as well as ships and helicopters track these adversary submarines.

The US Navy continues to request additional funds via the CNO's Unfunded Priority List for sonobuoys. This year's request is for an additional 54.4M, and I support that. In prior years the Unfunded Priority List has also included funding of roughly 50M additional dollars for sonobuoys, and I've supported those as well.

Can you speak to the importance of sonobuoys and how you can work to include what is clearly a persistent need into the base budget going forward?

Mr. HARKER. Sonobuoys are a critical munition/sensor used by airborne Anti-Submarine Warfare (ASW) platforms to locate, track and hold at risk near-peer competitor submarines. A surge in foreign submarine Out of Area Deployments (OoAD) by the most technologically advanced attack (SSN) and guided missile (SSGN) submarines has significantly increased the Navy's reliance on sonobuoys and of the P-8 mission to counter emerging threats. Most recently, sonobuoys have been successfully used to collect critical intelligence on the most advanced, new construction submarines.

The Navy is especially grateful for the continued Congressional support and flexibility with the Unfunded Priority List (UPL) requests for additional sonobuoy procurement in the past. The additional funding was imperative in increasing the industrial base's production of sonobuoys needed to replenish stock recently expended against our nearpeer competitors. The FY22 UPL request is forwarded to replenish stock expended during recent Overseas Contingency Operations (OCO) and to help build inventory associated with the anticipated manufacturing slowdown before the joint-venture dissolution of the current sonobuoy manufacturer, ERAPSCO. The Navy has added funding to the base budget for sonobuoy procurement in the future to ensure we can continue to procure these critical munitions/sensors at the most economical rate.

Mr. WALTZ. It's my understanding that research and development efforts for sonobuoys has traditionally been borne by industry IRAD funding. Can you describe the US Navy's efforts to more appropriately share the costs of R&D for our more pressing operational needs such as encrypted communications, non-electrical automatic scuttling, and passive range, depth and bearing accuracy? I don't see US Navy R&D funding being applied to these fleet needs.

Mr. HARKER. Sonobuoy research and development efforts for improved sonobuoy capabilities have been furthered by both Navy and Industry investments. Industry has used some low level IRAD funding to contribute to these efforts, but historically less than 5% percent of the total development cost. The Navy budgeted to support sonobuoy improvements such as: GPS, drop vector technology, and encrypted communication linkage.

Recently, the Navy spent R&D funding to develop a new Directional Frequency Analysis and Recording—Extended Range (ER-DIFAR) sonobuoy. This new sonobuoy will enable enhanced tactically relevant ranges through passive detection of very-quiet targets.

Further, the Navy invested heavily in a new sonobuoy architecture, Volumetric Air Deployable Active Receiver (VADAR), a PB21 new start project that will exponentially enhance wide-area sonobuoy capabilities. Due to the dissolution of the production sonobuoy manufacturer ERAPSCO Industry is currently using IRAD funding for the development of sonobuoy designs. The Navy will then procure OPN fund-

ed test articles for qualification. These sonobuoy designs directly support future sonobuoy production contracts.

Mr. WALTZ. The Shipyard Infrastructure Optimization Program (SIOP) is intended to modernize our aging shipyards, completely refurbishing our shipbuilding and maintenance infrastructure to service our fleet. Our current facilities are obsolete, struggling to meet the needs of our technologically advanced Navy of today and of the future. This results in higher maintenance costs, schedule risks and reliability issues. In addition to being critical infrastructure, the viability of our shipyards are a national security issue, especially if we want to expand the size of our Navy, not only to build ships, but maintain them as well.

However, I note that there is no mention of “shipyards” nor “shipbuilding” in President Biden’s \$2 trillion infrastructure proposal. Did the interagency working group developing the President’s infrastructure proposal consult with the Navy regarding shipyard infrastructure, and if not, why?

Mr. HARKER. [No answer was available at the time of printing.]

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OPN funded test articles for qualification. These sonobuoy designs directly support future sonobuoy production contracts.

Mr. WALTZ. I'm pleased to see the US Navy embracing the concept of digital twins across platforms. Again, focusing on the importance of ASW in the larger sense, can you discuss the value of digital twin technology within the *Columbia*- and *Virginia*-class programs?

Admiral GILDAY. PEO Submarines (PEO SUBS) and PEO *Columbia* (PEO CLB) both conduct numerous digital twin efforts to support design, construction, and sustainment efforts. These tools help improve efficiencies and program execution. Some key examples include the following. PEO SUBS is using of digital twins to revamp the Submarine Warfare Federated Tactical Systems (SWFTS) test program as part of the SWFTS Transformation initiative to deliver capability to the Fleet at the speed of relevance.

Specifically, digital twins are currently being used to accomplish select test requirements in a virtualized environment, freeing up tactical resources for fault tolerance and hardware specific testing, while facilitating workflow automation and parallelization of test efforts.

PEO CLB invests in academic partnerships for the development of digital twin technology to reduce the risk of sustainment challenges resulting from the complex nature of nuclear submarines. PEO CLB is implementing advanced equipment Health Management System (HMS) technologies that enable a Condition Based Maintenance+ (CBM+) capability to reduce sustainment costs. CLB has demonstrated embedded on-platform Machine Learning (ML) and digital twin technologies that allow CBM+ and autonomic logistics for the submarine fleet.

Two example systems include the Advanced Carbon dioxide Removal Unit (ACRU) and High Pressure Air Compressor (HPAC) systems. PEO CLB has also funded the development of Trident Refit Facilities (TRF) digital twins that enable dynamic simulations that capture variables such as workload, workforce and facility constraints to determine how work is accomplished to assess and forecast delivered performance. The simulations provide a quantitative capability to assess the CLB lifecycle, explicitly accounting for the ability of the TRFs and Naval Shipyards to execute the CLB maintenance requirements in the time frames required. Overall, PEO SUBS and PEO CLB expect to continue to expand the usage of digital twins to help improve efficiencies and execution.

Mr. WALTZ. The Shipyard Infrastructure Optimization Program (SIOP) is intended to modernize our aging shipyards, completely refurbishing our shipbuilding and maintenance infrastructure to service our fleet. Our current facilities are obsolete, struggling to meet the needs of our technologically advanced Navy of today and of the future. This results in higher maintenance costs, schedule risks and reliability issues. In addition to being critical infrastructure, the viability of our shipyards are a national security issue, especially if we want to expand the size of our Navy, not only to build ships, but maintain them as well.

However, I note that there is no mention of "shipyards" nor "shipbuilding" in President Biden's \$2 trillion infrastructure proposal. Did the interagency working group developing the President's infrastructure proposal consult with the Navy regarding shipyard infrastructure, and if not, why?

Admiral GILDAY. The interagency working group did not consult with the Navy regarding shipyard infrastructure, however, the Department of the Navy (DON) Shipyard Infrastructure Optimization Program (SIOP) aligns with the American Jobs Plan in building world-class infrastructure; revitalizing manufacturing and small businesses; and training Americans for the jobs of the future.

Investments improving America's shipyards by modernizing and upgrading their outdated facilities will provide immediate business opportunities, while transforming shipbuilding trades that will impact the local community for generations to come. SIOP meets the President's infrastructure priorities; projects are scoped and "shovel ready" to provide a clear return on investment to the tax payer through immediate job creation and opportunities for economic dividends for the next generation of skilled trades maintaining the Nation's Fleet. The SIOP projects are essential for expanding the Navy's capacity and capabilities to perform critical maintenance availabilities on our submarines and aircraft carriers, and are necessary due to the age and condition of existing shipyard infrastructure.

QUESTIONS SUBMITTED BY MR. CARL

Mr. CARL. The Navy is making strides to meet the demands of maintenance for the fleet. Given the larger industrial base discussions we are having, isn't this also an opportunity to explore how the Navy can do more with the private sector ship-

yards where there is clearly the capacity and desire to do this much needed maintenance and repair work?

Admiral GILDAY. The Navy is leveraging opportunities to work with private shipyards on our shared goal of meeting the maintenance demands of the fleet. Focus areas include engagement, collaboration, expansion, and modernization of the repair industrial base. With a focus on consistent and targeted discussions on both tactical and strategic priorities, the Navy and industry are improving the quality and frequency of engagements. Sharing ownership for the efforts, the Navy and industry are collaborating on workload & capacity reporting, “bestvalue” proposal requirements, and contract change cycle time.

Finally, the Navy is focused on responsible expansion of the industrial base, specifically promoting competition and increasing capacity while ensuring continued viability of the existing industrial base.

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Mr. HARKER. The Navy is leveraging opportunities to work with private shipyards on our shared goal of meeting the maintenance demands of the fleet. Focus areas include engagement, collaboration, and expansion of the repair industrial base. With a focus on consistent and targeted discussions on both tactical and strategic priorities, the Navy and industry are improving the quality and frequency of engagements. Sharing ownership for the efforts, the Navy and industry are collaborating on workload & capacity reporting, “best-value” proposal requirements, and contract change cycle time.

Finally, the Navy is focused on responsible expansion of the industrial base, specifically promoting competition and increasing capacity while ensuring continued viability of the existing industrial base.

QUESTION SUBMITTED BY MR. HORSFORD

Mr. HORSFORD. In 2017, the Navy lost 17 sailors in two preventable collisions. The investigations into these accidents highlighted a lack of manning as a contributing factor. As the fleet continues to grow, I want to ensure that the Navy is appropriately updating its manpower requirements and identifying the personnel cost implications.

A 2017 GAO report found that since the implementation of optimal manning, the Navy reduced crew sizes, which decreased the associated personnel costs for most ship classes. However, these reduced crew sizes had deadly results and still resulted in increased maintenance costs.

At what point does the Navy intend to man ships to required levels as opposed to just funded levels? What specific steps has the Navy taken to make those two numbers match?

Admiral GILDAY. Navy mans funded billets according to the priorities presented by Fleet Commanders (U.S. Fleet Forces and Commander, U.S. Pacific Fleet). As more billets are funded, Fleet readiness and operational needs are prioritized. From 2001–2010, the Navy implemented a number of optimal manning initiatives. When the optimal manning era ended in 2010, DDGs had an average of 274 total officer and enlisted billets. Manpower reviews of workload and watchstanding requirements were conducted in 2011, 2018 and 2019.

Based on the results of those reviews, Navy has steadily increased the number of funded billets on DDGs. In FY21 Navy funded 314 DDG billets and the destroyer billet base is programmed to increase to 339 funded billets by FY24. Navy continually assesses all aspects of ship operations and sustainment—manpower, maintenance, modernization, training and new construction funding—to optimize Surface Force lethality.

QUESTION SUBMITTED BY MR. KIM

Mr. KIM. The Navy's Aegis ships are considered by many to be the work horse of the Navy fleet, being called upon for more and more missions around the globe. I am inspired by the strong partnership between the Navy and the Missile Defense Agency in the sea based IAMD mission and the role our current Aegis fleet, equipped with SPY-1 arrays, play in this most important mission. I understand the SPY-1 radar will be the foundation of the Aegis fleet for decades to come so I was pleased in seeing that the MDA has requested additional funding for SPY-1 up-

grades on their unfunded priority list. Admiral, are you familiar with this request? What affordable initiatives and how much funding is the U.S. Navy investing in to refurbish and modernize your In-Service SPY-1 radars to ensure we keep pace with the ever critical missile defense threat?

Admiral GILDAY. The Navy recognizes the criticality of maintaining the SPY-1 radar systems to support essential missions. Since FY 2011, the Navy has invested \$143M in SPY-1 Reliability, Maintainability and Availability (RM&A) improvements to reduce cascading failures, mitigate obsolescence issues, and improve reliability in support of Anti-Air Warfare (AAW) and Ballistic Missile Defense (BMD) missions.

SPY-1 RM&A ORDALTs and Microwave Tube (MWT) Product Improvement Plan (PIP) initiatives were developed to address concerns called out in SPY Task Force. The MWT PIPs were developed to increase Mean Time Between Failures (MTBF) and are being fielded through attrition. Since 2010 the Navy has invested \$1.8 billion in modernizing the DDG-51 Class's Aegis Weapon System. Since then, 15 DDG-51 Class ships have been upgraded to Aegis Baseline 9 capability, which enables a DDG to conduct Air Defense and Ballistic Missile Defense systems simultaneously to counter new threats during that period.

In the PB22 Budget the Navy has invested \$265M with plans to upgrade an additional 3 DDG-51 Class ships to the latest Aegis Weapon System. The SPY-1 Multi-Mission Signal Processor (MMSP) was fielded as an element of the Aegis modernization program. MMSP supports AAW and BMD mission areas, provides the capability to generate and process AN/SPY-1D(V) waveforms to improve AN/SPY-1D radar performance in clutter, provides ballistic missile tracking and RF discrimination capability to defeat advanced ballistic missile threats.

The next generation MMSP referred to as MMSP-R will start fielding in FY22 and it incorporates modern computing hardware updates for improved reliability and internal test functionality. The Navy is in close coordination with MDA and is familiar with the SPY-1 projects listed on their Unfunded Priority List. The Navy has teamed with MDA to execute the SPY-1 Low Noise Amplifier (LNA) program and provided a spare SPY-1 array for risk reduction assess the feasibility of the SPY-1 Digital Low Noise Amplifier (dLNA) project.

QUESTIONS SUBMITTED BY MR. MORELLE

Mr. MORELLE. Secretary Harker, how does this budget request seek to provide greater economic stability and predictability for the defense industrial base and its suppliers? Are there further steps the Navy can take to tailor its strategy to maintain this network of critical infrastructure?

Ms. HARKER. The Department carefully balanced resources and requirements, weighing the effects of FY 2022 program decisions on the industrial base to ensure our nation maintains the skills, capabilities, and capacities critical to our national defense. In FY 2022, the DON requested funding for eight battle force ships, keeping the shipbuilding industrial base loaded at an executable level that encourages industry investment in capital improvements, capital expansion, and a properly sized world-class workforce.

For future budgets, the Navy is evaluating the use of acquisition authorities, such as Multi-Year Procurement, to drive workload stability and predictability for the shipbuilding industrial base. The FY 2022 budget also takes an approach to maintenance and modernization that provides stability to the industrial base, including contracting strategies that align workload with industrial base capacity.

Navy has implemented a variety of contracting strategies that award multiple availabilities under a single solicitation, known as "grouping." Horizontal grouping extends the period of awarded work for a shipyard by grouping two serial availabilities into a single solicitation. Vertical grouping allows for a single solicitation to award multiple concurrent availabilities, allowing for streamlined contracting and the ability to effectively manage work within a port. Vertical grouping promotes competition, and enables full employment of dry dock capacity, which improves return on industry investment and reduces cost to the government.

In total, 16 of 26 FY2021 availabilities will be grouped solicitations. The Navy is also seeing positive early results from the pilot program established by Congress in FY 2020 to fund private sector Pacific Fleet CNO Availabilities with multi-year Other Procurement, Navy (OPN) funding. The OPN Pilot allows the Navy to implement commercial best practices for ship maintenance and more efficiently use surface ship maintenance funding. Early indicators are showing benefits to efficiency, execution, and buying power, and the FY 2022 budget requests expansion of the OPN pilot to include U.S. Fleet Forces private sector CNO Availabilities.

Mr. MORELLE. General Berger, how does this budget request seek to provide greater economic stability and predictability for the defense industrial base and its suppliers? Are there further steps the Marine Corps can take to tailor its strategy to maintain this network of critical infrastructure?

General BERGER. The Marine Corps FY22 budget request provides consistent funding necessary to support readiness and to maintain our Organic Industrial Base infrastructure as well as ensuring stable workload for our defense industry partners. The Marine Corps will continue execution of the Organic Industrial Base facilities plan submitted to the Senate in September of 2019.

For example, five facilities projects identified within the plan are complete or in construction, with others pending UPL or infrastructure bill outcomes. As indicated in the Senate report, we will balance OIB modernization within the overall Service portfolio and in consonance with the DOD/DoN fiscal environment. Our budget request also provides funding for critical capabilities that are produced and maintained by our industry partners. Consistency in budgets and resourcing enables our industry partners at all levels of the supply chain to plan, resource, and invest in their own facilities to maintain our current systems and develop essential new capabilities.

Mr. MORELLE. General Berger, how are right to repair restrictions inhibiting your Marines' combat readiness?

General BERGER. Right to repair restrictions inhibit Marines' combat readiness by creating an environment in which Marines cannot efficiently conduct equipment repair. This may be because Marines do not possess the appropriate technical repair manuals, special tools, diagnostic systems, or data to conduct the repair; the technical manuals they do possess do not provide the detail required to conduct the repair; or conducting the repairs may void the equipment's warranty. The purchase of technical manuals, special tools, and data rights must be balanced against other program requirements at the earliest stages of the lifecycle. If not addressed early, right to repair issues can be exacerbated in the later stages of equipment lifecycles and by the increased acquisition of more technologically advanced equipment.

