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HEARING

ON

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2017

AND

OVERSIGHT OF PREVIOUSLY AUTHORIZED PROGRAMS

BEFORE THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

FULL COMMITTEE HEARING

ON

THE FISCAL YEAR 2017 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FROM THE MILITARY DEPARTMENTS

HEARING HELD
MARCH 16, 2016

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THE FISCAL YEAR 2017 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FROM THE MILITARY DEPARTMENTS

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Wednesday, March 16, 2016.

The committee met, pursuant to call, at 10:06 a.m., in room 2118, Rayburn House Office Building, Hon. William M. "Mac" Thornberry (chairman of the committee) presiding.

OPENING STATEMENT OF HON. WILLIAM M. "MAC" THORNBERRY, A REPRESENTATIVE FROM TEXAS, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. The committee will come to order. The committee meets today to hear from the service secretaries and the service chiefs, and we are grateful to each of you for being here today.

The Director of the Defense Intelligence Agency [DIA] testified earlier this month that the world is far more complicated, it is far more destabilized, it is far more complex than at any time we have seen. Just last month the Chairman of the Joint Chiefs testified before the Appropriations Defense Subcommittee, the joint force will be stressed to execute a major contingency operation to aggression by an adversary.

We face a more dangerous world, and we face a stressed force and a high operational tempo, all major concerns for this committee. We talk a lot about readiness, but as one of our senior military leaders has said, the real—real bill payer for underfunded readiness is lost lives, and I think that helps bring it into context for all of us.

Of course, the challenge in today's complex world is we can't just focus on one thing. We face everything from a serious nuclear threat from peer competitors to continuing threat of terrorism and aggression from a variety of actors. So we all face a number of challenges at the same time. I am sure that we will explore a number of those issues over the course of this hearing, as well as the administration's budget request and how well it meets those challenges, both around the world and within our force.

Finally, I would just note that yesterday I made some proposals to improve our acquisition system. I don't expect that you all have had the time to look and react to those, but I do solicit your feedback on what you think is good and what you think could be better. And working with you as well as folks in OSD [Office of the Secretary of Defense] and obviously all of our colleagues and folks outside the building, we want to take further steps to improve the way that the Pentagon acquires goods and services.

Before introducing our witnesses, I will yield to the distinguished gentlelady from California, who is sitting in for the ranking member, Ms. Sanchez.

STATEMENT OF HON. LORETTA SANCHEZ, A REPRESENTATIVE FROM CALIFORNIA, COMMITTEE ON ARMED SERVICES

Ms. SANCHEZ. Thank you, Mr. Chairman, and thank you all for being before us today. I want to thank you for all of your service. Before I begin, I would like to insert for the record, ask unanimous consent to put Mr. Smith's opening remarks in, please, Mr. Chairman.

The CHAIRMAN. Without objection.

Ms. SANCHEZ. So we live today in a world where the security environment is constantly changing, and so we have the responsibility to keep up with those changes. There are threats today that we are facing that we didn't know about even last year, and the threats are vast. And so I understand that all the services today, that you face so many—you get pulled in so many different directions to defend and to protect our country and Americans, and so thank you for the service and the sacrifice.

With the rise of ISIL [Islamic State of Iraq and the Levant] and extremism, it has become pretty apparent that we have to use all elements of power with those growing threats today. And I do completely agree with the Secretary in his written statement in terms of the different elements of power, and each element is necessary for combination with the others. However, each alone is insufficient to win a war or maintain a peace. And in the last couple of years it has become evident that military might alone is not enough to address the rising threats.

The U.S. must take the necessary investments in diplomacy and economic stability and in collective security to be more effective against today's threats. It is time for us to further engage our partners so that we can prevent terrorist attacks like the one in the Ivory Coast. The U.S. cannot combat ISIL and terrorism alone, and we have to be able to rely on our regional allies militarily and financially as we continue to fight against terrorism. And we have a budget problem, and we all know that, and we can't fix this problem without addressing the defense budget.

It is time not just for the services, but also for us in Congress to really sit down at the table and get down to the hard decisions, Mr. Chairman, to prioritize what we need and what is not a critical need. And we have to do that in the defense budget because it must be sustainable. As you said, a lack of resources is really a cost that none of us want to see. And I hope that you will speak to that, all of you.

And I would also like to commend the Defense Department [DOD] and the services for all your efforts in opening up the military occupation and positions to women. As the services go forward in integrating women into these positions, I believe that leadership will be key. And I hope to hear from you the steps that each of the services is doing in order to ensure that we get that done.

We are celebrating Women's History Month right now, and for that reason in particular, I would like to recognize all those women who have served in our military and are currently serving. I be-

lieve that the full integration of women into the military will not only open up the opportunities for these women, but they will enhance our readiness of our military. So I thank you, and I look forward to your testimony.

The CHAIRMAN. I thank the gentlelady.

Let me again welcome our witnesses. We have Mr. Patrick Murphy, Acting Secretary of the Army; General Mark Milley, Chief of Staff of the Army; Honorable Ray Mabus, Secretary of the Navy; Admiral John Richardson, Chief of Naval Operations [CNO]; General Robert Neller, Commandant of the Marine Corps; Honorable Deborah Lee James, Secretary of the Air Force; and General Mark Welsh, Chief of Staff of the Air Force.

For some of you all, I think this may be your first opportunity to testify in this format. I do note Mr. Murphy was once on this side of the table, and now he is on that side. It will be interesting to see whether people go easy on him or not. For some of you all, this may be your last time to testify in this format.

I just want to take a moment to acknowledge Mrs. Welsh, who is in the audience. One of the things that I have learned to appreciate is the full-time job which the spouses of our service chiefs occupy in supporting the force in their way, in the families. It is a tremendous asset for our country, and I appreciate all that you have done not only to support General Welsh over you all's career, but what you have done to support all of the airmen who have served our country. And the same is true for all of your spouses.

Without objection, your full written statements will be made part of the record, and we would be pleased to hear any introductory comments you would like to make.

Secretary Murphy.

STATEMENT OF HON. PATRICK J. MURPHY, ACTING SECRETARY OF THE ARMY; ACCOMPANIED BY GEN MARK A. MILLEY, USA, CHIEF OF STAFF, UNITED STATES ARMY

Mr. MURPHY. Thank you, Mr. Chairman and members of this committee. It is great to be back on this side of the dais, and I appreciate the opportunity to discuss our Army with you here today. This is my tenth week on the job as Acting Secretary of the Army, and it is truly an honor to be back with my Army family.

Now, I have traveled to see our soldiers, our civilians, and their families to Fort Hood, to Fort Sam Houston, and most recently to Iraq and Afghanistan. And let me tell you, the selfless service and dedication of our team should inspire all of us. We are tasked with the solemn responsibility to fight and win our Nation's wars and to keep our families safe here at home.

Our Army must produce ready units today to deter and defeat our Nation's enemies, defend our homeland, project power, and win decisively. By ready, we mean units that are fully manned, trained for combat, fully equipped according to their design structure, and led by competent leaders. We must also be ready for future fights by investing in modernization and research and development. We do not want our soldiers to have a fair fight. We want them to have a tactical and technical advantage over our enemies.

With our $125.1 billion budget request, our Army will focus its efforts on rebuilding readiness for large-scale, high-end ground

combat today. We do so because we believe that ignoring readiness shortfalls puts our Nation at greatest risk for the following reasons: First, readiness wins wars. Our Army has never been the largest in the world. At times we have not even been the best equipped, but since World War II, we have recognized that ready soldiers, properly manned, trained, equipped, and led, can beat larger or more determined forces. So whether we are confronting the barbaric acts of ISIS [Islamic State of Iraq and Syria] or the desperation of North Korea, our Army must be prepared to execute and to win. We train like we fight, and our Army must be ready to fight tonight.

Next, readiness deters our most dangerous threats and assures our allies. We are reminded with alarming frequency that great power conflicts are not dead. Today they often manifest themselves on a regional basis. Both Russia and China are challenging America's willingness and ability to enforce international standards of conduct. A ready Army provides America the strength to deter such actions and reassure our partners throughout the world.

Readiness also makes future training less costly. Continuing operations since 2001 have left our force proficient in stability operations and counterterrorism, but our future command sergeants major and brigade commanders have not had the critical combat training center experiences as junior leaders trained for high-end ground combat. Investing in readiness today builds a foundation necessary for long-term readiness.

Finally, readiness prepares our force for potential future conflicts. We can't keep fighting the last fight. Our Army must be prepared to face the high-end and advanced combat power of an aggressive Russia or more likely, Russian aggression employed by surrogate actors.

This budget dedicates resources to develop solutions to allow our force the space to develop new concepts, and formed by the recommendations of the National Commission on the Future of the Army, our formations must first be ready to execute against current and emerging threats. The choice, though, to invest in near-term readiness does come with risk. Smaller modernization investments risk our ability to fight and win in the future. We have no new major modernization programs this decade. Smaller investments in end strength risk our ability to conduct multiple operations for sustained periods of time.

In short, we are mortgaging our future readiness because we have to ensure success in today's battles against emerging threats. That is why initiatives that we asked for like BRAC [base realignment and closure] in 2019, are needed to be implemented now. Let us manage your investment, and this will result in $500 million a year in savings and a return on investment within 5 years.

And lastly, while we thank Congress for the Bipartisan Budget Act [BBA] of 2015, which provides short-term relief and 2 years of predictable funding, we request your support for the enactment of our budget as proposed. We request your support, your continued funding levels calibrated to current threats and to our national security interests, and we request your support, your continued support, for our soldiers, civilians, and their families so that our Army remains the most capable fighting force possible to fight and win

our Nation's wars and to keep our families safe here at home. Thank you, Mr. Chairman.

[The joint prepared statement of Mr. Murphy and General Milley can be found in the Appendix on page 59.]

The CHAIRMAN. Thank you. My understanding is that only the service secretaries have introductory comments. Is that correct?

Secretary Mabus.

STATEMENT OF HON. RAY MABUS, SECRETARY OF THE NAVY; ACCOMPANIED BY ADM JOHN M. RICHARDSON, USN, CHIEF OF NAVAL OPERATIONS, AND GEN ROBERT B. NELLER, USMC, COMMANDANT OF THE MARINE CORPS

Secretary MABUS. Thank you, Mr. Chairman, Congresswoman Sanchez on behalf of Ranking Member Smith, members of this committee. Thank you so much for the opportunity to talk about the Department of the Navy.

As you pointed out, Mr. Chairman, this is the first budget testimony for our new Chief of Naval Operations, Admiral Richardson, and for the Commandant of the Marine Corps, General Neller. In the time since they took these positions, I have had the privilege of their frank, professional, and invaluable counsel. They are officers of the highest caliber who expertly lead our Navy and Marine Corps during ever tightening fiscal constraints and an increasingly dynamic threat environment.

This is my eighth time, and my last, to appear before you. For me, leading the Department of the Navy is the greatest honor of my life. I couldn't be more proud of our sailors, marines, civilians, their families. I am also proud of the many steps we have taken and changes we have made to ensure that the Navy and Marine Corps remain the greatest expeditionary fighting force the world has ever known.

First and foremost, we continue to provide presence. That unrivaled advantage, on, above, beneath, and from the seas, gives our leaders options in times of crisis, reassures our allies, and deters adversaries. There is no next best thing to being there. Maintaining that presence requires gray hulls on the horizon.

While there has been some discussion about posture versus presence, the simple fact is, for the Navy and Marine Corps, our posture is presence. In every case, from high-end combat to irregular warfare to disaster relief, our naval assets get on station faster, stay longer, bring whatever we need with us. And since we operate from our ships, which are sovereign American territory, we can act without having to ask any other nation's permission.

Resourcing that presence depends on four fundamentals, four Ps: people, our sailors and marines; platforms, our ships, our aircraft, our systems; power, how we use energy to make us better warfighters; and partnerships, our relationships with international allies, industry, and most importantly, with the American people.

When I took this post almost 7 years ago, we had an incredibly committed and capable force, but each of these four Ps was under pressure. Our people had been stressed from high operational tempo and extended deployments. Our fleet was shrinking, and too many of our platforms were costing too much. Our use of power was a vulnerability. And our partners were seeking reassurance of

our sustained engagement. Now our people, platforms, power, and partnerships are stronger than they have been in many years, enabling us to provide that invaluable presence.

In people, we have instituted sweeping changes. Personnel policy, promotions are based more on merit and less on tenure, and commanding officers are empowered to meritoriously promote more sailors and marines. We have made career paths more flexible. And one example, thanks to Congress, is the Career Intermission Program [CIP], which has been greatly expanded.

We have also increased professional development and educational opportunities that bring America's best ideas to the fleet by adding 30 graduate school slots through our Fleet Scholars Education Program and sending high-performing sailors on SECNAV [Secretary of the Navy] Industry Tours to great American companies like FedEx and Amazon, where they learn private sector best practices that can be applied when they return.

We are absolutely committed, from leadership to the deck plates, on combating the crime of sexual assault and the tragedy of suicide. We have revamped our physical fitness assessments making them more realistically align with the jobs we do, and we have promoted healthier lifestyles through better nutrition and a culture of fitness.

All billets in both services are now open to women. Standards will absolutely not be lowered, but anyone who can meet the standards will be able to do the job. This will make us a more combat-effective force. We are trying to mitigate stress on sailors and marines and their families by making deployments more predictable, extending hours for child care, and creating colocation policies. To tap into the innovative culture inherent in the Navy and Marine Corps, we established Task Force Innovation, which takes good ideas from deck plate sailors and field marines, recognizes, funds, and rapidly moves these ideas fleetwide.

On platforms, we have reversed the decline in ship count. And thanks to Congress, and in particular to this committee, our Navy will reach 300 ships by 2019, and we will get to our assessed need of 308 ships by 2021. In the 7 years before I took office, the Navy contracted for 41 ships. In my 7 years, we have contracted for 84, and we have done so while increasing aircraft purchases by 35 percent, all with a smaller top line.

Practices like firm fixed price contracts, multiyear buys, stable requirements, have driven down costs on virtually every class of ship, and we are also in the process of recapitalizing nearly every naval aviation program. We have expanded unmanned systems, on, under, and above the sea, and put increased focus on them by establishing a Deputy Assistant Secretary for Unmanned and an Office of Unmanned Warfare System on the CNO staff, N99, designed specifically to coordinate all unmanned programs. We are also implementing advanced energy technologies like electromagnetic rail guns and laser weapons.

In power, to increase our lethality and operational flexibility, I set goals of having 50 percent of sea and shore-based energy derived from alternative sources by 2020, competitive with the price of conventional power. We met that goal with shore at the end of last year. Energy efficiency has also been greatly increased on our

bases and at sea. Ultimately since 2009, both the Navy and Marine Corps have achieved large drops in oil consumption.

In partnerships, during my tenure, I have traveled nearly 1.2 million air miles to 144 different countries and territories, visiting with our sailors, marines, our allies, and our partners. Twelve of my trips have been to Afghanistan, where I visited every Marine Corps forward operating base in Helmand to be with our forward-deployed men and women. And I have actively engaged with our allies and friends around the world to build and maintain a network of navies with whom we can train, operate, and trust. And we have worked in partnership with Congress to fulfill the constitutional mandate to provide for and maintain a Navy.

As President George Washington once said: It follows then, as certain as night succeeds the day, that without a decisive naval force, we can do nothing definitive. With it, everything, honorable and glorious. Thank you.

[The prepared statements of Secretary Mabus, Admiral Richardson, and General Neller can be found in the Appendix beginning on page 76.]

The CHAIRMAN. Thank you.

Secretary James.

STATEMENT OF HON. DEBORAH LEE JAMES, SECRETARY OF THE AIR FORCE; ACCOMPANIED BY GEN MARK A. WELSH III, USAF, CHIEF OF STAFF OF THE AIR FORCE

Secretary JAMES. Thank you, Mr. Chairman, and Congresswoman Sanchez and all the members of the committee. Good morning. My wingman, General Welsh, and I are very proud to come before you today to represent the nearly 660,000 Active Duty, National Guard, Reserve, and civilian airmen, plus all of our families, and we are certainly very honored to be here with our colleagues from the sister services as well.

When we testified before all of you last year, we outlined our three priorities, which are taking care of people, balancing readiness with our need for modernization, and making every dollar count. These priorities have not changed over the last year, but what has changed, and you have already touched upon it, Mr. Chairman, is the threats that are facing our Nation. As we sit here today, our Air Force is working very, very hard to degrade, with the goal of ultimately destroying, Daesh in the Middle East as part of a whole of government and as part of a coalition approach.

In the last year, our coalition forces upped the ante against Daesh, flying more than 55,000 sorties in support of Operation Inherent Resolve, which represents a threefold increase over the number of sorties in 2014. Moreover, a resurgent Russia continues to foment problems in the Ukraine and has announced its intent to modernize its nuclear forces, and of course, we are watching and we are waiting to see what happens next in Syria.

In addition, we have observed North Korea conduct an illegal nuclear test and a rocket launch just within the last month or so, and we continue to see worrisome activity from China in the South China Sea. And, of course, there are also very important growing threats in both space and cyberspace.

The bottom line here is that our Air Force is playing an absolutely essential role in each of these areas. We are fully engaged in every region of the world, in every mission area, and across the full spectrum of operations. And to put it plainly, in my opinion, we have never been busier on such a sustained and global basis, and we are doing all of this with roughly 200,000 fewer people and 79 fewer fighter squadrons than we had at the time of Operation Desert Storm, so we are a much, much smaller Air Force.

Now, to continue confronting these challenges and in order to maintain an effective fighting force, our budget submission, which is now before you, tries to balance capacity, capability, and readiness appropriately. As has been mentioned, the Bipartisan Budget Act, we are very, very appreciative of the stability and the predictability that that gives us, but it does leave us somewhat short, $3.4 billion short for the Air Force, as compared to what we originally requested for fiscal year 2017. So this means that once again we had some tough choices to make in this budget. And I will detail those budget choices as I discuss our top three priorities, and I want to begin with the most important one, and that is taking care of people.

Airmen and their families are the Air Force's most important resource, and our budget, I believe, reflects this truth. But with that said, as I just mentioned, we have been downsizing for years, and our people are very stressed, and this simply needs to stop. We now need to upsize our force modestly, and we want to do it in a total force way, to address a number of key areas, including critical career fields like intelligence, surveillance, and reconnaissance, cyber, maintenance across the Air Force, and battlefield airmen. These are some of the areas that we need to plus-up. We thank this committee for your support of our Active Duty plus-up. You have also supported us, of course, in our Guard and Reserve as well.

The Active Duty will go from roughly 311,000 to 317,000 airmen by the end of this fiscal year, but in reality, I think all of these mission demands I just spoke about will indicate that we need more growth in fiscal year 2017. So in order to meet that demand, I plan to take a judicious approach to incrementally increase our total force beyond the current level, provided, of course, that we can get the right talent. And we would be grateful to this committee to consider a reprogramming action at the appropriate time, should that be required.

Speaking of total force, we are continuing to maximize our use of the Guard and Reserve by shifting additional missions and workload when it makes sense to do so. Some examples here include cyber, ISR [intelligence, surveillance, and reconnaissance], command and control, mobility and space, so we are continuing to shift workload and missions as it makes sense. We are also continuing to push the envelope when it comes to integration of our Guard and Reserve with our Active, and that goes from the staff level at the highest headquarters all the way down to the wing level and to the flight line.

I also want to call to your attention, still on the subject of people, that we are expanding the Sexual Assault Prevention and Response Program. We are fully funding our child care operations, and we are making a big effort to fund the most important infra-

structure projects to benefit our airmen, all as part of this budget. And, of course, we too are looking forward to welcoming qualified women into the previously closed career fields.

The second priority I mentioned is getting the balance right between readiness and modernization, and we believe strongly that we need both. We can't have either/or. It is not an either/or proposition for us. So as we have explained before, less than half of our combat forces are ready for what we call a high-end fight, less than half. And when I say high-end fight, I am speaking of a conflict that might take place in an anti-access/area denial environment, in other words, an environment where an adversary could shoot us down, interfere with us in some major way in space or cyberspace.

In addition to all this, our aircraft inventory is the oldest that it has ever been, and of course as you know, the adversaries are closing the technological gap on us, so we must modernize.

In terms of readiness, this budget funds flying hours to their maximum executable level, invests in weapon systems sustainment, and ensures combat exercises like Red and Green Flag remain strong. After consulting with our combatant commanders, General Welsh and I agreed that we needed to make some adjustments in this budget to address these real world changes that I mentioned.

One of those adjustments is we are rephasing the A–10 and the Compass Call retirements. And the bottom line here is we are not proposing to retire any of these aircraft in fiscal year 2017. Furthermore, we will continue to look at the mix of aircraft each year and we will be prepared to modify, based on the global security situation. We also need to ensure the right number and mix of unmanned aircraft, so we are going to invest more in additional Reapers. And we also need to invest more in munitions. Again, this is contained in the budget request.

Turning to modernization, this year's budget will continue the ongoing investments to support our top priorities of nuclear deterrence, space, and cyberspace. We are also continuing with the F–35, the KC–46, Combat Rescue Helicopters. JSTARS [Joint Surveillance Target Attack Radar System] we are going to get started on, as well as T–X. We also are going to continue to move forward with the B–21, which was formerly known as the Long Range Strike Bomber. This fifth-generation global precision attack platform will give our country a networked sensor shooter capability and propel us into the next century of air power dominance.

Now, unfortunately modernization is also where we had to make some of those tough choices because of the insufficient budgets. So, for example, with reluctance we are deferring the purchase of five F–35s in fiscal year 2017 and three C–130Js in fiscal year 2017. We will also have to delay some of our upgrades to the fourth-generation systems like the F–16, and many infrastructure projects will simply have to wait. So infrastructure is another tough choice for us. And I want to also support our department's request for a BRAC in fiscal year 2019.

The third priority reflects our commitment to give the taxpayers the best bang for the buck, which is why we call it Make Every Dollar Count, and we are working a number of initiatives here, including we too are working on streamlined energy usage, cost sav-

ings ideas that come directly from airmen that we then put into practice, and we are continuing the march toward meeting the mandate to be audit ready by the end of fiscal year 2017.

So, Mr. Chairman, as I begin to wrap, again I want to thank this committee and you for your leadership and support of the Bipartisan Budget Act. I want to associate myself with the remarks about the need to lift sequestration. I know many on this committee have tried very hard to do that. If we return to sequestration, and if we once again have to park jets and take some of those very dire effects that we did the last time around, there is just no question in my mind, this means that we will enter possibly a future conflict less prepared. And if you are a student of history—I like history, I try to be a student—history teaches us that the consequences of insufficient preparation are prolonged conflict and increased loss of life. So please keep up the fight to lift sequestration permanently. And with that, I thank you, Mr. Chairman.

[The joint prepared statement of Secretary James and General Welsh can be found in the Appendix on page 154.]

The CHAIRMAN. Thank you, ma'am. That is exactly what history teaches. I hope we have learned those lessons.

Let me just ask about a couple of things right quick. General Neller, I have asked for the statistics for the Marine Corps on Class A mishap rates. And my understanding is the average over the last 10 years was 2.15 mishaps per 100,000 flying hours, but that went up in 2014 to 2.67; 2015, 2.88; 2016, 3.96. So the point is, over the last 3 years especially, the number of Class A mishaps per 100,000 flying hours has been increasing significantly.

Given this readiness and safety issue and the budget constraints and all that the Marine Corps is being asked to do operationally, can the Marine Corps meet the demands of the National Military Strategy?

General NELLER. Chairman, let me first comment on the aviation. We track this very closely, and the simple fact is that we don't have enough airplanes to meet the training requirements for the entire force. The force that is deployed is trained and ready, and it is a little bit different for every model, type, and series. So we are working on this, and not all of it is related to aviation maintenance, some of these events. But it is a fact that our mishap rate has gone up.

As far as our ability to meet the National Military Strategy, our ability to meet the day-to-day commitments and the requirements of the combatant commanders, we are doing that with trained and ready forces. Our ability to meet other regional requirements for major contingency plans, we would be able to do that, but we would probably not be able to do it within the timeframe that the current plans call for us to arrive to participate in that conflict.

The CHAIRMAN. Okay. General Milley, the numbers for the Army are not quite as dramatic, but they are also on an upward trend, rising from 1.52 in fiscal year 2014, to 1.99—just about 2—in fiscal year 2016. Let me ask you the same question. Can the Army meet the demands of the National Military Strategy?

General MILLEY. Thanks, Chairman. On the Class A's, it has our attention. We have asked for the Deputy Commander of TRADOC [Training and Doctrine Command] to conduct a multifunctional,

very detailed study of Class A aviation accidents. And one of the things you will see in this budget is we are increasing flying hours for our rotary-wing aviators from 10 hours to 12 hours. Ideally, we want them 14 to 15 hours a month. We can't get there with the budget to 14, 15, but we are going to increase it to 12. But we are going to have more data here in probably a month or so, and we will share that with you as soon as we get it. It does have our concern. Our aircraft accidents have increased, and we are very concerned about it.

On the second question, it is my estimate that, similar to General Neller's, is that on a day-to-day basis, the Army does about 46 percent of all the combatant commander demand signal that comes in, and 64 percent of emergent demand from the combatant commander is done by the Army. We can handle that on a day-to-day basis, and we have also very good current capability and capacity to fight the counterterrorist, counterinsurgency fight that is ongoing against ISIS and other areas such as in Afghanistan. So we have got those skill sets.

My concern going forward is at the higher end in the event of a contingency, and if that were to happen, then I have grave concerns in terms of the readiness of the Army forces to be able to deal with that in a timely manner. And I think the cost both in terms of time, casualties, and troops and the ability to accomplish military objectives, would be very significant, and we have all given our risk assessments associated with that in a classified session.

The CHAIRMAN. Let me turn to a different issue, and I want to ask first Admiral Richardson and then General Welsh about this. Deputy Secretary Work has testified before this committee that nuclear weapons remain the most important mission we have. This is absolutely critical. And Secretary Carter has said it is the foundation for everything we do.

I was just engaged in a conversation yesterday with some British parliamentarians about their decision whether to replenish, update, their nuclear deterrent, which is submarine-based. Admiral, do you agree, I guess, first, with Secretary Carter and Deputy Secretary Work that our nuclear deterrent is foundational, and do you believe that all three legs of the triad plus the weapons themselves must be part of that modernization effort for us?

Admiral RICHARDSON. Chairman, yes, I do. I think that the triad, and our part of that, the *Ohio* Replacement Program, are absolutely critical to national survival, and that is why that program is our number one modernization program. We are also working, as you know, very closely with the British, our partners in the United Kingdom, to make sure that they reconstitute and modernize their continuous at-sea deterrents. And so I absolutely agree.

And I agree that it is a triad approach that we have right now, and that includes not only the platforms but the weapons and the warheads. And so this moves over to not only the Defense Department, but the Department of Energy [DOE], to keep that whole system whole.

The CHAIRMAN. General Welsh, a couple of those legs are in your bailiwick. Do you agree that we need all three legs of the triad to be modernized, as well as the weapons themselves?

General WELSH. Chairman, I do believe that. I believe the triad has been very effective over time. I think nuclear deterrence has been the security wallpaper, if you will, for this country since we stood up our nuclear capability, and I think it should continue. I believe without all three legs of the triad, you expose seams in that nuclear deterrence posture to certain enemies.

The CHAIRMAN. Thank you. Ms. Sanchez.

Ms. SANCHEZ. Thank you, Mr. Chairman. I too am concerned about our nuclear capabilities and modernization. General Welsh, the funding bow wave for the nuclear modernization is really steep. Is there an effective 25-year plan to find and execute all these programs concurrently to modernize?

General WELSH. Ma'am, I think the important thing that we have to face really as a nation is a decision on are we going to modernize; are we going to keep the triad, the question the chairman just asked. And if the answer to that is yes, there is no option but to fund it. But we have to prioritize the funding, and if we decide we are going to take pieces of this, we have to prioritize the pieces that we will invest in.

This is a much larger discussion than any particular service. It has to be a Department of Defense. It is a congressional; it is a White House discussion, and I hope it is something that the next administration takes on early in their tenure because we need an answer pretty quickly, or we are going to spend money toward a lot of programs that we can't complete if we don't fund them down the road.

Ms. SANCHEZ. Well, thank you for that because, I mean, this has been my concern, is the funding of how do we modernize this. You know, I have sat I think of the 19 years, now 20 that I have been on this committee, all but 2 on the Strategic Forces Committee, being a ranking member for it at one point. And I hear Mr. Murphy and others say that our readiness is deteriorating or has deteriorated to some extent, and it is just really not something we should in detail discuss obviously, I believe, in a public forum. But, you know, being able to move forward our domestic programs, being able to have an Army at ready to go, having an Air Force that can do the air cover and air deterioration that we need before we send in our Marines or our special forces or our Army, and then doing a total modernization on our nuclear capabilities. It can't all be funded at once.

And so, Mr. Chairman, I hope that this committee will really sit and think about how we are going to get all of that done because it is coming to a head. I mean, we can't fund everything. We just cannot fund everything. So I hope that, Mr. Chairman, that we might consider how we really take a look at that funding issue.

I have another question. This one will be for Admiral Richardson and General Milley. When Admiral Greenert and General Odierno wrote us that letter in 2014, well, wrote to the Secretary of Defense, that regional missile defense capabilities were stretched and that the Department of Defense should look, among other approaches, to deterrence and left-of-launch capabilities to relieve the demands on missile defenders and the cost to the Navy and the Army, what are the effective alternatives that are being considered to that?

Admiral RICHARDSON. Ma'am, I will tell you that right now in terms of the Navy's situation, the ballistic missile defense ships are our most stressed force right now, so in terms of deployment length and that sort of thing, they come——

Ms. SANCHEZ. Can you pull that up? I can't hear you as well.

Admiral RICHARDSON. I'm sorry.

Ms. SANCHEZ. Thank you.

Admiral RICHARDSON. All right. Those ships are as stressed as any in the Navy, but we are considering sort of the ballistic missile defense across the entire kill chain, if you want, the left of launch starting with the systems that, you know, program and launch these missiles, all the way through towards terminal defense. You take that entire sequence, you break it down, and you take a look at the opportunities and vulnerabilities in that whole sequence, and that is our approach.

But there is the terminal phase which relies on our Aegis-equipped cruisers right now both at sea and at shore. And it is a costly system, as you point out, and that is why General Odierno and Admiral Greenert wrote that letter, so that we can make sure we are approaching this from a systems assist approach and not missing any opportunities.

Ms. SANCHEZ. Great. I think we have had such reliability and such capability in that area that we tend to want to use it everywhere, and I know that it is stretched. I have been with Mr. Turner to see some of the new systems coming up with respect to that. And I am just worried again how we are going to fund all of this.

And then the last question I have, Mr. Chairman—I am sorry for taking up the time—but what is the Air Force's plan to shift away from using the Russian RD–180 engine and have assured access to space as quickly as possible?

Secretary JAMES. The plan that we have been pursuing, of course in conjunction with all of you and the last two NDAAs [National Defense Authorization Acts], is to fund rocket-propulsion systems to allow industry to get away from that Russian engine as quickly as possible. We are targeting 2019, per the law. We are doing it in a full and open, competitive way. We are working as hard as we can at it. The technical experts tell me that 2019 is an ambitious technical target, I will say, for a timeline, but we are working as hard as we can toward that goal. We absolutely share the goal.

Ms. SANCHEZ. Great. Thank you, Mr. Chairman, and I think I will have some follow-up questions, in particular on that issue. Thank you.

The CHAIRMAN. Mr. Forbes.

Mr. FORBES. Thank you, Mr. Chairman. And to each of you, I wish I had the time to go through and tell the American people all the great things you have done because you are all truly assets to our country, and we appreciate each and every one of you.

My questions go more not to you personally, but to the substance of what we are asking today because it is important that we have the facts to make the decisions we need to make. And the first question I would ask each of you to do for me is to raise your hand if you had to submit, or you submitted, the written record of remarks that you have to anyone for approval that was not under your direct command before you came here today.

So, General Neller, you did not? You were the only one?

General NELLER. Congressman, can you say that one more time?

Mr. FORBES. Did you have to submit your written statement to anyone not under your direct command before you submitted it to us today?

General NELLER. I approved the statement and sent it up, and I assume it went up here as written.

Mr. FORBES. Thank you all for doing that. So, Mr. Chairman, if we could just show the record that everyone had to submit their statement for approval. I think that is wrong. We just need to hear from you directly, and I know that is not your fault.

Secretary Mabus, you know the personal high regard I have for you, and I appreciate your comment that the Navy, it is important that we have a presence. Also you have been a leader to say that ship count was a part of that presence, at least a component. You have testified that we need 308 ships in the Navy, and Admiral Richardson has told us before that he would bet his paycheck when the force structure comes back in, that that will go up higher, and I would also bet Admiral Richardson's paycheck that it will go up higher. We currently have 272 ships in the Navy. We have had testimony before our committee if we get down to 260 ships, that we cease to be a superpower, and we become a regional power.

Right now if we look at some of the ships we count, we count two hospital ships, two high-speed ferries that are in reserve status, and we are getting ready to count 11 cruisers that would be put up. It would take 18 months to get them back in the water. If we took those ships out, we would be down to 257 ships. But even if we didn't look at that, we have had testimony from the CBO [Congressional Budget Office], and the Navy now says it is pretty close, that if we stay on track now, and we do everything the same way we are, and we don't add about $4 billion to the accounts—maybe as much as $6 billion over the next several years—we will be down to 237 ships.

Admiral Harris has testified before our committee that he only had 62 percent of the subs that he needed in the Pacific Command. We know that by 2029, we will have 41 subs, where our requirement is 48. The Chinese will have twice as many. We know the Marine Corps said they need 38 amphibious ships—some people say as many as 50—but we will have 30. We know in 2007, the Navy was able to meet approximately 90 percent of the validated needs of our combatant commanders. This year it will meet approximately 40.

We know the administration is now trying to forego the refueling of an aircraft carrier. It is trying to disestablish a carrier air wing. It is going to cut the buy of small surface combatants from 52 to 40, try to inactivate 1 of the 2 T–AOEs in the Pacific, deactivate half of our cruiser fleet, and deactivate 3 amphibious ships. We also know that we had before sequestration, cuts of between $487- to $780 billion.

So my question is this, Mr. Secretary: Isn't it true that unless another administration is able to do the heavy lifting and come up with that extra $4 billion to $6 billion a year, that the air will come out of this balloon, and we will come down to 237 ships? And the second thing is, can you point to where this administration has pre-

sented any budget adding that $4 billion or making up that shortfall? It looks to me kind of like my wife coming to me when she is complaining about our house, and I say but, look, I got plans to buy the house on the Hill, and then she says, but where are you going to get the money? So maybe you can help us with that.

Secretary MABUS. Thank you, Congressman, and every CNO that I have been privileged to serve with and I have talked about the *Ohio*-class replacement coming in 2021 and the need to fund that to keep it from having a huge and detrimental impact on Navy shipbuilding. I would say that what your comments point out is that shipbuilding takes a long time. It is not the job of one administration. It is not the job of one Congress. And this administration has reversed that precipitous decline that you pointed out. Now, it has also put us on the track to get to 308 ships, which is what you say we need, and I would bet the CNO's paycheck too that the next one will come in higher. But what we are debating now, what you are discussing now, is not what happens to the fleet now. It is what happens to the fleet in the 2020s.

Mr. FORBES. But if you don't mind, I would love for you to give us the rest of that for the record. And I didn't mean to cut you off. It is just that I am cut off. So, Mr. Chairman, thank you. I yield back.

Secretary MABUS. I would be happy to do that.

[The information referred to can be found in the Appendix on page 171.]

The CHAIRMAN. I appreciate that.

Mrs. Davis.

Mrs. DAVIS. Thank you, Mr. Chairman, and I certainly want to welcome our former colleague, Acting Secretary Murphy, to the panel and to the committee this morning. I know through a series of opportunities that we have had to discuss the issues before us, one of the most critical really is readiness, and I think that you have all in one way or another said that, you know, readiness really has no constituency. And so we have to be able to make that case to our constituents that this is certainly something that has affected us a great deal.

And I think what people have a harder time understanding is how the antiterrorism and anticounterinsurgency efforts have really impacted our overall readiness today of the forces throughout. Can you in as quick a way as possible speak to that, all the services, what is the most critical way in which that has made a difference and not allowed us to be at a place today that is of less risk than it would have been otherwise?

General MILLEY. Thanks, Congresswoman. For the Army, just very briefly, you know, for 15 years we have been running back and forth to Iraq and Afghanistan. And during that time, we have been fighting one typology of war against counterinsurgents or terrorists or guerillas, and our higher-end training against conventional threats, hybrid threats, threats that involve enemy artillery, enemy air, enemy electronic warfare, et cetera, the higher-end, higher-intensity type battlefields have not been routinely practiced for 15 consecutive years. So our readiness against that type of threat has deteriorated over a decade and a half.

Mrs. DAVIS. Thank you.

Admiral RICHARDSON. Ma'am, I will tell you, the Navy, it has been very well known by this committee that this manifested itself in deployment lengths of 8 to 10 months during those times, which puts an incredible cost on the ship itself, but even more so on the people that man the ship, and so that part went under stress. The ability to do maintenance on those ships was severely affected by sequestration. It incurred a readiness debt that we have had difficulty pulling out or even making progress on, as the funding levels are what they are, and the security environment in the world continues to put demands on the force.

General NELLER. I believe everybody is in a similar spot. The DEPTEMPO [deployment tempo] hasn't reduced even though we are doing similar things, but we are back in the Far East as we have reset the force there, so the amount of deployment goes on. The fight in ISIL continues to put stress on equipment, particularly aviation. We are in the process of resetting our equipment, and then you are trying to maintain legacy gear and at the same time modernize. Every model/type/series aircraft in the Marine Corps is in the middle of a reset, either reset the legacy and/or buy new. And at the same time we recognize there is capabilities in training, as General Milley mentioned, that we have to get ready for what we think we are going to see in the future. So all those things together, they are putting stress on our readiness.

General WELSH. Congresswoman, the Air Force never came home from the first Gulf war. We have had airmen flying and air tasking for 25 years in the Middle East. During that time, as Secretary James mentioned, we have cut 40 percent of our Active Duty force, so that lower force size combined with the increased deployment and operations tempo over the last 25 years has limited the amount of training we can do for the other missions that we are required to do in a different kind of conflict, as General Milley just stated. That is the biggest impact on us in attaining readiness over the long term.

Mrs. DAVIS. Thank you. I appreciate all of you doing that very quickly. It was a little elevator speech, but that is important, I think, for us to be able to articulate as well.

And if we could just go back to you, General Welsh, just the impact of the uncertainty on the budgets and what we have dealt with here. What impact does that have on the 2 million men and women who serve our country and sacrifice on our behalf?

General WELSH. Ma'am, they are very proud of who they are. They are very proud of what they do, and they are very proud of the joint coalition team they stand beside doing it, and their families have been unbelievably dedicated to this. And this world of deployments I mentioned is what almost everybody in our services came into. It is the way it has been the entire time they have served. So they are willing to pay the price if they think it is important, if they think the Nation supports them, if they think they will have the resources and the equipment and the training to be the best in the world at what they do. That is all they ask. If they don't believe that, they will think about voting with their feet.

Mrs. DAVIS. General Neller.

General NELLER. I think that is a very good review of where everybody is. You know, they don't ask much. They always make it

happen. We want to keep them here. The thing that keeps them here is maybe not so much what you would call quality of life. It is having good gear. And the best quality of life I can offer to a marine family is I am going to bring their marine home alive.

Mrs. DAVIS. Thank you. Okay. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Mr. Wilson.

Mr. WILSON. Thank you, Mr. Chairman. And thank each of you for being here, and we are particularly grateful to see Secretary Murphy, our former colleague. There is life after office. And I know his military background, too. And so I thank all of you for your service.

General Welsh, I appreciate being the son of a Flying Tiger. I am also very proud to be the uncle of a current airman. And as chairman of the Emerging Threats Subcommittee of the Armed Services Committee, I am concerned about the third offset strategy which may be providing for present-day tradeoffs for an overdue bet on the future when investments in both areas are desperately needed. In your opinion, what generation of weapons system is your priority to maintain American military technological superiority by 2020?

General WELSH. Chairman, the two best examples of technology that we need in the Air Force by 2020 are programs that are already in progress that the Congress has supported very well, and that is the KC–46 tanker and the F–35. The emerging threat over the next 5 to 10 years will mean that we have to have a capability to operate against an integrated air defense system, against aircraft that now have longer sensor ranges, longer weapons ranges, than anything we currently have on our legacy fleet. The F–35, working with the F–22, will give us that capability. It will also give us the capability to penetrate and integrate our defense systems. So 2020, those are the pacing technologies that we are already in the process of acquiring.

Mr. WILSON. And I am grateful that you mentioned the F–35. I formerly represented Beaufort Marine Corps Air Station, and I am very grateful for the training there and what that means for our country.

Admiral Richardson, I am also grateful to be a Navy dad. And you yesterday courageously testified before the Senate Armed Services Committee that Iran had knowingly violated international law earlier this year by boarding a U.S. Navy vessel, detaining 10 sailors against their will. In addition to this outrage, it was reported just this week that Iran has seized an estimated 13,000 pages of information extracted from government laptops, GPS [Global Positioning System] devices, and maps aboard the vessel. I am deeply concerned about this violation and would like to know what subsequent actions have been taken to rectify this brazen defiance of international law by Iran.

Admiral RICHARDSON. Sir, within the Navy—I will speak to that part—we have conducted an investigation. That investigation is being reviewed right now. That will detail all of the sequence of events that went on in detail as that event unfolded. And we have identified a number of areas in the Navy where we can tighten up

our act, improve, so that we can minimize the chance of something like this happening again.

Mr. WILSON. Well, again, it is just an outrage to me to see our military personnel humiliated by what I consider to be an outlaw regime.

And, General Milley, my wife and I appreciate that we have had three sons who have served under your command. Military officials have said that the Army's fiscal year 2017 budget request for facilities is less than that of the prior year. So by far, this affects the military construction budget, which in recent years has been focused on family housing projects. Could you explain what military barracks and facilities have your focus, and in particular I am very interested in Fort Jackson, that I represent, and their barracks that are 50 years of age?

General MILLEY. Thanks, Congressman. I must say that you have probably the most joint family I have ever heard in my life, and I do hope you got positive feedback from your sons.

Mr. WILSON. I just can't include the Coast Guard.

General MILLEY. Coast Guard is next. But to answer your question, installation readiness is one of the foundational parts of overall readiness because that is where we get our housing, quality of life, education, et cetera, but that is also where you get your Rangers and all your training areas, et cetera. And that has taken a cut over several years, and frankly our installations have degraded significantly.

And I agree with General Neller, the greatest quality of life that we can take care of a soldier is to bring him back with his dog tags in one piece, whole mind, whole body, and that requires good training, equipment, leadership, et cetera. But also when they are deployed, to ensure that their families have great quality of life so that they can focus on the task at hand, which is the military task.

Specifically with respect to, you mentioned Fort Jackson in South Carolina, there are some areas there that have been deteriorated. So there are several projects that you will see in the 2017 budget that are targeted specifically to Fort Jackson because I am not satisfied with the quality of the barracks that are there, and we are going to upgrade some of those. And we are pulling forward a couple of additional items that we were looking to put in the FYDP [Future Years Defense Program] in 2018 or 2019. We are going to bring them forward because I think the condition of some of the facilities at Fort Jackson are unsatisfactory and don't meet Army standards.

Mr. WILSON. Thank you very much.

The CHAIRMAN. Ms. Bordallo.

Ms. BORDALLO. Thank you, Mr. Chairman. Secretary James and General Welch, there has been recent criticism against the Air Force's proposed use of the cost-plus during the early stages of the acquisition program for the new Long Range Strike Bomber, the B–21. Can you please explain the process for which the Air Force determined that a blended cost-plus fixed-price approach was ideal for that program, and what advantages it provides?

Secretary JAMES. So Congresswoman, I will start, but then chief please jump in as well. When it comes to contracting, of course, I guess to state the obvious, one size does not fit all. It just depends

on the circumstances. And so in the case of a cost-plus when it comes to development programs, this is what we tend to do. When it is a larger program, when there are uncertainties, when there are risks involved, but in the case of the B–21, I do want to say that it is cost-plus incentives.

So that is to say there are incentives for the contractor to be able to meet milestones for schedule and performance, and if they don't meet those milestones according to the plan, they will lose their fee. And most of that, by the way, is backloaded in the development process which incentivizes them to move through development as quickly as feasible and not drag it out.

So overall, cost-plus incentive for that development, for a never before done airframe and an integration job, the way it is seemed most appropriate and the incentives are key. When it comes to the firm-fixed-price in production, that seems to be a much more sensible way to do the production element.

And as you know, Congresswoman, we awarded both at once. We awarded the EMD—engineering, manufacturing, and development—together with the initial tranche of the actual production in a firm-fixed-price environment.

Ms. BORDALLO. Thank you. Thank you. I have very little time left. Mr. Welsh, do you wish to comment on that?

General WELSH. Ma'am, I would just add that 70 percent of the cost of this program overall, is firm-fixed-price.

Ms. BORDALLO. Thank you.

Secretary Murphy, and General Milley, the Army has been working to replace the current force generation concept with the sustainable readiness concept. Is it still on track to replace the current model in fiscal year 2017?

Additionally, how does the Army's new model translate to the total force? Specifically, will National Guard and Reserve units be fully incorporated into this readiness model?

General MILLEY. The short answer is yes. It is on track to be implemented and it does include Guard and Reserve in the readiness model. In general, what we want to do is increase the operational use of the National Guard and we want to increase their training, increase the CTCs [combat training centers], selectively increase the number of days of training per year, and then most importantly, increase National Guard deployment to Europe, Middle East, and Asia.

Ms. BORDALLO. General Milley.

General MILLEY. That was General Milley.

Ms. BORDALLO. I am sorry. Secretary Murphy.

Secretary MURPHY. I am only a Secretary, ma'am. But Congresswoman, General Milley is absolutely right. I mean, if you look at our 1 million soldiers in our Army, the majority of them are actually in the Reserve or National Guard Components. We are one team, one fight, one Army. And so when you look at Guam, for example, you know, we have the THAAD [Terminal High Altitude Area Defense] battery that is there and Active Duty, but we are working with the National Guard there as well. But as far as on schedule, we were absolutely on schedule, and we are committed to make sure that we have one team and one total force.

Ms. BORDALLO. Very good. All right. And I have a statement to make, not a question. Secretary Mabus and Admiral Richardson, I would like to make a brief comment regarding depot-level maintenance including dry-dock capabilities in the Western Pacific. I believe that these capabilities are sorely lacking and the Navy is not investing enough to support a forward-deployed fleet in the Western Pacific. We have these requirements and we must make the right investments as this is a key to readiness in our region.

In particular, I have serious concerns about the Navy's assessments, and will continue working to ensure that our forward-deployed assets have quality and secure maintenance that American workers and equipment provide without losing weeks of presence.

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

The CHAIRMAN. Thank you. Mr. Rogers.

Mr. ROGERS. Thank you, Mr. Chairman. Welcome to the panelists. I appreciate all of your service to our country.

Secretary James, I really appreciate your leadership. You have been a great partner to work with on our endeavors in my subcommittee. I want to talk to you about helicopters. I know that is a subject you and I have talked about in the past. But for about 12 years now we have had helicopters protecting our missile fields, our ICBM [intercontinental ballistic missile] fields that are not up to the mission. And as you know, recently, Admiral Haney has stated that this problem cannot go on.

My question to you is, what is the status on that? What are your plans to remedy Admiral Haney's concerns with making sure those helicopters are able to carry out their mission with protecting those ICBM fields?

Secretary JAMES. I would expect within the next couple of weeks, our acquisition executive, in the Air Force, who is currently looking at acquisition strategies, will come to a conclusion and make a recommendation. So at the moment we are looking at sole-source opportunities. We need to have the proper documentation to support if that is the way to go. We are looking at competitive opportunities, and I also, you know, Congressman, but just in case there are others that aren't following this day-to-day, there are those that actually protect the missile fields, and there is another part of the requirement as well.

So maybe one is more urgent than the other. We are essentially working with Admiral Haney. We are working with Chairman Dunford and other members of the team of the Joint Staff to look at the case for how urgent we need to go. I think it is urgent. You think it is urgent. I think we are a couple of weeks away, at least within the Air Force, of having a way forward.

Mr. ROGERS. Great. I would like, if you would, by the first of April if you could provide me a detailed cost estimate on what you anticipate it would cost the Air Force if you have to call the Army National Guard in to provide gap fillers for these missile wings' security. I would like to know what that would be with specificity if you could.

Secretary JAMES. We will do that.

[The information referred to can be found in the Appendix on page 171.]

Mr. ROGERS. And then moving on to launch. As you know this is taking up a lot of your time and mine. And for those who aren't familiar with how we evolved with the EELV [Evolved Expendable Launch Vehicle] program, it started in the 1990s with Boeing and Lockheed. Now, we tried to help both those two commercial enterprises be successful with launch capabilities and that just didn't work out, so we helped them form United Launch Alliance [ULA] with a lot of expense to the government. But it is essential for national security and access to space.

Could you certify Secretary James that there is a sufficient commercial market to support these companies over the next 10 years and sign firm-fixed-price contracts for the same?

Secretary JAMES. I could not certify that, Chairman. I know the companies are trying to become competitive because they believe it, but I certainly could not certify such a thing.

Mr. ROGERS. And do you concur then with the analysis by General Mitchell's study which stated quote, "Launch capacity exceeds demand by a 3 to 1 ratio to service it in this fixed market."

Secretary JAMES. I would have to go back and read that to see the context. I am not sure he was talking about the total world market, including commercial launches, or whether he just meant NSS [national security space]. So please allow me to go back and reread that passage and get back to you for the record.

[The information referred to can be found in the Appendix on page 172.]

Mr. ROGERS. Well, and you will find he was making reference to that global market, and it is just a practical term that we are going to have to acknowledge. I am not sure what the answer is going to be either.

But you and I are going to have to navigate these waters and figure out how to make sure we have assured access to space. I don't know what the answer is going to be ultimately, but I would look forward to having more dialogue with you offline about this.

Secretary JAMES. And Mr. Chairman, I would also bet the CNO's paycheck that we will be having more dialogue, you and me, but I thank you very much.

Mr. ROGERS. Yeah. We are determined to make sure he never gets paid again, aren't we?

Thank you, Mr. Chairman, I yield back.

The CHAIRMAN. I appreciate it and I hope you all figure it out because it is a complex subject. Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman. Thank you to all of the witnesses. It is great to see our former colleague. It shows there is hope after Congress. And again, your testimony has been outstanding this morning.

So Secretary Mabus, you know, again, we enjoyed your long service here, longest since World War I, and I just want to follow up again with some of the exchange earlier which I think we are all on the same team here, that shipbuilding is the long game, and that we did as a nation take a holiday. As you pointed out only 41 ships under contract during the 8 years preceding your time in office. We doubled that to 84. I see it every day in southeastern Connecticut.

We have the *Illinois* christening, the *South Dakota* keel laying is coming up soon. In the yard we have the *Colorado,* and *Vermont.* There has not been four ships under construction in southeastern Connecticut at the same time since the 1980s, and, frankly, the biggest challenge we have is workforce. Secretary Perez is right down the hall. We just had a hearing on the Workforce Investment Act and the fact that Connecticut, like Maine, Vermont—excuse me, Virginia, Hawaii, California, they are all out there really now scouring the countryside for metal trades. And again, I think that speaks volumes about your record and I want to thank you publicly for the time that you have spent leading our Nation and really recovering our fleet.

Admiral Richardson, we had a sequence of witnesses over the space of about 7 days a couple of weeks ago. Admiral Stavridis, Admiral Harris, and General Breedlove. And without any prompting, Admiral Stavridis talked about how Russian submarine activity now is about 70 or 80 percent of where it was during the Cold War. Admiral Harris again just said, you know, we need more submarines out in the Pacific. General Breedlove talked about the Greenland-Iceland-U.K. Gap, and that we are playing zone defense.

We have a force structure that was developed back 10 years ago of 48 submarines in the fleet. We have 54 now that are under stress. Do we need to take another look at that force structure?

Admiral RICHARDSON. Sir, we do. And start of that look right now is part of our updated Force Structure Assessment and that will include a comprehensive look at attack submarine force levels.

Mr. COURTNEY. So I mean, obviously, this budget this year, keeps the two-a-year build rate for *Virginia* and has all of the investment in *Ohio* replacement.

Admiral RICHARDSON. Yes, sir.

Mr. COURTNEY. But, again, even with that, we are looking at a 41-sub fleet unless we again tweak or move—can you talk about that a little bit?

Admiral RICHARDSON. Yes, sir. This goes to one of the points that the Secretary makes so eloquently is that these are long-term decisions, as you highlighted. So at the end of their lives, these ships leave service at the rate that they entered service, and we are building ships, submarines in this case, at three or four a year, and that is the rate at which they leave service. And so we have to be very thoughtful in terms of a building plan that reaches and maintains those required force levels.

Our two-per-year *Virginia* plan is part of that. We have done an intense look at the industrial base over the last year. We think we can mitigate that further, particularly in 2021 there might be room, industrial capability, capacity to build an additional *Virginia*-class submarine in that year so that would make it 10 over the 5-year plan. So we look forward to discussing that with you.

That would mitigate that trough somewhat. We are building the *Virginia* Payload Module, so we get more capability out of each of those *Virginia*-class submarines starting in fiscal year 2019, but we do have to continually challenge ourselves, to make sure that we have got the right number in terms of requirements, and we are doing everything that we can to look at meeting that requirement.

And you know, that comes up with a resource or a cost that has been traditionally considered unacceptable. I think we still owe you that plan at the best cost point that we could appreciate, and then we will have a discussion.

Mr. COURTNEY. Good. And as you know, the Seapower Subcommittee will work with you and I know I can speak for Mr. Forbes. I want to give you, Mr. Mabus, the floor for just—again, the question is, are we going to hit a 300-ship Navy with the contracts that are underway and the work that I described earlier that is happening right now?

Secretary MABUS. We are going to get 300 by 2019 and 308 by 2021 just with the ships this committee has authorized, that has been appropriated, and that are under contract today.

And once again, these are long-term things. I mean, it took—the fleet size we are living with today, those decisions were made 8, 10, 15 years ago. The fleet size that we will be living with in the mid-2020s, late 2020s, those decisions are being made today. This administration has built all of the ships we are going to be able to build and have them under contract.

Mr. COURTNEY. I yield back.

The CHAIRMAN. Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman. Ladies and gentlemen, thank you so much for joining us today and thank you for your service to our Nation.

General Neller, I want to focus on Marine Corps aviation. As you know, Lieutenant General Davis I think has done a very good job in trying to bring back Marine Corps aviation readiness. Can you give us perspective? When General Paxton came and testified before our subcommittee he said that we don't get back to restoring full-scale or full-spectrum readiness in Marine Corps aviation just by adding flying hours. Can you kind of give us a drill down of what we need to do to get you back to full-spectrum readiness on Marine Corps aviation?

General NELLER. Well, Congressman, thank you for the question. It is different for every model/type/series, but in general, we have to repair our legacy aircraft that we have to keep online and we have to modernize by buying new airplanes. We are buying the F–35. The acquisition objective is 420 and we have got about 70. We are going to stand up our second squadron.

At the same time, we have got F–18s that are going to fly for another 10-plus years. MV–22s, acquisition objective 360; we have got about 270, 280, so that is happening. So same thing with the Hueys and Cobras. CH–53 is probably in the hardest spot because we have two demonstrators that are flying. They are flying very well. We have got over 35 hours. I saw them last week, but that program is going to take some time to go through the test and evaluation.

So it is a combination. Buy new, repair our old, and the accounts for fiscal year 2017, this budget fully funds the sustainment accounts for putting aircraft through depot level. And Admiral Richardson and I were out at the Fleet Readiness Center in San Diego. They have improved their output. We opened up other venues, got two contractors that have provided additional aircraft. So all of that is going to go on.

But the bottom line is, we've got to get more airplanes on the ramp. Pilots have to fly more. We have got to get our maintainers the parts they need to fix the airplanes. So all of these things are working. I think we have a plan. It is funded. But it is not going to happen overnight. It is going to take a couple of years of this combination of effects.

Mr. WITTMAN. Very good. Thank you, General Neller, I appreciate that. I know we are all concerned about getting to the point that we project the Marine Corps needs to be at. So we want to make sure we keep up to date on that.

Admiral Richardson, I know that you have been approached about a number of submarine issues, but I want to drill down a little bit on the *Ohio*-class replacement. The largest of the fiscal year 2017 research and development programs are for *Ohio*-class replacement. And you have talked extensively about the design phase, making sure we are mature in designs, so when we go to build that boat we are ready to go. We understand, though, that if we take the cost of that boat wherever it ends up, and we put that in the middle of a shipbuilding budget, we know what happens. It doesn't take a rocket scientist to figure that out.

What we, I believe, need to be looking at is, what do we do to mitigate that? And what we have done, as a House, and trying to get the Senate to do, is a National Sea-Based Deterrence Fund, which is how we funded *Ohio*-class submarines originally.

Can you give us perspective, what kind of cost savings will we be able to accrue by funding *Ohio*-class replacement with the National Sea-Based Deterrence Fund, because there is still some resistance here. I think that that is the way to do it, and it doesn't interfere with other long-term viability of other shipbuilding programs.

Admiral RICHARDSON. Yes, sir. Thank you for the question. First of all, I like what the fund stands for, which is that this is a national program of absolutely top priority for national security, and so it elevates the discussion to a national level which is exactly where I think it should be.

With the authorities that the fund may provide which would allow you to make very wise business decisions, the projections are that you could save on the order of 10 or more percent across the program, which is essentially getting one submarine for the cost of, you know, free, right.

Mr. WITTMAN. For the total cost?

Admiral RICHARDSON. Yeah, so significant savings achievable by the use of a fund like that.

Mr. WITTMAN. Got you. General Neller, from your perspective we look at all of the shipbuilding programs. Obviously, the ones we are addressing are *Ohio*-class replacement, but also amphibious lift. One of the elements is to look at, you know, what we are doing with the next generation amphibious ships, the LX(R), give us your perspective on the importance of the timeliness of getting that program locked in as far as building those ships.

General NELLER. Congressman, similar to what the CNO said about submarines, we build these ships. They have a certain life expectancy, so if you don't have a replacement vessel, they have to

have an extension program or their maintenance costs are increased, so you are spending money to keep something older online.

So right now, due to the support of the Congress, and this committee, we are going to get LPD–28, give us 12 LPD–17 class ships. And the next class of ship is the LX(R) to replace the landing ship dock, the *Whidbey Island/Harpers Ferry* class. The first ship of that class is supposed to be built in 2020. There is some advance procurement of long-lead items like engineering, power, engines, and steel.

But there is a gap, and anytime you have a gap, the workforce is not able to work. You forget what you have learned and your costs go up. So there was a discussion about it of LPD [landing platform/dock] repeat. Can't make the price because we are all concerned with the cost, so there is a ship design, and talking with the CNO, and the Secretary, and Mr. Stackley. The plan is that we come up with a design. It is going to be bid between a couple of different shipyards and we will start to build that first ship in 2020.

If there were more money and we could come up with a design faster, that all could possibly be moved to the left. But then ideally, whenever we do start to build that ship we should build—there should be not build a ship, stop, build a ship, stop. It should be build a ship, start the next one so that workforce gets smarter. That we know will drive the cost down.

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

The CHAIRMAN. Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman, and thank you lady and gentlemen for your service to the Nation. There can be no greater honor for me as a Congressman than to serve on the House Armed Services Committee that is charged with the responsibility of authorizing expenditures for the national security of this country. Which is guaranteed by our men and women who serve us in the military and you all lead that effort. And I thank you for that.

I will say that since 2011 you have been operating under sequestration and each one of you have talked about how this has eroded your ability to ensure the continued superiority of the United States military, and we have heard a lot about the impact on ships and planes. We know that the Air Force, and the Navy, and the Marines, are very important elements of our superiority. But we should not forget about the foundational element of boots on the ground Army.

And so I want to ask about how sequestration, which is not a program of President Obama. It is actually a statutory law passed here in Congress. I think members of the Armed Services Committee were not smitten with it at all because we knew what impact it would have, across-the-board 10 percent cuts without regard to need or jeopardy that we would place the Nation in. But I want to talk about that in terms of the Army and how the end strength of the Army has shrunk due to sequestration.

Mr. Murphy, and General Milley, would you address that, please?

Secretary MURPHY. Congressman, off the bat, budgets are moral documents. It shows what our country's priorities are. You know, I left the Congress 5 years ago and the budget for the Army at that

time was $243 billion. You heard my opening testimony. We are asking for $125.1 billion. So we have downsized our Army.

I would like to recognize, though, I was thankful also for the BBA of 2015, which helped relieve that sequestration. We are very thankful for that predictable and adequate funding. But if you are asking me as far as what this budget request is, it is minimal. It is minimally adequate. We are taking high risk, as an Army and as a Nation, when you fund our Army at this level, especially when you consider the OPTEMPO [operating tempo] and the world right now, when you talk about ISIS, a resurgent Russia, aggression with North Korea.

So we ask you to support our budget request at that level. But I would like to, you know, when you look at brigade combat teams, you know, again, we are a total Army but as far as 5 years ago, when I left the Congress, we had 45 brigade combat teams on Active Duty, now we have 31.

Mr. JOHNSON. In addition to the diminution on end strength, we also have issues of readiness and modernization. General Milley, could you comment on that?

General MILLEY. Yeah, thanks, Congressman. As I mentioned earlier, the readiness issues are our number one priority as we go forward. Because we are uncertain, and I can't tell you or anyone else that our Nation won't be in other conflicts next week, next month, next year, or the year after that. None of us at this table can do that. So we have always got to maintain readiness, and readiness is a number one priority.

Right now the readiness of the United States Army, all components of the United States Army, is not at a level that is appropriate for what the American people would expect to defend them. And I will be happy to give a classified briefing on the exact specifics of that. But it is not at the levels it can execute satisfactorily in terms of cost, in terms of time, cost in terms of casualties, or cost in terms of military objectives.

As far as the impact, specifically, on the Army of the diminution of funding, et cetera, the Army is the largest force, largest military force among all of the joint forces. Right now, as I mentioned earlier, we do 46 percent of the annual demand of the combatant commanders, and 64 percent of everything they ask for on an emergent basis comes out of the Army. And we have suffered something like 60 or 70 percent of all the casualties over the last 15 years.

And we have been cut significantly, so you can imagine there is a significant amount of stress on the force as a result. And that also impacts readiness, so you have got the largest force, the largest demand, the largest stress, and the least budget. All of that is cumulative on the United States Army. We will drive on. The caissons will go rolling along. We will execute the tasks given to us on a day-to-day basis, but it does come with risk, and people have got to be clear-eyed and open-minded about what that risk is. And again, I will be happy to talk in a classified session in more detail on the risk if you desire.

Mr. JOHNSON. Thank you, I yield back.

The CHAIRMAN. Mr. Franks.

Mr. FRANKS. Thank you, Mr. Chairman, as always, the generals and admirals, and all the service people there. We express a great gratitude to you all for everything that you do.

General Milley, I have been especially impressed with the cogency and clarity of your comments in recent days and I appreciate you speaking so clearly to us. Because I believe your perspective is critically important.

With that, I am going to direct my questions to the civilian command structure here. Secretary James and Secretary Mabus, during its 7-year tenure, the Obama administration, I understand, has reviewed and reassessed the need for the nuclear triad. Has the administration conducted detailed analysis of eliminating one or more legs of the triad or significantly altering the U.S. nuclear posture. And if so, what were the results of those efforts?

And I will start with you Secretary Mabus.

Secretary MABUS. Congressman, I am not aware of any detailed look at that. We have been, obviously, focused on our leg of the triad, the *Ohio*-class replacement, and have, obviously, done very detailed analysis on how that program comes into being in its own track for 2021.

Mr. FRANKS. Let me kind of re-orient the question. Why does the administration continue to propose such strong support for and recapitalization of the nuclear triad from your perspective?

Secretary MABUS. Well, to quote the CNO, it is a matter of our national existence. And from a Navy standpoint, it is our top modernization program. It is the top program that we have. It is on track to begin construction of the *Ohio*-class replacement in 2021. That is when we have to begin.

But as this CNO, and the three that I have been privileged to serve with have said, and I have said, you are going to have to look at this program with a national lens because if you drop this into the middle of a Navy shipbuilding budget, it will just gut Navy shipbuilding for decades to come. And so the reason that we are focused on it is because it is an existential program, and the reason that we are focused on how to do it is to do it without damaging our conventional superiority as well.

Mr. FRANKS. Well, thank you, sir. Secretary James, I might ask if you share the same endorsement and support to the nuclear triad?

Secretary JAMES. Yes, I absolutely support it and I believe that the administration supports it precisely because it has worked for us for decades. It has provided that deterrent and each leg of the triad adds a little bit different aspect to that.

So the ICBMs are considered responsive. The sea launched are considered survivable, and the bombers, of course, are flexible and they also are survivable because of the dispersion.

If I could just add one point. Obviously, it is a certain amount of money, and to the extent we fund one thing if we are under budget constraints, we can't fund another. So I would just like to say I am not fully familiar with the strategic deterrence fund that you all have referenced here. But if that is a strategic deterrence fund which would help or benefit one leg of the triad, I would ask for consideration that all of the legs of the triad be included in such an approach.

Mr. FRANKS. Well, Secretary Carter and Deputy Secretary Work have made clear that the nuclear deterrence is the Department of Defense's highest priority mission. Certainly, I agree with that. But for the Navy and the Air Force, how are you prioritizing your portions of the nuclear deterrence mission within each service, and what nuclear deterrence programs are you pursuing, and where do they rank in your services' priority list? You kind of have to take an overview, each of you, if you would, of those points.

Secretary MABUS. It is our top priority. We have said that for several years now. The first boat is funded. We have funded all of the research and development, all of the design work, all of the engineering work going into this. As was said in answer to an earlier question, we have been working with our colleagues, the British, on a common launch, common missile launch tube so that we do save some money there.

We have been driving down the cost of these boats and we are on track to begin construction of the first one in 2021, which will allow it to take its place in the fleet, and in the rotation at the correct time when the *Ohio*-class begins to retire.

Secretary JAMES. And Mr. Franks, I would say there is three parts. There is the people who perform the nuclear mission, there is the readiness of those people, and then there is the modernization aspects. And over the last several years we have shifted billions of dollars in additional people to try to address all of these areas.

So when it comes to modernization, of course, we have the B–21, we talked about that somewhat earlier. We have the ground-based strategic deterrent, which will be the future of the ICBM force, and then we, of course, have to also fund appropriately the weapons that would go with these.

Mr. FRANKS. Thank you, Mr. Chairman. I thank all of you.

The CHAIRMAN. Mr. O'Rourke.

Mr. O'ROURKE. Thank you, Mr. Chairman and I would like to thank each of you for your testimony today and your service to the country.

And I would like to ask Secretary Murphy and General Milley a series of questions on readiness based on some of what we have heard so far today.

Secretary Murphy, you defined readiness as the components being a fully manned and fully trained force that we send into harm's way, and General Milley has been very eloquent about the consequences of a failure to do so. It really will end up costing this country the lives of the service members who are there fulfilling our missions.

If the publicly stated goal for the Army is to be at 90 percent readiness, and if we are in this setting somewhere short of that, what does it cost to get us to our stated goal if it is not in this President's budget?

Secretary MURPHY. Well, Congressman, a couple of things. As far as when you look at the budget, as I mentioned, it is minimally adequate and we are taking on high risk. If you are talking about end strength that is also, we are at the minimal levels. We are in a glide path, as you know, to get down to 980,000 in the total force Army.

If you do give the Army money and extra money, it doesn't mean that we are going to be at 90 percent the next day. Readiness takes time to build and that is why we are expanding CTCs, the combat training centers. And that is at total force. So next year we have planned that we are going to double the National Guard units, brigade combat teams going through the CTCs. So it is multilevel.

So it is not just—the money is critically important. If you give us the money, we will be more ready. We will give the training. And as you know, we train like we fight.

Mr. O'ROURKE. You really got my attention earlier when you said you put us at high risk when you fund the Army at this level, which leads me to this conclusion. I don't want to be a passive witness to high risk. And so if more money is needed to improve readiness and reduce risk, especially for the service members whom we want to return safely, then I want to fund that. I want to be an advocate for that funding, and I want to be able to convince my colleagues that that funding is necessary because it comes at a cost in tax dollars, other opportunities, and other priorities.

So I want to know what that number is. I don't simply want to assume that we must move forward with a high-risk posture for the U.S. Army, so looking for a specific number that I can advocate for.

Secretary MURPHY. Real quick. We have, obviously, our base budget request at $125.1 billion. We have an unfunded request which is not part of that. Please fund the base. Then we have unfunded. It is called UFRs [unfunded requirements], as you know, at $7.5 billion, which helps mitigate that risk. But again, that doesn't mean that we are at 90 percent the next day. I mean, this is a process and, you know, I believe the chief wants to comment as well.

General MILLEY. Congressman, the whole issue of readiness, the very first question any of us needs to ask is readiness for what? And as I mentioned earlier, the United States Army, you can take it to the bank right now, is ready to fight ISIS, Al Qaeda, al-Nusrah, and any other terrorist group, counterinsurgency type thing. That is not what we are talking about when we are saying risk.

We are talking about great power war with one of, or two of, four countries. You are talking about China, Russia, Iran, and North Korea. That is the guidance we were given. That is how we are force sizing the budget, or that is how we are sizing the force and that is how we planned the budget, in accordance with the National Military Strategy, the Defense Planning Guidance, and a wide variety of other documents. To do those operations against those countries, if that day would ever come, that is what we are talking about in terms of the level of risk.

Now, we collectively can roll the dice and say those days will never come. And that is a course of action. That is not a course of action I would advise, and I think that the guidance is correct. We need to size the force and train the force, all the forces, Army, Navy, Air Force, Marines—not just the Army—to be able to handle those contingencies. And I think there is a high level of risk associated with those contingencies right now.

Mr. O'ROURKE. So let me ask this. If others before us have said we are at the low ragged edge of what is safe or manageable risk, if you say we are at high risk, does $148 million total base in OCO [Overseas Contingency Operations] for the U.S. Army get you where you need to be, or do you need something more to mitigate that risk?

I am accountable for this, so I want to make sure I am advocating for, and we are legislating for, the appropriate number to get you to where you need to be based on risk as you see it.

I am out of time, so I hope that someone will follow up on this question because I want to know what that number is.

Secretary MURPHY. Congressman, it is a minimal level.

Mr. O'ROURKE. I yield back.

The CHAIRMAN. Great questions. Mr. Turner.

Mr. TURNER. Thank you. I want to thank each and every one of you for the fact that you have, with clarity, assisted us in the debate on the issue of sequestration. Following on with a previous questioner, we appreciate an understanding that the base budget number that you need is $574, and we are certainly working and struggling to get it to that level. It is unfortunate that the administration did not follow the budget deal that had been agreed to with the House and the Senate, and did not send over a budget that was consistent with the 2-year predictable funding that Secretary Murphy had indicated was helpful.

The base budget sent by the administration is lower, and I know you are all forced to present us budgets that were for that lower number. We are hoping to restore some of those to get back to what would give you some consistency in the funding that you expected from last year.

General Milley, you had said that the issue of risk, and it being unacceptable with respect to readiness, equated to increased time and casualties.

Secretary James, the general gave a great description for the Army. Are we currently at an unacceptable risk for the Air Force with respect to readiness, and does that risk also equate to increased time and casualties?

General MILLEY. Congressman, could I just make a quick clarification? I did not use the word "unacceptable." It is not my choice to say whether the risk is acceptable or not acceptable. My military professional advice tells the decision makers, Congress, the President, the Secretary of Defense, the Secretary of the Army, what I think the risk is. It is the decision maker's choice to determine whether it is acceptable or unacceptable.

Mr. TURNER. I appreciate that you said that. So let's go to you then, General. Help me with how to characterize that risk because, obviously, as we attempt to advocate to put the base budget at $574, I believe and I think many believe it is unacceptable. How would you characterize the risk then currently?

General MILLEY. The risk in terms of time, troops, and tasks, and that is how we categorize it, is a military risk, can you do the military tasks expected of you in the various contingency operations? Yes or no. And if you can't do all of them, what ones can you do? And that translates into a level of risk.

Second is the effect on time. Can you do those tasks and can you get them done on time in accordance with what is determined by the decision makers of being an acceptable amount of time for the American people to accept in the course of a conflict. And troops——

Mr. TURNER. General, I understand that balance very good, but where are we in that balance?

General MILLEY [continuing]. Is casualties. I have said that level of risk is high risk for the contingencies, that are the higher-end contingencies. Not for the day-to-day.

Mr. TURNER. I understand.

General MILLEY. But for the higher-end contingencies, we are, in my view, my professional view, at a high risk to execute the tasks that would be required. That is correct.

Mr. TURNER. Excellent, perfect. So you are using the general terms for those high contingencies. Is the Air Force in the same place the Army is?

Secretary JAMES. So half of our combat Air Forces are not sufficiently ready for that kind of a high-end fight that General Milley just described against one of those great powers. Ready to do what? That is an excellent question. We too are ready and we have been doing it for 25 years. To fly and operate in the kinds of environments that you are currently seeing in the Middle East, it takes a toll, but we are ready. We are doing it.

I also want to agree with the point about time is a factor here. So money is helpful for readiness, but freeing up the time of our people to go and do this training is equally important. And right now, we are stretched so thin, and we are so small as an Air Force and we are so deployed we are having difficulty getting the time freed up.

So yes, I am very worried about it. And yes, if you go into a high-end conflict against a great power and you are not sufficiently ready, history teaches me you lose more lives and it is a prolonged conflict. And it is very worrisome.

Mr. TURNER. General, to get back to you. You had talked about rolling the dice, and maybe the day will never come, and in looking at that calculus, don't our adversaries know it too? So if we decide just to underfund assuming the day will never come, don't we lessen our effects of deterrence and thereby perhaps even increase our risk?

General MILLEY. I believe that is true historically, and I believe it is true in the present, and likely would be true in the future, that if you are strong that that aids or increases your probability of deterring an aggressor.

Mr. TURNER. General, going back to Russia then. You know, considering that it very well could be our number one threat, are we ready currently for direct military conflict if Russia continues its adventuresomeness in Ukraine and the extreme exercises that they have had in both scale and scope with respect to the Baltics, are we ready?

General MILLEY. I think you have to look at that at three levels, Congressman, tactically, operationally, and strategically. At the strategic level, there is no doubt in my mind that the United States would prevail. And it would be catastrophic for an awful lot of peo-

ple, but the United States would prevail. Tactically, however, you are talking about a different ball game here.

Mr. TURNER. And strategic being nuclear?

General MILLEY. Well, I am talking subnuclear. No, I'm not talking about a nuclear exchange. That would be, to me, that is beyond the beyond. But my point is, I don't think we ever want to get that question asked or answered. What we want to do, I believe, is to deter further Russian aggression in Europe. And they have been aggressive since at least 2008 or so. So I think the key is to deter Russian aggression and assure allies. And you do that with strong capabilities, some of which are military, some of which are diplomatic, or informational, or economic. There is a whole suite of a toolbox that we can use.

Mr. TURNER. Thank you for your clarification on strategic, because many people would translate that——

General MILLEY. No, that is not what I was talking about. No, not at all.

Mr. TURNER. I appreciate that you walked that back.

The CHAIRMAN. Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Chairman. And I want to thank my colleagues here, and certainly the witnesses for focusing on what we just discussed. What is strategic, and Mike laid that out. And General Milley, your answer of strategic is something that we need to be very, very aware of.

Normally when we talk strategic, we talk nuclear. But you said something different. And I think that we need to understand that. Specifically, question, Secretary James, what is the cost of a single F–35?

Secretary JAMES. I think the current unit is $105.

Mr. GARAMENDI. I am sorry how much?

Secretary JAMES. It is $105 million is the current unit cost.

Mr. GARAMENDI. And you are delaying how many F–35s which you earlier said were essential for your mission?

Secretary JAMES. In fiscal year 2017, five.

Mr. GARAMENDI. How many?

Secretary JAMES. Five. In fiscal year 2017.

Mr. GARAMENDI. Five.

Secretary JAMES. With the greatest of reluctance. That is the budget.

Mr. GARAMENDI. So $600, $700 million, something like that?

Secretary JAMES. That sounds about right.

Mr. GARAMENDI. And General Milley, to address your question of risk, how much money?

General MILLEY. We have submitted a UFR through the Department of Defense that would mitigate the risk. Again, it goes back to what is the task, the task that were given to us——

Mr. GARAMENDI. No. We are talking about the strategic, your discussion of strategic.

General MILLEY. That is what I am talking about. So the tasks that were given to us, is be prepared to deter, fight, and win. I would have to really talk to you in a classified basis to tell you the exact tasks that were given to the Army or any of us, because it is a classified document. It is Defense Planning Guidance.

Mr. GARAMENDI. Is the dollar also classified?

General MILLEY. No. The dollar is not.

Mr. GARAMENDI. And that number is?

General MILLEY. Well, that number would vary. Again, it goes back to what tasks are you willing to accept risk on?

Mr. GARAMENDI. Let's just say Europe.

General MILLEY. I think that the European task that we are covering with the ERI [European Reassurance Initiative] in this budget of three-point-something billion dollars, I think, will go a long way towards deterring Russia and assuring allies and we would ask for your support of that ERI. Should more be done? Yes, I think more should be done.

Mr. GARAMENDI. And is the cost of that much more?

General MILLEY. Well, again, Congressman, that would depend on the task. I am not trying to be cagy.

Mr. GARAMENDI. No, I understand.

General MILLEY. It depends on the specifies tasks. And there is a menu of options. If we threw more money at it, we could put—you know, ERI, we could put more equipment——

Mr. GARAMENDI. I am going to move on. Thank you. I get a sense of additional money reducing the risk.

General MILLEY. Sure. That is right.

Mr. GARAMENDI. General Neller, you talked about your needs. You have got needs that are not being addressed. Where I am going here is to this nuclear issue. We are going to spend $3.3 billion on every single one of the nuclear weapons. That is the bomb and related services to it. And we are going to be spending somewhere around, I don't know, $113 million preparing for the Minuteman IV, the next missile. And there has been discussion back and forth around this table about priorities.

And the question that we need to ask ourselves is, are we prepared to set all of you on a mission to spending close to a trillion dollars over the next 25 years or so on revamping, rebuilding our entire nuclear arsenal and delivery systems? You know, we need to make that choice now and somebody said it is the next President's choice. No, it is our choice today because we set you on a path to do that.

And the question is, what are the real important things that we need to do? Do we really need to replace the Minuteman IIIs with Minuteman IVs in the next 20, 25 years? Do we need to do that? Do we really need to have a new long-range cruise missile, or can we delay that and instead, spend the money on ramping up the Army?

General MILLEY. May I take a shot at that from an Army perspective just briefly? I just want to be clear. I don't have a part of the triad in a sense, but I can tell you that in my view, my professional military view, and I am a member of the JCS [Joint Chiefs of Staff], that the nuclear triad has kept the peace since nuclear weapons were introduced and has sustained the test of time. That is not unimportant. And that system has deteriorated, Congressman. And it needs to be revamped. It is not even an Army system. It needs to be overhauled and brought back up to its level of readiness.

Mr. GARAMENDI. We are not debating that it needs to be revamped. The question is how much and when?

General MILLEY. Okay.

Mr. GARAMENDI. And as we make that choice, right now the choice is to do it now and get on with it and to spend an extraordinary amount of money, which will come out of every other program, not just the military, but every other program. So there are some hard choices that need to be made.

General MILLEY. Uh-huh.

Mr. GARAMENDI. And right now our choice is to do it all. I yield back.

The CHAIRMAN. The time of the gentleman has expired. Mr. Hunter.

Mr. HUNTER. Thank you, Mr. Chairman, gentlemen and lady. Thank you for being here today.

Mr. Murphy, it is good to see you. Mr. Rooney says hi, by the way. Great to see you. Last time I saw you we debated Don't Ask, Don't Tell on the floor, I think. It was a long time ago.

Secretary MURPHY. That is true.

Mr. HUNTER. It is great to see you. And let me just tell you, it fills my heart with joy that no matter what administration we have, whether it goes back and forth, to see the uniformed leaders in front of me right now that we have today, it just makes me happy. It is a very reassuring feeling to see all of you here. The cream has risen to the top, and we are glad you are in charge.

General Milley, I would like to just say, I want to go through a few things that I have worked on over the last couple of years with the Army. You had Will Swenson who ended up getting the Medal of Honor [MOH]. His nomination got lost. My office found it. It wasn't lost. It was mishandled. CID [Criminal Investigation Command] agents even went through his trash at his house, but he got the MOH and the Army did the right thing in the end.

Major Matt Golsteyn. He killed a bomb maker who killed several Marines. The Army wanted to put him in jail for about 20 years. Went to a Board of Inquiry. The violation could not be substantiated. His case was handled okay. Secretary McHugh revoked his Distinguished Service Cross over something that he did that was unrelated. The Army kind of did the right thing there.

Lieutenant Colonel Jason Amerine. The Army investigated him for talking to me about hostage recovery. But because of Jason, we were able to change the hostage policy for the country. This committee and this Congress, and the President then followed suit. We changed the hostage policy and this committee benefited from his contribution to the Bergdahl report.

Earl Plumley. He was a soldier nominated for the Medal of Honor in Afghanistan, supported by you and General Dunford. Both of you signed down on it. The Army downgraded him to a Silver Star, not even a Distinguished Service Cross. That case is now with the IG [Inspector General].

Charles Martland roughed up a child rapist and the Army tried to expel him. He has now been extended three times and let me just tell you, he was rated number 2 out of 400 SF [Special Forces] instructors. He is before a board now. We are hoping the Army will do the right thing.

These are not just personnel cases to me. What they represent are systemic issues that have huge policy ramifications stemming

out of each one of these issues. Each one exposed a certain unique problem. We tried to fix the problems by first fixing the personnel cases themselves, and then trying to make a systemic change, and do our oversight role here in Congress.

For the most part, the Army does the right thing, but it does it kicking and screaming sometimes. You are restoring my faith in what the Army should be. Your predecessor, the previous Secretary never came to my office, never called, wouldn't answer my phone calls, nothing. So everything that we did, it wasn't a nice conversation with the Army or actually trying to fix the problem. We had to bludgeon the Army with media, and going in and doing as much as we can to make them react to stuff that they should have reacted to simply with a phone call to me, and we could have worked these things out.

You personally are restoring my faith and confidence in the Army. My dad was in the Army, the 173rd. My little brother was in the 4th Stryker Brigade. I forgive them for joining the wrong service. I think you are the right leader for today's Army. And I want to just keep engaging with you because I know you are going to put the warfighter first. And in the end, your dad is a United States Marine. So you can't be that bad. And I just want to say thank you. Thanks for doing what you are doing.

General MILLEY. Thanks Congressman, I appreciate that. And I am very proud to be part of a joint team. My mother was in the Navy as well, and brothers and cousins in the Air Force. So like one of the other Congressmen, it is a joint family. So it is a great team. And all of the services, every one of them, are really doing a great job so I appreciate your confidence. Thank you.

The CHAIRMAN. Mr. Ashford.

Mr. ASHFORD. Thank you, Mr. Chairman. Just briefly, I am from Omaha, and obviously, Offutt Air Force Base is in our district. And I go way back. My father actually flew a B–26 bomber that was—we talked about this—it was manufactured at the Martin Bomber Plant. The Martin Bomber Plant is still there, and hopefully it will remain for a couple more years anyway.

I was very impressed by so much that is going on there, the sexual assault project at Offutt is an immense success. And your comment on that is absolutely correct. I mean, they have a mentoring project, a mediation project. The young airmen who are involved in that project are making a significant difference. Specifically, on the 55th and all other ISR wings, the mission has changed dramatically in the last—as has been mentioned by everyone here.

How do you see on the budget side, I know there are, I think, 11 or 12 planes that are deployed at any given time, at least on the 55th, and many of them are at Offutt being maintained. Do we have adequate platforms and how do you see the ISR function being maintained and sustained under this budget and going forward? Madam Secretary.

Secretary JAMES. So I will begin, if I may, and I am sure the chief will jump in. There is a lot going on in the world of ISR to state the obvious. It is the number one desire of the combatant commanders. If you would go to any of them and say what more of the Air Force do you want, it is ISR, ISR, ISR. So we are adding

some additional platforms, as I mentioned, some additional MQ–9s, but even more importantly, let me come back to the people.

So there is a lot going on to try to alleviate some of the stresses to build up that force. Everything from, we are looking at standing up some new units so that there are additional places to rotate to. Other quality-of-life oriented areas, additional compensation, if you will, to recognize the special types of duties. So there is a lot going on and we do need to build up that force some more.

Mr. ASHFORD. General.

General WELSH. Sir, I would just add that the focus for us over the last 7 to 8 years has been a different part of the ISR enterprise than the part that lives at Offutt Air Force Base. The big wing ISR platforms have not been where we have invested most of our time, energy, and money over the last 8 to 9 years. That has been in the medium altitude unmanned fleet primarily, because of the demand to support combat and contingency activity over that time period.

We have got to get back at looking at what does a theater's worth of ISR look like to a joint force commander in a bigger, broader theater that is not involved in just a low-intensity conflict or a counterterrorism fight. And when we do that, I think we will find that we are going to have to also follow up on recapitalization, modernization over time for the capabilities of the 55th Wing because they are invaluable and they contribute at the national level, to decision making.

Mr. ASHFORD. Right. And I realize the challenges on the infrastructure side, and I appreciate the attention being paid to that as well.

General Milley, could I just ask one question? I was very impressed by your testimony, and your candor, and your discussion about what happens after ISIS is destroyed. How do you see that from a financial budgetary perspective as we move forward after the destruction of ISIS and related affiliates?

General MILLEY. Well, I mean, it is obviously too early to tell. The strategic task or the operational task given to us by the President is to destroy ISIS. I am 110 percent confident that we will do that over time. And we have made adjustments to the current campaign plan, and I think over time, that will be effective.

What comes next, though, what happens after ISIS is destroyed? I think that is yet to be decided. I think there is going to have to be a strategic choice that if we are successful and ISIS is destroyed, something will have to go into that space in order to stabilize that terrain for a period of time, the terrain and the population. Ideally, that would be international capability of some sort led by Sunni Arabs. But we are a ways away from that and I think that the planning and the thought and the analysis will have to go into that. How much will that cost? I don't know. I haven't seen any cost estimates, but I would imagine that wouldn't be cheap.

Mr. ASHFORD. Thank you, General. I yield back, Mr. Chairman.

The CHAIRMAN. Dr. Fleming.

Dr. FLEMING. Thank you, Mr. Chairman. General Welsh, I am encouraged by the Air Force's plans to move forward on recapitalization of the weapons storage facilities and was disappointed that despite the Schlesinger report, that the previous facilities were decertified, but I am glad we are back on track. So would you com-

ment on the weapons storage facility recapitalization programs in terms of timeline and what we can expect for the near future.

General WELSH. Yes, sir. We have, over this next year, roughly $40 million in our budget in 2017 to move forward with that effort. It is almost $700 million over the FYDP. As you know, F.E. Warren is being done right now. The weapons storage facility is being renovated. The next step is Barksdale, and that would begin in 2018. Beyond Barksdale, then I think the order after that would be Malmstrom and then Whiteman. And so we are on track. It is funded. The plans are in place. And we think the design work that we have done so far in F.E. Warren has been very well done, and it will provide us a standard footprint that we can then modify as appropriate for each wing, and that contract should be let this year.

Dr. FLEMING. Okay. Great. Great news. Okay.

General Milley, I certainly want to endorse your comments you made a few weeks ago about the Army not planning to cut one more infantry brigade. We feel like we are already below where we should be on this. I am very interested to learn about the Army's repatching initiative. I understand that this will not impact Active Duty forces' structure within the 310 Brigade at Fort Polk and would like to know more about this concept of repatching. I have not heard of that before, so if you could comment and expand on that.

General MILLEY. Yes. Repatching is probably a misnomer, if that is what people have mentioned to you. So what we are looking at is really associated units—we took a page out of the Air Force—so associated units between the National Guard and the Active Component of the Regular Army.

Years ago there was a concept called "roundout." It is very similar to that. It is not exactly the same. And I wanted to go both ways in the sense of National Guard units are affiliated or associated with Regular Army divisions or brigades, and they are essentially rounding out that force structure. And then it can go the other way as well. Specifically with 310, we are looking at putting 310—I think we said for them Texas—I might be wrong on the division, but——

Dr. FLEMING. I believe it is Texas.

General MILLEY [continuing]. To make them part of the 36th Division.

Dr. FLEMING. Yes.

General MILLEY. And that was an option. It has not yet been decided, by the way—these are options——

Dr. FLEMING. Okay.

General MILLEY [continuing]. That are coming forward after, and we are going to do rigorous analysis and study that is ongoing with the Army staff, and ultimately the Secretary of the Army will be the guy making the decision.

But the idea is to associate National Guard with Active Duty Component units, and we think that will overall increase the readiness of both components. So that is the idea behind it.

Dr. FLEMING. Right. You don't anticipate any change in manpower at Fort Polk? My understanding is——

General MILLEY. No.

Dr. FLEMING [continuing]. While these Active Duty members would be——

General MILLEY. No.

Dr. FLEMING [continuing]. In essence, assigned to the National Guard in Texas, they would remain stationed at Fort Polk.

General MILLEY. They would be Regular Army Active Duty soldiers. They would remain at their base station. There would be no budgetary implications in terms of 304 funds or mobilization funds or any of that kind of stuff. This is an association of Active and National Guard units where they would train together, Office of Professional Development classes, NCOPD [Noncommissioned Officer Development Program]. They would do FTXs [field training exercises] together. They would go on deployments together and so on and so forth. What we are trying to do is integrate the force to put teeth behind the idea of total force, to make that real, to walk the walk, not just talk the talk sort of thing.

Dr. FLEMING. Right. Okay. That is great. And I will just say in closing, I just want to thank all of the chiefs and secretaries for being here today and the great service you provide to our Nation. Thank you, and I yield back, Mr. Chairman.

The CHAIRMAN. Ms. Gabbard.

Ms. GABBARD. Thank you, Mr. Chairman. Good morning. Thanks to all of you for your service and your leadership.

General Milley and Secretary Murphy, I just want to say, as a soldier in the National Guard, I appreciate very much your leadership and the role that you have taken in highlighting the importance of this total integrated force that you have just talked about and actually backing it up with plans and actions and training that you have just laid out.

I think capitalizing on the resources and assets that we have within our National Guard and Reserve Components is critical. They have often been underutilized. And largely many of the challenges have come from really a problem with the culture in providing that wide gap between the Active Component versus the Reserve Components. So I just want you to know that the leadership you have taken on this has already trickled down to the unit level that I have seen and heard when I go to my drill training on the weekend and provided a very serious morale boost where people feel like they are actually being utilized for what they have been trained to do.

I want to touch a little bit on the end strength, this 980 number, and I think a lot of us have come at this from different directions. I think it highlights the concern that many of us have on what that number means and where we need to be. I think the Commission on the Future of the Army talked about, quote—this number being a, quote, minimally sufficient force.

Secretary Murphy, you used the words, I think, "minimally acceptable force that has created a situation of high-risk." Considering the both unconventional and conventional threats that we have, whether you are ranging from groups like ISIS to North Korea, what is that end strength number that would be sufficient to be able to confront these threats on at least two fronts?

Mr. MURPHY. Well, Congresswoman, first, thanks for being part of the Army team and your service as well. You know, we are obvi-

ously planning at that 980 level where we are still drawing down and still we have a little bit to go there. But, you know, we have been very clear; it is not just the end strength numbers. I mean, Congress could pass a bill that gives us higher end strength, but if it doesn't come with funding, that will very much hurt our Army because then you have to cut from—we have already cut from modernization.

As I said in my opening testimony, we are mortgaging future readiness. We are mortgaging modernization to focus on current readiness with the OPTEMPO that we are under right now. So, you know, I can't give you an exact number. That is for policymakers and the President to put forth. But unless that end strength number comes with dollars behind it, it will hollow out our Army. It would not be a wise decision.

Ms. GABBARD. Thank you.

General MILLEY. And I would echo that, Congresswoman. This budget, this President's fiscal year 2017 budget, takes us to 460 in the Active Component in the Regular Army by the end of the year, and it takes the Guard to 335 and the Reserve to 195. You know, is that sufficient? Again, it is readiness or capability to do what? Yes, we can do the National Military Strategy on a day-to-day basis, but can you do the tasks that are embedded within the other documents that are classified, and the answer to that is yes, but at high risk.

Okay. So then your question is, how do you lower that risk? End strength is one of the variables. Readiness is another one. Technology is another. Time, and there is a whole assortment of that, but end strength is just one. So I caution everyone about getting fixed on a fixed number, an end strength, a million, 500 thousand, 2 million, or whatever the number is. That can lead you to a bad solution. And I would be concerned as the Chief of Staff of the Army if someone put into law that the Army will be at number X, but no money came with it for readiness or modernization. That would actually hurt, not help.

If someone wanted to increase the end strength of the Army, I am all for it. I think it is a good thing. I think it is necessary, but it would need to come with the additional moneys for readiness and modernization. Otherwise, it would end up actually hurting.

Ms. GABBARD. Thank you. I think that is a critical point. As we go through this, oftentimes people are throwing around different numbers without really explaining what the rationale behind that number would mean and what the cost would be.

I have got just a few seconds left. I just want to highlight a concern about the reduction in National Guard MILCON [military construction] funding. As you well know, over half the National Guard readiness centers were built between the end of World War II and Vietnam. Places like the Pohakuloa Training Center in Hawaii, host not only our Active and Reserve Components, but also foreign military officers for RIMPAC [Rim of the Pacific Exercise]. It was built during the Korean War and is really in despicable shape. And just as we work through this, I ask you to place that at a high level of priority with regards to readiness. Thank you.

The CHAIRMAN. Mr. Gibson.

Mr. GIBSON. Well, thanks, Mr. Chairman, and I appreciate the panelists. Let me follow up on that question from Ms. Gabbard, and also earlier from Beto O'Rourke, and build on some of the testimony earlier today but perhaps come from a different perspective or different angle, because I am interested in the best military judgment from General Milley and General Neller.

Many of us here listening very carefully, building the record, having testimonials about the risk, and even today, we are hearing today about the very high risk associated to where we are. And I understand there is a bit of a dance that has to go on politically. I get that. But I want to cut through some of that with this assumption that, you know, a number of us here, in a bipartisan way, are building a bill that stops the drawdown of the land forces. And when you consider the fact that by 2018, we are talking about taking our land forces to pre-World War II levels, I think it is important the American people hear that, hear directly about where we are heading.

Now, with this bill, of course, and I heard the Chief of Staff of Army mention just moments ago, and I concurred with him completely, that this would have to come with the money necessary for readiness and modernization. And I say the same. And I met with General Neller about a week or two ago. But I am coming at it differently saying it this way: If the Congress was able to build the coalition to vote for and to pass stopping the drawdown, essentially to bring with it the moneys necessary so we don't hollow out the force, so that would be 55,000 numbers different from 2018 in terms of the 980 number would go to 1,035, and the United States Marine Corps instead would basically have 2,400 different, when you look at instead of 182, the Active Marine Corps would 184. And the Marine Corps Reserve instead of being 385, would be 389.

So my question is this: If we were able to get that done, please explain to my colleagues and the American people how this would impact readiness. Explain to us what you would do, Army, Marine Corps Generals, in terms of this increased end strength, what would that mean for the formations? How would that address the risk? And what would that mean to the families in terms of deployment and dwell? Thank you.

General MILLEY. Thanks, Congressman. Well, in terms of readiness, it would, I think, assist us with the deployment dwell and buy time because you would have the capacity and the force to do the day-to-day OPTEMPO—because as the wars draw down in Iraq and Afghanistan, they didn't end but they came down considerably, but so didn't the size of the force. So the OPTEMPO, the DEPTEMPO for the Army, has remained very high. We are still at, you know, 1 to 1 or 1 to just a little bit less than 2 in some capacity.

So time is critical to building readiness, the time to train, the time to rebuild the force. It would also, I think, probably allow for an increased number of capabilities, not necessarily brigade combat teams, but various other capabilities. Earlier, people talked about Patriot; Patriot is one of our significantly increased or high-stress units. And then on the families it would clearly reduce some of the OPTEMPO stress on a day-to-day basis.

So if that were to happen, that would be wonderful. We would welcome it. But, again, I just caution everybody; it would have to

come with the dollars associated with it in order to fund the readiness, in order to fund the modernization associated with those forces.

General NELLER. Congressman, I think it would do two things. If we increased the number of like units, it would improve our dep-to-dwell, which gives us more time to train before we deploy again, which overall improves our readiness, reduces stress on the force and stress on the families.

That said, we are in a process right now, and we are looking at what the force design looks like and—because I think we have realized it is because we have been doing what we have been doing successfully, but we have to look to the future. Do we have the right force design for the future? Do we have the right number of marines doing the right things? Do we have enough people that do information warfare, do electronic warfare, do cyber? Do we have enough communicators, enough intel analysts, and I think the answer is no.

And so we would probably take that number of people and use them to get those types of marines which would add those capabilities to make the force better and more ready and better prepared to go face the conflicts we think that we have the highest probability of operating in in the future.

Mr. GIBSON. I appreciate those comments. And for the record, both general officers talked about the impact on service members and their families. A lot of emphasis here in the Congress has to do with post-traumatic stress, TBI [traumatic brain injury], and other associated concerns for our veterans. And, you know, this bill, fully funded, would help address it.

And also in terms of the European Reassurance Initiative, concerns with the Islamic State, dealing with North Korea, some challenges potentially with China, you know, this is a very important bill that we need to muster the political will to pass. I thank the panelists. I yield back.

The CHAIRMAN. Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman. And I want to begin by thanking our wide array of distinguished witnesses before us today, and we certainly appreciate both your insight and your dedication and service to our Nation. So thank you for that.

Secretary Mabus, and—actually before that, if I could just acknowledge Mr. Murphy, and great to see you back before the committee and to have you with us today. So thanks for your service and what you are doing.

Secretary Mabus and Admiral Richardson, with the resurgence of Russia and the ascendance of China, and the role the Navy plays in the conflicts throughout the Middle East, there is obviously clear urgency to add more submarines to the fleet. In light of the impending submarine shortfall, can we count on efforts to extend the life of the *Los Angeles*-class boats? And how can we best direct our immediate and long-term investments to effectively mitigate any risks posed by the shortfall?

Secretary MABUS. Number one, Congressman, the Russian activity that you were talking about is the highest level we have seen since the Cold War. And the OPTEMPO for the Navy, and particularly for our submarine forces, has been exceptionally high for at

least the last decade. The number of submarines that we have today and the number that we are going to have into the 2020s, is an example of why it is so important not to miss a year in submarines. We have missed years building only one attack submarine, and we just can't make those years back up.

Where we can focus now is, number one, on making sure that the submarines that we do have in service reach the end of their life span, the *Los Angeles* class that you have mentioned in particular, that to the extent we can extend those, but to make sure that they reach that in a safe and effective manner.

Number two, right now we are looking at one *Virginia*-class submarine in 2021, because that is the year that the *Ohio*-class replacement begins to be built. We would very much like to and need to have a second *Virginia* class in that year. We are undergoing the studies, the look right now, to make that happen. And we simply need, as we go forward, to build more submarines, and particularly the attack submarines, and not let the *Ohio*-class replacement effort have an impact on so many of our other shipbuilding programs and in particular the attack submarine program.

Mr. LANGEVIN. I couldn't agree more, Mr. Secretary, and I share that concern. And the faster we can get these boats into the water, obviously the better.

Secretary Mabus and Admiral Richardson, as you know, the last eight *Virginia*-class submarines have been delivered ahead of schedule, and the program has been touted as a model for acquisition reform, largely due to the multiyear contracting strategy and its use of economic order quantities, something that I along with my then colleague from Connecticut, at times several years ago strongly advocated for that change in how we bought and paid for our submarines, allowing for a multiyear contract, which never had been done before.

Now, based on the initial industry estimates of the cost impact to module manufacturing, final assembly and testing, and the supplier base, the estimated long-term cost impact of an $85 million shortfall in AP [advance procurement] funding in fiscal year 2017 could be between $110 million and $210 million. So with this in mind, what ramifications might the Navy see, should we fail to provide robust funding for advance procurement for the *Virginia*-class submarine program, and how would the health of the force be affected?

Secretary MABUS. Everything you pointed out, you know, shows why it is important to do these things 10 at a time as a multiyear buy. We appreciate Congress allowing us to do that very much. Part of that multiyear buy is the advance procurement so that shipyards can buy in economic order quantity.

And to show you the impact that something like that has, in 2014, when we signed the last multiyear for 10 subs over 5 years, we paid for 9 subs, so we basically got a submarine free because we, with the help of Congress, let suppliers buy in economic order quantity. They were able to keep and train the workforce that was going to be needed. They were able to make the infrastructure investments that they needed to make.

Mr. LANGEVIN. Thank you. I know my time is expired. I hope we are not going to let advance procurement slip. So thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman. Ms. Welsh, welcome to the Armed Services Committee. The behavior in here is not always this good. We might need you back in a few weeks. But congratulations on your Easter Seals award dinner. I apologize I didn't see you when I was congratulating General Welsh on it and certainly look forward to having you back in Valdosta. I think it has been 10 months and 2 weeks since I saw you down there. I remember that because my baby was exactly 6 weeks old at that time and so I look forward to seeing you again in Valdosta, and General Welsh as well.

General Milley, I read about the issue with regard to the pistols, and I think it is absolutely ridiculous that you don't have the authority to pick a pistol for the Army. I would bet that the four of you in uniform could probably, in 10 minutes, come up with an agreement on what that platform should be. I would think that with a quick click or two on an iPad, you could figure out what the retail price of the pistol was, what a decent price for the pistol was, and what we should be paying for that pistol if we were buying it in the quantities that we would buy it in. And I want you to know that I do believe you should have that authority.

And I can't help but wonder that if it is this bad with a pistol, what about optics? What about rifles? I mean, all of the things that we are buying. How much bureaucracy is in there that we could remove that would allow you to equip your men and women better, faster, and with less money?

General MILLEY. Thanks, Congressman, and you are correct. The pistol is only one of the systems that is symptomatic of the system at large. First of all, we do, Secretary of the Army and I, do have the authority to pick the weapon, but that is at the end of the day. The problem is getting to the end of the day and how long it is taking. So this thing has been going on for like 9 years. And you have heard the whole litany of woe, about 300 pages, and so on and so forth. The test itself is 2 years long on known technology. We are not talking about, you know, nuclear subs or going to the moon here. We are talking about a pistol.

So, yes, it is a long, drawn-out process. It is not as adaptive. It is not as agile, it is not as quick. We don't have as many authorities. There are a lot of legal requirements and oversight and so on and so forth. We, the Army, would like to cut to the chase a little bit more on some of these things. And in the case of the pistol, we happen to be the one who's the proponent. All the other services would use the pistol that we get.

Mr. SCOTT. I would encourage all of you to get specific language that you would like to see in the National Defense Authorization Act that would help you cut through that red tape.

General MILLEY. Right.

Mr. SCOTT. I mean, I heard it on the sniper fields at Benning with regard to what a scope can be purchased for over the Internet versus what it costs to get the same scope on a rifle at a military base.

Secretary Mabus, real quick, thank you for naming the series of ships after John Lewis, my colleague from Georgia. Nobody deserves it more.

I want to go to Secretary James now with regard to the JSTARS, if I can. We have discussed the ISR shortfalls. I know we are making progress with the JSTARS. My concern still is the ISR gap between the old platform of JSTARS and fielding the new platform of JSTARS and how we intend to close that gap and what suggestions that either you or General Welsh have for closing that gap.

Secretary JAMES. So, again, let me begin and then I will yield to the chief. Just a couple of data points. I mentioned we are getting going now with the recap of JSTARS. It has taken too long for a variety of reasons, but in this 5-year plan, we do have it funded. So that is point one.

We have three contractors already that are under contract that are doing pre-EMD types of technology maturations, risk-reduction types of activities, and we believe that we will get a contract awarded for EMD, engineering, manufacturing and development, in about the first quarter of fiscal year 2018. It is one of those high-demand, low-density areas. And you are right; combatant commanders want JSTARS and they want that equivalent as well a lot. So we are moving forward with it, and regrettably it has taken as long as it has.

General WELSH. Congressman, I think by the time we finish this risk-reduction work and the technology maturation work in fiscal year 2017, and we approach that EMD contract decision, we will have a better idea of how much we can accelerate, if any, at that point in time. We would like to accelerate from a fiscal year 2024 IOC [initial operating capability] and move it forward.

Mr. SCOTT. General, thank you for your time and for your many years of service.

Ms. Welsh, good to see you again.

The CHAIRMAN. Mr. Gallego.

Mr. GALLEGO. Thank you, Mr. Chair. This question is for General Neller. We now have two special purpose MAGTFs [Marine air-ground task forces], a new UDP [unit deployment program] requirement to Australia, the Black Sea Rotational Force [BSRF], additional requirements for embassy security, and an uptick in exercise and security cooperation missions and, of course, the regular MEUs [Marine expeditionary units] that our marines go on. So I have three questions regarding the sustainability of this OPTEMPO.

One, is the current deployment-to-dwell ratio of 1 to 2 sustainable in terms of training and also just general retention of marines? Two, will we have the ability to surge forces in the event of a full-spectrum conflict? And, three, are there more opportunities—and I brought this up in private with you—more opportunities to better leverage the Reserves in any way to help in regards to the first two questions?

General NELLER. So, Congressman, based on the current force structure, we deploy the MEUs to maintain a 1.0 presence for CENTCOM [Central Command]. There is also a forward-deployed naval force MEU in Okinawa, but that comes off of unit rotational forces. The BSRF and one of the special purpose MAGTFs is one

force, and the other one is in CENTCOM. So is it sustainable? At a 2-to-1 ratio, at 24 infantry battalions and the aviation logistics, yes, it is. We can sustain this.

Ideally, when I came in the Marine Corps, we were a 3-to-1 force. We had 6 months deployed, 18 months to reset. We had been a 2-to-1 force. That is right at the very edge. And so we do have some units that are inside that, and that is of concern.

So can we surge? The force that can surge is the force that is getting ready to replace these units that are forward deployed or the units that have just got back from these same deployments. And then there is always a life cycle to a unit, and the readiness ebbs and flows. It is a very kind of complicated algorithm involving people, the equipment, the readiness of the gear, the training of the unit.

Depending upon what the requirement is and how much we have the ability to surge with those that have just gotten back and where they are in their training cycle, they would be at least prepared to surge. The bottom line is we are going to go. The Marines are going to go. And we are going to go, and we are going to provide the best ready force that we can because that is what you expect of your Marine Corps.

And part of that surge is the Reserves, the 38,500 marines in the Reserve Component, which are part of the total force. Just like with the Army, Navy, and the Air Force Guard and Reserve, we are a total force. There is 2,400 Reserve marines activated today that are forward deployed, and they are out there as part of the 186,000 marines, 184,000 Active. So we wouldn't be able to do what we do without the Reserves.

To have the Reserves surge, obviously we have to bring them on Active Duty; we have got to mobilize them, and they have to be paid. And if we were to replace one of these capabilities with a Reserve battalion or a Reserve flight squadron, that is expensive, and that is where you get in the issue of using the Reserves as effectively as we probably could.

Mr. GALLEGO. Thank you. I yield back my time.

The CHAIRMAN. Mr. Nugent.

Mr. NUGENT. Thank you, Mr. Chairman, and I want to thank this panel for being here today. It is always enlightening to hear from you.

Just a little disclosure here. I was an airman back right after the Wright Brothers did their thing. But all three of my sons are currently in the Army, two Active Duty, and one Black Hawk pilot in the Florida Army Guard, and so, you know, that is an Army family from that standpoint.

But this is for everyone. You know, SOF [special operations force] is often referred to as the tip of the spear. In keeping with that analogy, the vast majority of the rest of the spear is provided by all of you, the service branches. Some in Congress believe that national security could be provided much cheaper by investing a little more in SOCOM [Special Operations Command] and cutting a lot more from the Army, Navy, Air Force, and Marines. I know that without the enormous share of the service support you contribute to SOCOM, SOF doesn't function.

And while digging for hard data to support both your traditional and special operations support expenses, I was surprised to discover that none of the branches, none of the branches, have a comprehensive list of common service support that contribute to SOF or understanding of what it really costs for you to annually support SOF.

So in this year's NDAA, I am pursuing language that would direct each service to identify the support that they give and how much it costs, because what I want to make sure is that you are resourced properly and that, you know, this I think sometimes misguided aspect that SOF can solve all of our problems—you know, if we are going to resource SOF, then how does it affect, you know, and we don't want it being taken from the general services.

So if you could, and like I said, we have checked, would you support that in regards to that kind of language?

General MILLEY. For the Army, absolutely, sure. In fact, it is a great idea to come up with a list if I were supporting SOF, because as General Votel testified, I think it was last week, and I can certainly attest to that, is that the United States military special operations forces depend upon the parent services of all of us in the conventional forces for their very existence, not only in their training, in their manning, and their equipping, but also operationally. It is much, much more difficult for them to operate when they are out there just by themselves, but when they have got an architecture around them, conventional forces, air, naval, and land, then they are much more effective.

Admiral RICHARDSON. Sir, the Navy would absolutely support that.

General NELLER. Sir, we would support it. And I, again, I think all of us realize we are part of a joint team. And we need the SOF guys and gals to do what they do, and as General Milley said, and General Votel I am sure would validate, that they can't do what they do without us being there to provide the capability. So we operate as a joint force. And I think, quite frankly, there are lot of things that conventional—and I don't really like that term—that conventional forces do that are part of what are perceived or seen as what the SOF is doing, particularly in Iraq and other places where we are involved in advising and assisting and training foreign militaries.

But it is not about the credit. It is just about we work with each other, and I would be certainly willing to show what the costs are.

Mr. NUGENT. General Welsh.

General WELSH. Yes, sir, we completely agree with that. By the way, the good news for all of us is the greatest spokesman for this necessity of a strong conventional force to support SOF is the commander of U.S. Special Operations Command. He has been for a while.

Mr. NUGENT. He has repeated that on numerous occasions, that SOF is great. It can do certain things and do them really well, but they can't reopen the Strait of Hormuz. They can't withstand an assault by a conventional force. You know, so there is limitations, and we need to have all of that as a joint task.

One last thing. And I appreciate when you talk about readiness, in regards to deterrence. I truly believe, and this is just, you know,

an old sheriff saying this, that, you know, when you have a high deterrence, it does deter nation-state actors from doing something that is really stupid, I think. It is not going to stop, you know, the knuckleheads out there that are nonconventional, but it really does have a direct impact.

You know, I have a son currently over in Europe for 6 months and supporting what is going on over there. We are not fooling anybody, you know, as it relates to Putin in regards to what force structure we have. And so I think that as the Army moves forward in regards to having prepositioned assets there but also actually having, the old terminology, boots on the ground to respond, is you can't do it from afar, particularly on a conventional force.

So, Mr. Chairman, I appreciate the extra time, and I appreciate all of you being here. God bless you. Thank you.

The CHAIRMAN. Mr. Byrne.

Mr. BYRNE. Thank you, Mr. Chairman. I want to reiterate my thanks to all of you for being here today and for being so patient with us.

Secretary Mabus, I want to talk to you about my favorite topic, the littoral combat ship [LCS]. You testified before the Senate committee yesterday and reiterated the Navy's need for 52 littoral combat ships. You will recall very well that 2 years ago, you undertook a study at the direction of the then Secretary of Defense of the entire LCS program and recommended 52 ships, but the latter 20 be upgraded to frigates.

We had Secretary Stackley before the Seapower subcommittee couple of weeks ago, and he said there is no new study that validates a downsized 40. So what I would like for you to respond to is, in light of all of that, what would be the negative impacts of a reduction of the LCS program from 52 to 40?

Secretary MABUS. Well, first, it is absolutely correct that we have a validated need. The force structure assessment says we need 52 small surface combatants, and your discussion of the study that was undertaken because of concerns with lethality and survivability. And literally thousands of alternatives were looked at. We came out the frigate program, the last 20, are going to be far more survivable, far more lethal, and we are going to be able to backfit some of the original LCSs with that survivability and lethality.

Any time you reduce the numbers in a shipbuilding program, number one, the price goes up for what you are going to get. If we down-select only one version, one shipyard would almost certainly close. One of the things that we have learned and other countries have learned, and it is a hard lesson, is that if you lose these unique skills, it is almost impossible to get them back. It takes years. It takes far more to get them back than it does to maintain them.

Number three, the way that the 52 number was arrived at is looking at all the missions that are required from the Navy and what it takes to meet that, that goes from everything from high-end combat against a near-peer competitor to the presence operations that we have ongoing every single day of the year to do what Mr. Nugent just said, deter and reassure, to the things like disaster relief, humanitarian assistance. And also we are very lacking in ships in SOCOM on the drug interdiction front. So looking at all

the needs that the Navy has, those would be the impacts, if you reduced those in absolute numbers.

And, again, what we are talking about now, we are talking about the fleet of the future. We are not talking about the fleet of today. We are talking about the workforce of the very near future. But the fleet of the future, how many ships we have, what their capabilities are, how they can meet the strategy, is dependent on that force structure analysis. We did the one in 2012. We refreshed it in 2014. And a lot of people, myself included, have been willing to bet the CNO's paycheck that that number of the one we are doing today, right now, that the number 308 is not going to go down.

And so even if you look at keeping 308 as a number, if you look at the 30-year shipbuilding plan, if you reduce numbers of any type of ship, you simply don't meet the requirement.

Mr. BYRNE. And that was a good lead-in to my question for you, Admiral. And that is, that if you look at the shipbuilding plan with the recommendation of the administration, we get to 308, but then within a short period of time we go down precipitously. So if we want to avoid dipping down pretty quickly under the 308 after we get there, aren't we going to have to continue to build these littoral combat ships at the 52 level instead of going down to 40?

Admiral RICHARDSON. Certainly, sir. And that is, you know, exactly the fact of shipbuilding, that they come out of service as fast as they went in when they reach the end of their service life. You can extend that a little bit, but eventually they are going to come out at that same rate. And so you have to be minding the decisions of the past, putting together a program that is very thoughtful in terms of reaching and maintaining the requirements of the future. Underneath that 308 number, it is the composition of that number that is important as well, and the small surface combatant is an important contribution.

Mr. BYRNE. Well, thank you for that answer, and I do not want to bet your paycheck. I want you to keep your paycheck, but we want to keep building these ships too.

Admiral RICHARDSON. I should be clear that after Mrs. Richardson and our five kids get their cut, there is very little discretionary money left in that paycheck.

Mr. BYRNE. With that, I yield back, Mr. Chairman.

The CHAIRMAN. Ms. McSally.

Ms. MCSALLY. Thank you, Mr. Chairman. Thank you gentlemen and ladies for your service and your patience during this long hearing.

Mr. Murphy, I want to start off with you. Talking about the WASPs [Women Airforce Service Pilots], these amazing women who served in World War II as pilots, 1,074 of them, pioneers opened the door for people like me to be able to serve. Do you believe that they should be allowed to be in Arlington?

Mr. MURPHY. Yes.

Ms. MCSALLY. Do you believe you have the authority to let them into Arlington quickly?

Mr. MURPHY. Yes, through an individual exception of policy.

Ms. MCSALLY. How about just as a group, the WASPs, we want to let the WASPs into Arlington because of the amazing service that they did?

Mr. MURPHY. No, ma'am, and that is why I support your legislation. That is why I have done another course of action. Again, you know, ma'am, we all take an oath to support and defend the Constitution. In that Constitution we have the rule of law. I cannot violate law or U.S. regulations. U.S. regulations right now—and I am not trying to give you mumbo jumbo.

Ms. MCSALLY. Yeah, that's okay.

Mr. MURPHY. No, no.

Ms. MCSALLY. I hear you.

Mr. MURPHY. But, ma'am, that is why I support your legislation. That is why I support a commission to address it, but the quickest way to do this would be individual exception of policy. These women, Air Force——

Ms. MCSALLY. That is not what we are looking for, Mr. Murphy.

Mr. MURPHY. I am sorry.

Ms. MCSALLY. We are looking for all the WASPs to be able to let in. And just to be clear, so you are saying you can't make that happen right now for all the WASPs. Can the Secretary of Defense?

Mr. MURPHY. No.

Ms. MCSALLY. Can the Commander in Chief?

Mr. MURPHY. No.

Ms. MCSALLY. You believe nobody in the executive branch——

Mr. MURPHY. The Congress can.

Ms. MCSALLY [continuing]. Has the authority to make the exception?

Mr. MURPHY. The Congress can. I am trying to right the wrong, ma'am. I agree with you. I support you 100 percent. But Congress in 1977——

Ms. MCSALLY. I just want to make sure——

Mr. MURPHY [continuing]. After decades of service, they allowed WASPs to be buried in veterans' cemeteries.

Ms. MCSALLY. Right. Do you really believe the Commander in Chief doesn't have the authority right now—I mean, he makes executive orders all the time—that he can't say the WASPs are allowed or a group exception to policy?

Mr. MURPHY. Individual exception to policy, ma'am, he can, but not groups.

Ms. MCSALLY. So if I submitted an exception to policy for 1,074 of my closest friends, would that be considered?

Mr. MURPHY. I would support that legislation, like I support your current legislation, as long as it is an above-the-ground inurnment, yes.

Ms. MCSALLY. So you think it literally does take an act of Congress as the fastest way to fix the problem?

Mr. MURPHY. There was an act of Congress in 1977, ma'am, in 1977, which said they were allowed to be buried in veterans' cemeteries, but they didn't allow them to be buried in Arlington, ma'am. But what I am saying is Congress needs to change what Congress did in 1977. I can't change it unilaterally. SECDEF [Secretary of Defense] can't change it unilaterally. The Commander in Chief can't. That is why we have co-equal branches of government.

Ms. MCSALLY. Okay.

Mr. MURPHY. Now, I support your effort.

Ms. MCSALLY. Thanks. I just wanted to clarify whether you thought the executive branch had any ability to change it right now, and the answer is no.

Mr. MURPHY. To my understanding, I taught con [constitutional] law at West Point. Again, from my counsel and everything that I have researched in support of your efforts, yes, ma'am.

Ms. MCSALLY. Okay.

Mr. MURPHY. And I know it is not the answer you want to hear, but that is the answer.

Ms. MCSALLY. That is okay. I just wanted to get the answer on the record.

All right. Secretary James, it was great to see you last week at Davis-Monthan, and thanks for coming out to visit.

General Welsh, I only have a couple minutes left. I do want to follow up on the A–10. Thank you for not trying to put the A–10 in the boneyard this year and continuing to keep it flying, although I am concerned about the future plans, and it seems like there is some inconsistencies within the Pentagon.

When the Secretary of Defense announced his budget, before we actually saw the details, he said the A–10 won't be retired until 2022, and his quote was, "they will be replaced by F–35s only on a squadron-by-squadron basis as they come online, ensuring that all units have sufficient backfill to retain enough aircraft needed to fight today's conflict." So we got the impression as the F–35 became FOC [full operational capability], squadron by squadron after 2022, that would happen.

When we actually got the budget and we saw the plans of the Air Force, we see that starting in fiscal year 2018, actually 2 squadrons are going in the boneyard; 2019, 49 more aircraft; 2020, 64 more aircraft; and 2021, 96 more aircraft. Last August, the Test and Evaluation Office, Dr. Gilmore, agreed that there is going to be a fly-off between the A–10 and the F–35 to compare capabilities side-by-side. The earliest that will happen is 2018. They think maybe even 2019. By the time we get a report to Congress, that will be 2020.

Our perspective is that we shouldn't put one more A–10 in the boneyard until this test is complete and we actually have a report to assess any sort of risks, and then we move forward. It seems like there is just a number of inconsistencies in the timing here. Are you not willing to wait until the test is complete to make a decision to move forward on putting any more A–10s in the boneyard?

Secretary JAMES. This is, once again, a budgetary issue, and I will let the chief talk about how the SECDEF's comments relate to the squadrons of the F–35. So we will come back to that. I was impressed with the boneyard, by the way. I was impressed with everything that I saw at Davis-Monthan.

It is strictly a budgetary matter. It was last year and the year before as well. And you are right; our 5-year plan does begin in fiscal year 2018, gradually to retire the A–10.

Ms. MCSALLY. Chief, do you have any comments? I mean, when Dr. Gilmore mentioned the fly-off, you said, I think—let me just make sure that is you—the idea that the F–35 is going to walk in the door next year when it reaches IOC and take over for the A–10 is just silly. It has never been the intent. We were never going

to do that. That is not the plan. And really gearing more towards FOC, which we are talking much further down the road.

General WELSH. Yes, ma'am. And the idea, the F–35 is considered to be the highest ranked CAS [close air support] platform. We are losing CAS capacity. That is what the Budget Control Act has done to us. The real issue in 2018, and the reason that we start the divestiture in 2018, and I can't account for why Secretary of Defense's comments were this way, but the plan has been the same since it was submitted with our budget; is that the workarounds we have put in place until now allow us to bed down the F–35 through IOC by getting maintenance manpower from other places, by contracting it out. In fiscal year 2018, all those things kind of run out, and we are now short people to stand up F–35 units.

And so if we keep the A–10, by fiscal year 2021, the scheduled FOC date for the F–35, we will be about 50 percent short of the maintenance manpower required to field the F–35. So it is a manpower problem.

Ms. MCSALLY. Okay. I am over my time, but we will follow up with you. Thanks a lot.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Jones.

Mr. JONES. Mr. Chairman, thank you. I came back because I have a great interest in our military, to have a strong military, with the hopes that a strong military can make sure that we get the attention of foreigners who want to attack America and foreign countries.

It is pretty distressing really to hear the testimony today, knowing that our readiness, knowing that our modernization accounts need money, need to really rebuild this military that most Americans, including myself, feel like we need to have a strong military because of the world situation.

I want to touch on, and then I will get to my question very quickly, many of my colleagues on the Armed Services Committee don't agree with me on this, and that is fine. That is what makes America great. I just get incensed by the waste of money in Afghanistan. I had the former Commandant, Chuck Krulak, has been my adviser for 5 years. I email him, he emails me back. He gives me questions from time to time, or he will give me thoughts that I can share.

In the last 2 weeks, this article appeared, "Twelve ways your tax dollars were squandered in Afghanistan, $10 billion." Then there was an article about the fact we spent $18 billion in Afghanistan to train Afghanis to be policemen, and 36,000 walked off the job. Then you had John Sopko before the Senate a month ago testifying that the Department of Defense spent $6 million to buy 9 goats from Italy—they are blond in color—to ship to Western Afghanistan so they could start a goat farm and get the wool and then start a cashmere business. He further testified to the Senate, he doesn't know where the goats are. And someone asked him, do you think they ate them? You know, this is not a joke. I hear you telling us today that America is not ready to defend this country if we keep going down this path. So this is what I want to ask.

General Dunford I have great respect for, as I have great respect for you as well. I know that from time to time he wants your counsel because he has got the responsibility to say to a President, Mr.

President, this is the right policy. We must continue this policy. Or maybe he would say, Mr. President, I don't know if we should continue going down this black hole or not.

So what I would like to note from you, primarily the generals, because you would be the ones, maybe the secretaries as well, that from time to time General Dunford would say we need to have a policy discussion. And I would understand it would be confidential and informal. But do you as a general feel that if a policy—forget my position on Afghanistan—but a policy that this country is pursuing is wrong for the American people and wrong for the military, would you feel that it is your duty, not publicly now, but your duty to say to General Dunford in this case, you need to let the President know that 10 to 12 more years of trying to train the Afghans to take care of themselves is not worth one dime, and it is certainly not worth one pint of blood? Do you feel that this is part of your responsibility—forget Afghanistan—but to be an adviser to the President so we can give the President the support or not give him the support, meaning money, in a lost cause? Would anyone like to answer that?

General MILLEY. Congressman, you can get a quick spot from all of us, I suppose. For me, we meet regularly with General Dunford, very candid conversations amongst the senior leadership you see here at the table. We talk policy. We talk all kinds of strategic issues, very candid. And I have no doubt in my mind, speaking for myself, that if I had a doubt in a certain policy, et cetera, that I would bring it up to him, and I have already done that on many occasions. Point one.

Point two is, we also have an obligation to render best military advice to the Secretary of Defense, the President, National Security Council, and Congress, and I believe that I recognize that, and I accept that as a personal responsibility, and I will execute it without failure as long as I am in this seat.

Mr. JONES. General Milley, thank you very much. I think my time is about to expire, and I tell the chairman all the time, I am going to try to stick to the time. So thank you for at least listening. I appreciate that very much.

The CHAIRMAN. I appreciate that.

Mr. Lamborn.

Mr. LAMBORN. Thank you, Mr. Chairman. Thank you all for your service.

There has been a lot of talk in the Senate on changing Goldwater-Nichols. In fact, our Senate colleagues have started hearings on that. Now, from your perspective, and I am going to ask General Welsh and Secretary James this in particular, because one of the wild rumors that are now flying around is that SPACECOM [Space Command] is going to be moved or NORTHCOM [Northern Command] and SOUTHCOM [Southern Command] are going to be merged, or who knows what other rumors are out there.

Is the proposed Senate process sufficiently transparent and deliberative? Those are two things I think that are critical. Could you both comment on that, please?

Secretary JAMES. I would begin, Congressman Lamborn, by simply saying that I am not fully familiar with the full Senate process. I am sure it is transparent and so on. But any law that has been

around for 30-plus years, it probably makes sense to stand back and take a look at it. So I believe that was the spirit with which they have initiated this. And by the way, the Department of Defense is also reviewing some of these matters in their working groups and so on. So that would be my comment.

General WELSH. Sir, like the boss, I am not familiar with the internal Senate process on this, so I really can't comment on that. We have been asked for our views and our inputs, which I think is wonderful. The one thing I would comment on about Goldwater-Nichols is sometimes we forget that it has been a raging success, in my view.

Mr. LAMBORN. Excuse me?

General WELSH. It has been a raging success, since 1986. The joint capabilities of this force are night and day compared to what they were in 1985, and all of us were serving back then, so I hope we don't throw out the baby with the bathwater. I don't think that will happen. But it has been 30 years. It is time to take a look and see how we can make it better.

Mr. LAMBORN. All right. Thank you both for your perspective.

General Neller, I would like to shift to you. I want to turn to Secretary Carter's recent decision to open all specialties and units to women without exception. And I am concerned about the very rapid implementation timeline that has been given to you. And to me, if it is a very quick timeline, I would be concerned that there is more politics involved than actually what is best for the warfighter. So I want to ask you about the timeline. If there is too quick of a timeline to implement, does that make it difficult to resolve all of the questions?

General NELLER. Well, Congressman, I don't think we are—we are on a timeline for a decision. The Secretary said by 1 April he would tell us, he would accept our implementation plans, which he has done. So we had been building in parallel an implementation plan because we did not ask for an exception for all ground combat elements, but now they are all open.

So we are going through the process, like the other services, to find out what the propensity to enlist is. We have changed—we have developed standards for men and women in the pool to go in these MOSs [military occupational specialties]. We have got standards that, when they are in recruit training, that they have to meet in order to go on to the MOS school. We have got MOS-specific standards at the school that all marines have to go through to earn the MOS. And then if and when female marines pass, which I am sure they will, we have a plan to successfully put them into these units so that they can contribute, and then we can continue on with mission effectiveness.

So there is three lenses that we look at this at the end: the admission effectiveness for the unit, the health and welfare of the force, and overall best use of talent of the human capital that we have. So we are going to go through this process. Our recruiters are out there now to see if there is any indications that there is a propensity to do these particular MOSs, and we will put people through school.

So how long is that going to take? I have no idea, but I think we have got a plan. I think we are prepared to go forward on this,

and we will continue to track it. I think it is going to take all of us, but I think more so the Army and the Marine Corps. I am not going to speak for General Milley. But I think we know we are going to collect the data on this, and so we will see how this all plays out over the next 5 to 10 years before we really have a good idea of how it has worked out.

Mr. LAMBORN. Well, I just hope that the needs of the warfighter are first and foremost, and rushing too quickly, to me, might compromise that. I would hate to see that compromised.

General NELLER. I don't personally feel under any pressure, and I don't think the force does because we want every marine to be successful. And this is about mission effectiveness and effectiveness of the force.

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

The CHAIRMAN. We have touched on a variety of topics. I appreciate you all being here. We will need to stay in touch with you moving towards markup and the floor, everything from Goldwater-Nichols and acquisition reform, to dealing with our readiness problem. But for now, again, you have our thanks. And the hearing stands adjourned.

[Whereupon, at 12:59 p.m., the committee was adjourned.]

A P P E N D I X

March 16, 2016

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MARCH 16, 2016

RECORD VERSION

STATEMENT BY

THE HONORABLE PATRICK J. MURPHY

ACTING SECRETARY OF THE ARMY

AND

GENERAL MARK A. MILLEY

CHIEF OF STAFF

UNITED STATES ARMY

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES HOUSE OF REPRESENTATIVES

SECOND SESSION, 114TH CONGRESS

ON THE POSTURE OF THE UNITED STATES ARMY

MARCH 16, 2016

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We would like to thank the committee for their continued support of the United States Army and the American Soldier. Humbled to be entrusted with the care of our Soldiers, Civilians, and their Families, we look forward to working with Congress to ensure our Army remains unmatched in the world.

Introduction

The United States Army is the most formidable ground combat force on earth. America's Army has convincingly demonstrated its competence and effectiveness in diverse missions overseas and in the homeland. Today, these missions include: fighting terrorists around the world; training Afghan and Iraqi Army forces; peacekeeping in the Sinai Peninsula and Kosovo; missile defense in the Persian Gulf; security assistance in Africa and South America; deterrence in Europe, the Republic of Korea, and Kuwait; rapid deployment global contingency forces; and response forces for the homeland. Additionally, we maintain 12,000 miles of U.S. waterways; respond to hurricanes, floods, and severe snowstorms; patrol our Southwest border; and assist with the response to the outbreak of pandemic diseases. In support of these U.S. Geographic Combatant Command missions, the Army has approximately 190,000 Soldiers deployed to 140 countries. Largely due to deliberate investments in Soldier training, equipping, and leader development, today's Army continues to excel at these diverse and enduring missions. However, we cannot become complacent, remain static, and look to the past or present to be a guarantor of future victory. To sustain this high performance and remain prepared for potential contingencies, the Army must make the most of the resources entrusted to us by the American people. This ultimately requires a balance of competing requirements—readiness, end strength, and modernization—to ensure America's Army remains ready to fight and win both today and in the future.

Throughout history, successful armies anticipated the future, adapted, and capitalized upon opportunities. Today, the Army faces a rapidly changing security environment that requires the Army to make difficult decisions in order to remain an effective instrument of the Nation's military power. An Army ready for combat is the most effective tool to continually assure allies and deter or defeat adversaries. However, given the past three years of reduced funding coupled with the uncertainty of future funding, the Army risks going to war with insufficient readiness to win decisively. Therefore, the Army's number one priority is readiness.

Increasing Army readiness provides additional options for the President, Secretary of Defense, and Congress to successfully implement American foreign and security policy. In this budget, the Army will focus investments on readiness, key modernization programs, and Soldier quality of life to sustain the world's greatest Army. Our benchmark of success is to: sustain and improve our capabilities to prevent conflict; shape the environment by building partner capacity; win

the current war against terrorists in Iraq, Afghanistan, and elsewhere; and prepare ourselves to win the next war decisively.

A ready Army is a manned, trained, equipped, and well-led force that can conduct Joint missions to deter and defeat a wide range of state and non-state actors. No American Soldier should ever go to combat unready for the brutal and unforgiving environment of ground combat—that is the contract we must ensure is rock solid between the American people and the American Army. Therefore, this budget requests Congressional support to fund readiness and end strength, provide our Soldiers with modern equipment, and ensure adequate Soldier quality of life.

Adapting to New Strategic Realities

The global security environment is increasingly uncertain and complex. Opportunities to create a less dangerous world through diplomacy, economic stability, collective security, and national example exist, but military strength is both a complementary and foundational element of National power in a dangerous world. Each element is necessary in combination with the others; however, each alone is insufficient to win a war or maintain a peace. The conditions of diplomatic success, for example, are more likely if military options are credible, real, and perceived as unacceptable to an adversary. Therefore, for the Nation to advance its enduring national interests, our Joint force as a whole, and the Army in particular—in terms of capacity and capability—must remain strong.

In Europe, Russia continues to act aggressively. While we cannot predict Russia's next move, its record of aggression in multiple domains throughout the last decade—Georgia in 2008 and Ukraine (both eastern and Crimea) in 2014—clearly illustrates the need to be prepared to deter or defeat further Russian aggression. Russian acts of aggression are a direct threat to the national security of the United States and our NATO allies. Accordingly, in this budget we ask for your support to modify the Army's posture in Europe, including more rotational forces, prepositioned equipment, and increased operational use of the Army National Guard and Army Reserve.

Throughout the Middle East and South Asia, radical terrorism threatens regional order. The Islamic State of Iraq and the Levant, al-Qaeda, and other transnational terrorist groups present a significant threat and must be destroyed. The Islamic State of Iraq and the Levant is the most lethal and destabilizing terrorist group in modern history. There are more members of radical Islamic terrorist groups operating in Iraq, Syria, Egypt, Saudi Arabia, Libya, Algeria, Morocco, and elsewhere than ever before. Their ability to seize and hold territory and spread their ideology through social media is a significant challenge. They also have demonstrated both capability and intent for global reach into Europe, Asia, and the U.S. homeland. Additionally, although the imminent threat of Iran's nuclear weapons development has reduced, Iran remains a supporter of various terrorist groups and is a considerable threat to stability in the Middle East and U.S. interests. Destroying the Islamic

State of Iraq and the Levant and other radical terrorist groups will take considerable time. It is a necessary commitment and we ask Congress for continued resources to sustain our efforts in the Middle East and South Asia for the long term.

Strategically in Asia and the Pacific, there are complex systemic challenges from unresolved territorial disputes, economic and demographic change, a little noticed ongoing arms race, a perceptible rise in nationalism, and a lack of multilateral collective security regimes in Northeast Asia. China is not currently an enemy, but their rapid military modernization and activities in the South China Sea are warning signs that cause concern. China continues to militarize territorial claims in the South China Sea and impede freedom of navigation in the Asia-Pacific region. The Army, in support of naval, air, and diplomatic efforts, will play a significant role in maintaining peaceful relations with a rising China. Meanwhile, North Korean nuclear and missile developments, in combination with routine acts of provocation in the Demilitarized Zone, continue to pose an imminent threat to regional security in Northeast Asia. The Army's assigned and rotational forces in the Republic of Korea, Japan, and throughout the Asia-Pacific region today provide a deterrent and contingency response capability that strengthens defense relationships and builds increased capacity with our allies. We must sustain and improve that capability to execute our national strategy to rebalance to the Asia-Pacific. In short, the conditions for potential conflict in Asia, as in Europe, are of considerable concern and our Army has an important role to prevent conflict and if conflict occurs, then to win as part of the Joint force.

Politically, socially, economically, and demographically, Africa's potential for positive growth is significant. Realizing this potential depends on African governments' ability to provide security and stability for their people against terrorist groups such as the Boko Haram, al-Shabaab, and al-Qaeda in the Islamic Maghreb as well as the Islamic State of Iraq and the Levant in Libya. Army forces partner with ministries of defense to develop and shape the environment and establish strategic frameworks that employ forces, build professional military institutions, and partner with European Allies to achieve shared strategic objectives.

In Central and South America, criminal gang and drug trafficking activities have wrought devastating consequences in many of our partner nations, degrading their civilian police and justice systems, corrupting their institutions, and contributing to a breakdown in citizen safety. Our annual multinational training exercises with our partners promote regional cooperation and enhance readiness of partner nation military forces. To date, we have active partnerships with defense and security forces from 26 nations in the Caribbean, Central America, and South America.

Today, state and non-state actors are destabilizing major regions of the world by combining conventional and irregular warfare with terrorism. Acts of aggression also occur through surrogates,

cyber and electronic systems, organized criminal activity, and economic coercion. These groups mobilize people, resources, and sophisticated modern weapons in unconventional ways that enable hostile actors to be more agile than traditional militaries. Since these advantages are low cost, it is likely this form of conflict will persist well into the future and our Army must adapt.

The U.S. Army, as the principal land force of a global power, does not have the luxury of preparing to fight only one type of enemy, at one time, in one place. We cannot forecast precisely when and where the next contingency that requires Army forces will arise. However, history indicates that the next contingency will likely require a commitment of conventional and unconventional forces to conduct operations of significant scale and duration to achieve strategic objectives. If a major crisis occurred today, the Army would likely deploy all uncommitted forces—from all components—into combat on very short notice. Therefore, the readiness of the Army is key to the security of the Nation. Unfortunately, less than one-third of Army forces are at acceptable readiness levels to conduct sustained ground combat in a full spectrum environment against a highly lethal hybrid threat or near-peer adversary. The risk of deploying unready forces into combat is higher U.S. casualty rates and increased risk to mission success. To mitigate this risk, the Army will continue to prioritize readiness to reverse declines from the past 15 years of continuous combat and reduced resources. We welcome continued Congressional support in this effort.

The Foundation of America's Defense

Fundamentally, America's Army protects the Nation by winning wars as part of the Joint Force. As the Nation's principal land force, the Army organizes, trains, and equips forces for prompt and sustained campaign-level ground combat. The Army is necessary to defeat enemy forces, control terrain, secure populations, consolidate gains, preserve joint force freedom of action, and establish conditions for lasting peace. To do the core tasks globally against a wide range of threats, the Army must have both capability and capacity properly balanced. Although important, it is not just the size of the Army that matters, but rather the right mix of capacity, readiness, skill, superior equipment, and talented Soldiers, which in combination, are the key to ground combat power and decision in warfare.

Today's Army maintains significant forces stationed and rotating overseas that provide a visible and credible deterrent. However, should war occur, we must terminate the conflict on terms favorable to the United States—this requires significant ready forces and the operational use of the Army National Guard and Army Reserve. Only the Army provides the President and the Secretary of Defense the ability to rapidly deploy ground forces, ranging in decisive ground capabilities from Humanitarian Assistance and Countering Terrorism to high-end decisive operations. Moreover, the Army conducts these operations in unilateral, bilateral, or coalition environments across the range of

conflict from unconventional warfare to major combat operations. In the end, the deployment of the American Army is the ultimate display of American resolve to assure allies and deter enemies.

While the Army fights alongside the Navy, Air Force, Marines, Coast Guard, and our allies, the Nation also relies on a ready Army to provide unique capabilities for the Nation's defense. Unique to the Army is the ability to conduct sustained land campaigns in order to destroy or defeat an enemy, defend critical assets, protect populations, and seize positions of strategic advantage. Additionally, as the foundation of the Joint Force, the Army provides critical capabilities—command and control, communications, intelligence, logistics, and special operations—in support of Joint operations. In short, a ready Army enables the Nation to deploy ground forces in sufficient scale and duration to prevent conflict, shape outcomes, create multiple options for resolving crises, and if necessary, win decisively in war.

Ready to Fight Tonight

The Army's primary focus on counterinsurgency for the last decade shaped a generation of Army leaders with invaluable skills and experiences. Nonetheless, this expertise comes at a cost. Today, most leaders of combat formations have limited experience with combined arms operations against enemy conventional or hybrid forces. Moreover, the current operational tempo and changing security environment continues to place significant demands on Army forces, stressing our ability to rebuild and retain combined arms proficiency. The Army currently provides 40% of planned forces committed to global operations and over 60% of forces for emerging demands from Combatant Commanders.

The four components of readiness—manning, training, equipping, and leader development—describe how the Army prioritizes its efforts to provide trained and ready forces ready to fight and win our Nation's wars. Even though investing in readiness takes time and is expensive, the result ensures that our Soldiers remain the world's premier combat land force.

The first component of readiness, manning, is about people—the core of our Army and keystone to innovation, versatility, and combat capabilities. Unlike other Services that derive power from advanced platforms, the collective strength of the Army is people. America's Army must recruit resilient, fit people of character and develop them into quality Soldiers. After recruitment, the Army develops men and women into competent Officers, Non-Commissioned Officers, and Soldiers who possess combat skills and values essential to the profession of arms. Unfortunately, in order to meet Regular Army end strength reduction requirements, the Army has involuntary separated thousands of mid-career Soldiers. While numbers are not the only factor, end strength reductions below the current plan will reduce our capability to support the National Military Strategy. Additionally, manning requires an appropriate mix of forces across the Army—Regular Army, Army National Guard, and

the Army Reserve—to accomplish our National military objectives. To support Joint Force commitments worldwide over the last 15 years, the Army increased its operational use of the Army National Guard and the Army Reserve. We will continue this trend as we draw down the Regular Army. With the support of Congress, we can maintain the appropriate force mix capable of conducting sustained land combat operations worldwide with increased operational use of the Army National Guard and Army Reserve.

To win on the battlefield, the Army must sufficiently resource training—the second component of readiness—to provide sufficient combat ready units in a timely manner. Building readiness from the individual Soldier to collective units across multiple echelons is time intensive. Moreover, a ready unit is not only prepared in the classroom; it is prepared by conducting rigorous and repetitive training under intense pressure and realistic battlefield conditions. Training at the highest level, the kind the Army conducts at combat training centers, brings all elements of the force together to practice firing, maneuver, and leader decisions against a skilled and determined enemy in all environmental conditions. In FY16 and FY17, the Army has programmed 19 combat training center rotations, giving Soldiers and leaders intensive combined arms maneuver experiences in anticipation of future combat. Key to success of the combat training center exercises is preparing at home station. Both combat training center exercises and home station training have declined in the past 15 years. Ultimately, training is the most essential aspect of readiness and we must rapidly improve this area. Therefore, we request funding for training that will enable our Soldiers to succeed.

A trained army requires modern equipment to win—the third component of readiness. An unintended consequence of the current fiscal environment is that the Army has not equipped and sustained the force with the most modern equipment and risks falling behind near-peers. Instead, funding constraints forced the Army to selectively modernize equipment to counter our adversary's most significant technological advances. While we are deliberately choosing to delay several modernization efforts, we request Congressional support of our prioritized modernization programs to ensure the Army retains the necessary capabilities to deter and if necessary, defeat an act of aggression by a near-peer.

The fourth component of Army readiness is leader development. As stated in the 2015 National Military Strategy, "Military and civilian professionals are our decisive advantage." The Army is committed to build leaders of character who are technically and tactically proficient, adaptive, innovative, and agile. It takes time to develop Soldiers who can successfully lead, train, and equip a unit for combat. Leader development starts with a framework of formal training coupled with professional education and operational assignments. Professional Military Education serves as the principal way leaders combine experiences gained during operational assignments with current and

emerging doctrinal methods in preparation for combat. As such, we have re-established the requirement to have our leaders complete military education prior to promotion. Ultimately, predictable funding provides the facilities and faculty that develop Army leaders who provide the Nation an advantage that neither technology nor weapons can replace.

The deliberate decision to prioritize readiness while reducing end strength and decreasing funding for modernization places the Army in a readiness paradox: devoting resources to today's readiness invariably decreases investments for future readiness. While the Army prefers investments for current and future readiness, the security environment of today demands readiness for global operations and contingencies. We request the support of Congress to fund Army readiness at sufficient levels to meet current demands, build readiness for contingencies, and understand the mid and long term risks.

Strengthening Army Readiness

Before the Army can significantly increase readiness, there must be an infrastructure to support Army manning, training, equipping, and leader development. Army readiness occurs on Army installations—where Soldiers live, work, and train. Installations provide the platform where the Army focuses on its fundamental task—readiness. The Army maintains 154 permanent Army installations, and over 1100 community-based Army National Guard and Army Reserve Centers worldwide. Regrettably, we estimate an annual burden of spending at least $500M/year on excess or underutilized facilities. In short, smaller investments in Army installations without the ability to reduce excess infrastructure jeopardizes our ability to ensure long-term readiness. To continue the efficient use of resources, the Army requests Congressional authority to consolidate or close excess infrastructure.

As we spend taxpayer's dollars, the Army makes every effort to achieve the most efficient use of resources and demonstrate accountability. The Army is conducting a 25% headquarters personnel reduction to minimize the impact of our end strength reductions to our combat formations. These headquarters personnel reductions and future reductions will reduce authorizations for Soldiers and Civilians at a comparable rate.

The Army is also reviewing the recommendations of the National Commission of the Future of the Army. After a thorough assessment, we intend to implement recommendations that increase Army readiness, consistent with statute, policy, and available resources. Implementation of any recommendation will include the coordinated efforts of the Army's three components: the Regular Army, the Army National Guard, and the Army Reserve. The Army may request the support of Congress to reprogram funding and, if needed, request additional funds to implement the commission's recommendations.

In addition to the recommendations of the National Commission of the Future of the Army, the size and mix of Army forces relates to the capabilities required in the 2015 National Military Strategy. To respond to global contingencies or domestic emergencies, the Army has 37 multicomponent units—units that have members of the Regular Army, Army National Guard, and the Army Reserve. Multicomponent units strengthen Army readiness by training together today and if needed, fighting together tomorrow.

The Army has excelled in providing trained and ready forces for combatant commanders across a wide array of missions for the past 15 years of war. This creates the impression we are ready for any conflict. In fact, only one-third of Army forces are at acceptable combat readiness levels, a byproduct of near continuous deployments into Iraq and Afghanistan. To address this readiness shortfall, the Army has redesigned our force generation model to focus on Sustainable Readiness: a process that will not only meet combatant commander demands, but will sustain unit readiness in anticipation of the next mission. This process synchronizes manning, equipping, training and mission assignments in such a way to minimize readiness loss and accelerate restoration of leader and unit proficiency. Designed for all three components and all types of units, our objective within current budget projections is to achieve two-thirds combat readiness for global contingencies by 2023. But, we will do everything possible to accelerate our progress to mitigate the window of strategic risk.

Modernization: Equipped to Fight

While rebalancing readiness and modernization in the mid-term, from 2020 to 2029, the Army will not have the resources to equip and sustain the entire force with the most modern equipment. Informed by the Army Warfighting experiments, the Army will invest in programs with the highest operational return and we build new only by exception. We will delay procurement of our next generation platforms and accept risk to mission in the mid-term. The Army Equipment Modernization Strategy focuses on the five capability areas of Aviation, the Network, Integrated Air Missile Defense, Combat Vehicles, and Emerging Threats.

The Army will resource the first capability area, **Aviation**, to provide greater combat capability at a lower cost than proposed alternatives. Key to the success of this initiative is the divestment of the Army's oldest aircraft fleets and distributing its modernized aircraft between the components. The Army will upgrade the UH-60 Black Hawk fleet and invest in the AH-64 Apache. These helicopters provide the capability to conduct close combat, mobile strike, armed reconnaissance, and the full range of support to Joint operations. Though aviation modernization is a priority, reduced funding caused the Army to decelerate fleet modernization by procuring fewer UH-60 Black Hawks and AH-64 Apaches in FY17.

Second, the Army must maintain a robust ***Network*** that is not vulnerable to cyber-attacks. This network provides the ability for the Joint Force to assess reliable information on adversaries, the terrain, and friendly forces. This information provides a decisive advantage by enabling the Joint Force commander to make accurate and timely decisions, ultimately, hastening the defeat of an adversary. Key investments supporting the network are the Warfighter Information Network-Tactical; assured position, navigation, and timing; communications security; and defensive and offensive cyberspace operations.

The Army will invest in the third capability area, ***Integrated Air Missile Defense***, to defeat a large portfolio of threats, ranging from micro unmanned aerial vehicles and mortars to cruise missiles and medium range ballistic missiles. The Army will support this priority by investing in an Integrated Air and Missile Defense Battle Command System, an Indirect Fire Protection Capability, and the Patriot missile system.

Army improvements to ***Combat Vehicles*** ensure that the Army's fourth modernization capability area provides future Army maneuver forces an advantage over the enemy in the conduct of expeditionary maneuver, air-ground reconnaissance, and joint combined arms maneuver. Specifically, the Army will invest in the Ground Mobility Vehicle, Stryker lethality upgrades, Mobile Protected Firepower, and the Armored Multi-Purpose Vehicle.

Finally, the Army will address ***Emerging Threats*** by investing in mature technologies with the greatest potential for future use. The Army will invest in innovative technologies that focus on protecting mission critical systems from cyber-attacks. To this end, the Army will invest in innovative technologies focused on active protection systems (both ground and air), aircraft survivability, future vertical lift, directed energy weapons, cyber, and integrated electronic warfare.

The Army modernization strategy reflects those areas in which the Army will focus its limited investments for future Army readiness. However, our implementation of the strategy will fall short if we delay investment in next generation platforms. We request the support of Congress to provide flexibility in current procurement methods and to fund these five capability areas—Aviation, the Network, Integrated Air Missile Defense, Combat Vehicles, and Emerging Threats—to provide the equipment the Army requires to fight and win our Nation's wars.

We support the ongoing Congressional efforts to streamline redundant and unnecessary barriers in the acquisition process. Our adversaries are rapidly leveraging available technology; our acquisition process must be agile enough to keep pace. Aligning responsibilities with authorities only improves the acquisition process. The Army remains committed to ensuring that we make the right acquisition decisions and that we improve the acquisition process to maintain a technological advantage over adversaries and provide requisite capabilities to Soldiers.

Soldiers, Civilians, and Families: Our Greatest Asset

The Army's collective strength originates from the quality citizens we recruit from communities across America and place into our formations. We build readiness by training and developing American citizens into ethical and competent Soldiers who are mentally and physically fit to withstand the intense rigors of ground combat. Additionally, the Families of our Soldiers make sacrifices for the Nation that contribute to Army readiness and play an important part in achieving mission success. As a result of the dedication and sacrifices of Soldiers and their Families, the Army is committed to providing the best possible care, support, and services.

The Army is committed to improve access of behavioral health services. Beginning in 2012, the Army transformed its behavioral health care to place providers within combat brigades. These embedded behavioral health teams improve Soldier readiness by providing care closer to the point of need. However, the Army only has 1,789 of the 2,090 behavioral health providers required to deliver clinical care. The Army will continue to use all available incentives and authorities to hire these high demand professionals to ensure we provide our Soldiers immediate access to the best possible care.

The Army provides an inclusive environment that provides every Soldier and Civilian equal opportunities to advance to the level of their ability regardless of their racial background, sexual orientation, or gender. This year, the Army removed legacy gender-based entry barriers from the most physically and mentally demanding leadership school the Army offers—the United States Army Ranger School. To date, three female Soldiers have graduated the United States Army Ranger School. We increasingly recognize that we derive strength from our diversity, varying perspectives, and differing qualities of our people. The Army welcomes the increased opportunities to bring new ideas and expanded capabilities to the mission.

The Army does not tolerate sexual assault or sexual harassment. We are committed to identifying and implementing all proven methods to eliminate sexual harassment and sexual assault. As an example, the United States Army Cadet Command shared sexual harassment and sexual assault prevention best practices with universities and organizations nationwide. Currently, Cadet Command has 232 Army Reserve Officers Training Corps programs that have signed partnership charters with their colleges or universities. These cadets actively participate in education and awareness training on campuses that include programs such as "Take Back the Night" and "Stomp Out Sexual Assault." Cadets also serve as peer mentors, bystander intervention trainers, and sexual assault prevention advocates.

Prevention is the primary objective of the Army Sexual Harassment/Assault Response and Prevention (SHARP) program. However, when an incident does occur, the Army initiates a

professional investigation to hold the offender accountable while providing best-in-class support and protection to the survivor. Additionally, the Army performs assessments of SHARP program strategies to measure effectiveness. To increase effectiveness, the U.S. Army Medical Command ensures that every Military Treatment Facility operating a 24/7 Emergency Room has a trained and qualified Sexual Assault Medical Forensic Examiner. Our enduring commitment to the SHARP program strives to eliminate sexual assault and sexual harassment, strengthen trust within our formations, and ensure our Soldiers are combat ready.

Another program committed to keeping the faith and improving quality of life is the Soldier For Life Program. The Soldier For Life program connects Army, governmental, and community efforts to build relationships that facilitate successful reintegration of our Soldiers and their Families into communities across America. Currently, the Soldier For Life program offers support to 9.5 million Army Veterans and Soldiers. Moreover, the Army plans to support the transition of 374,000 Soldiers in the next three years. In 2015, veteran unemployment in the United States was at a seven-year low and employers hired veterans at higher rates than non-veterans. Additionally, the Army distribution of FY15 unemployment compensation for former service members was down 25%, $81.8 million, from FY14. The Army seeks to continue the positive trends for Army Soldiers, Family Members, and Veterans in 2015. Ultimately, this program provides a connection between the Soldiers and the American people.

The Army's most valuable asset is its people; therefore, the well-being of Soldiers, Civilians, and their Family members, both on and off-duty remains critical to the success of the Army. Taking care of Soldiers is an obligation of every Army leader. The Army focuses on improving personal readiness and increasing personal accountability. Programs like "Not in My Squad," first championed by Sergeant Major of the Army Daniel Dailey, empower Army leaders to instill Army values in their Soldiers and enforce Army standards. Our Soldiers and Civilians want to be part of a team that fosters greatness. It is through personal conduct and proactive leadership that we seek to improve on a culture of trust that motivates and guides the conduct of Soldiers. The American people expect and continue to deserve an Army of trusted professionals.

The Army's Budget Request

The Army requires sustained, long term, and predictable funding. We thank Congress for the Bipartisan Budget Act of 2015, which provides short-term relief and two years of predictable funding. However, funding levels are not keeping pace with the reality of the strategic environment and global threats. Moreover, while the current budget provides predictability, it does so at funding levels less than envisioned by the President last year. In short, the FY17 Army Budget base request of $125.1 billion is $1.4 billion less than the FY16 enacted budget of $126.5 billion. As a result, the Army will

fully fund readiness, reduce funding for modernization and infrastructure maintenance, and continue programmed end strength reductions.

Our major goals in this budget request are to: improve readiness by fully manning in combat units, increase combat power, streamline headquarters, improve command and control, and conduct realistic combined arms training. The Army will also modernize in five capability areas: Aviation, the Network, Integrated Air Missile Defense, Combat Vehicles, and Emerging Threats. Additionally, the Army will ensure the recruitment and retention of high quality Soldiers of character and competence. The FY17 budget also provides adequate funding so that we can provide Soldiers, Civilians, and their Families the best possible quality of life. Absent additional legislation, the Budget Control Act funding levels will return in FY18. This continued fiscal unpredictability beyond FY17 is one of the Army's single greatest challenges and inhibits our ability to generate readiness. This will force the Army to continue to reduce end strength and delay modernization, decreasing Army capability and capacity—a risk our Nation should not accept.

Conclusion

The Army's FY17 Budget prioritizes readiness while reducing our end strength and delaying modernization. Prioritizing Army readiness ensures the Joint Force has the capability to deter, and when required, fight and win wars in defense of the United States and its national interests. To fulfil this obligation to the Nation, the Army requires predictable and sufficient funding to build readiness, maintain Army installations, modernize equipment, and provide Soldier compensation commensurate with their service and sacrifice.

The Nation's resources available for defense are limited, but the uncertainties of today require a ready force capable of responding to protect our national interests. An investment in readiness is the primary means that allows the Army to meet the demands of our Combatant Commanders and maintain the capacity to respond to contingencies worldwide. By building readiness, the Army provides the Joint Force the ability to respond to unforeseeable threats, decisively defeat our enemies, and advance the Nation's national security interests. As a result of our current fiscal uncertainty, the Army prioritizes today's readiness and accepts risk in modernization, infrastructure maintenance, and sustained end strength in the mid and long term. We request the support of Congress to fund Army readiness at sufficient levels to meet current demands, build readiness for contingencies, and understand the mid and long term risks. Ultimately, the American people will judge us by one standard: that the Army is ready when called upon to fight and win our Nation's wars.

Patrick J. Murphy
Acting Secretary of the United States Army

Mr. Patrick J. Murphy was appointed Acting Secretary of the Army by President Obama on Jan. 7, 2016. As Secretary of the Army, he has statutory responsibility for all matters relating to the United States Army: manpower, personnel, reserve affairs, installations, environmental issues, weapons systems and equipment acquisition, communication, and financial management.

He was recently sworn in as the 32nd under secretary of the Army and Chief Management Officer by President Obama on Jan. 4, 2016. He serves as the Secretary of the Army's senior civilian assistant and principal adviser on matters related to the management and operation of the Army, including development and integration of the Army Program and Budget. As the Chief Management Officer (CMO) of the Army, he advises the Secretary on the effective and efficient organization of the Army's business operations and initiatives for the business transformation of the Army which includes 1.3 million personnel and a budget of approximately $144 billion.

Prior to his confirmation, Mr. Murphy was a litigation partner at the law firm of Fox Rothschild, where he served as an outside general counsel for small businesses, including several that were veteran-owned.

From 2011-2015, Mr. Murphy was a television contributor to NBC Universal and an anchor for MSNBC's "Taking the Hill," where he broke down the civil-military divide and addressed issues affecting the veteran community.

From 2007-2011, Mr. Murphy served in the U.S. Congress, representing the Eighth Congressional District of Pennsylvania. He also served on the Armed Services, Select Intelligence, and Appropriations committees. He has co-authored several initiatives including the 21st Century GI Bill, the Repeal of Don't Ask Don't Tell, and Hire Our Heroes legislation. In 2008, he was also instrumental in making the Washington Crossing National Veterans Cemetery a reality. He authored the Improper Payments Bill, which saved the American taxpayer tens of billions of dollars per year. He served two terms in the U.S. House of Representatives and led efforts in passing historic legislation in the energy, healthcare and education fields.

Mr. Murphy, a third generation veteran, was commissioned as a second lieutenant and later served in the U.S. Army Judge Advocate General's Corps as a criminal prosecutor and as an assistant professor in the Department of Law at the U.S. Military Academy at West Point, NY. Immediately following 9/11, He served two overseas deployments-Tuzla, Bosnia in 2002 and Baghdad, Iraq in 2003-04. While serving in Iraq with the 82nd Airborne Division, he led a Brigade Operational Law Team (BOLT) and also earned a Bronze Star for his service. He oversaw the justice system for the 1.5 million Iraqis in south central Baghdad, and a full spectrum of legal responsibility for 3,500 paratroopers in his combat brigade.

Mr. Murphy is a graduate of King's College, the University of Scranton ROTC program, and the Widener University Commonwealth School of Law.

He is married and has two children.

General Mark A. Milley
39th Chief of Staff
United States Army

General Mark A. Milley assumed duty as the 39th Chief of Staff of the U.S. Army August 14, 2015 after most recently serving as the 21st Commander of U.S. Army Forces Command at Fort Bragg, North Carolina.

A native of Winchester, Massachusetts, General Milley graduated and received his commission from Princeton University in 1980. He has had multiple command and staff positions in eight divisions and Special Forces throughout the last 35 years.

He has served in command and leadership positions from the platoon and operational detachment alpha level through Corps and Army Command including the 82nd Airborne Division and the 5th Special Forces Group at Fort Bragg, North Carolina; the 7th Infantry Division at Fort Ord, California; the 10th Mountain Division at Fort Drum, New York; the 2nd Infantry Division in Korea; the Joint Readiness Center at Fort Polk, Louisiana; the 25th Infantry Division at Schofield Barracks, Hawaii; the 101st Airborne (Air Assault) at Fort Campbell, Kentucky; and the 1st Cavalry Division and 3rd Infantry Division in Baghdad, Iraq.

He commanded the 1st Battalion, 506th Infantry, 2nd Infantry Division; the 2nd Brigade, 10th Mountain Division; served as the Deputy Commanding General for the 101st Airborne (Air Assault); and served as the Commanding General for 10th Mountain Division. While serving as the Commanding General, III Corps and Fort Hood, he deployed as the Commanding General, International Security Assistance Force Joint Command and Deputy Commanding General, U.S. Forces – Afghanistan. Additionally, he served on the operations staff of The Joint Staff as the J33/DDRO, and as a Military Assistant to the Secretary of Defense at the Pentagon.

His operational deployments include the Multi-National Force and Observers, or MFO, Sinai, Egypt; Operation JUST CAUSE, Panama; Operation UPHOLD DEMOCRACY, Haiti; Operation JOINT ENDEAVOR, Bosnia-Herzegovina; Operation IRAQI FREEDOM, Iraq; and three tours during Operation ENDURING FREEDOM, Afghanistan. He also deployed to Somalia and Colombia.

General Milley's education includes a Bachelor's Degree in Political Science from Princeton University, Master's Degrees from Columbia University (International Relations) and from the U.S. Naval War College (National Security and Strategic Studies). He is also a graduate of the MIT Seminar XXI National Security Studies Program.

General Milley and his wife have been married for more than 30 years and have two children.

His awards and decorations include the Defense Distinguished Service Medal; Army Distinguished Service Medal with two bronze oak leaf clusters; Defense Superior Service Medal with two bronze oak leaf clusters; Legion of Merit with two bronze oak leaf clusters; Bronze Star Medal with three bronze oak leaf clusters; Meritorious Service Medal with silver oak leaf cluster; Army Commendation Medal with four bronze oak leaf clusters; Army Achievement Medal with one bronze oak leaf cluster; National Defense Service Medal with one bronze service star; Armed Forces Expeditionary Medal with two bronze service stars; Afghanistan Campaign Medal with two bronze service stars; Iraq Campaign Medal with two bronze service stars; Global War on Terrorism Service Medal; Korea Defense Service Medal; Humanitarian Service Medal; Army Service Ribbon; Overseas Service Ribbon with numeral 5; NATO

Medal with bronze service star; and the Multi-national Force and Observers Medal. He is authorized to wear the Combat Infantryman Badge with star; Expert Infantryman Badge; Master Parachutist Badge; Scuba Diver Badge; Ranger Tab; Special Forces Tab; Joint Chiefs of Staff Identification Badge; Joint Meritorious Unit Award; and Meritorious Unit Commendation and the French Military Parachutist Badge.

RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

THE HONORABLE RAY MABUS

SECRETARY OF THE NAVY

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

ON

16 MARCH 2016

NOT FOR PUBLICATION UNTIL
RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

Chairman Thornberry and Ranking Member Smith, members of the Committee, thank you for the opportunity to discuss the readiness and posture of the Department of the Navy. With Chief of Naval Operations John Richardson and Commandant of the Marine Corps Bob Neller, I have the great privilege of representing the Sailors and Marines who serve our nation around the world, the civilians who support them and all of their families.

This is the first testimony before this committee for Admiral Richardson and General Neller in these positions. In the time since they took these critical posts, I have had the privilege of their frank, professional and invaluable counsel. They are officers of the highest caliber who expertly lead our Navy and Marine Corps during ever-tightening fiscal constraints and an increasingly dynamic threat environment.

This is my eighth time, and my last, to appear before you. For me, leading the Department of the Navy is the greatest honor of my life. I could not be more proud of our Sailors, Marines, and civilians. I'm also proud of the many steps we've taken and changes we've made to ensure that the Navy and Marine Corps remain as they have been for over 240 years as the greatest expeditionary fighting force the world has ever known

This statement, together with those provided by Admiral Richardson and General Neller, presents to you and to the American people an overview of the Department of the Navy and highlights our priorities as we move forward with the Fiscal Year 2017 (FY17) budget process. As the Secretary of the Navy, I am responsible for recruiting, training, and equipping the Sailors, Marines, and civilians who spend every day working to defend the American people and our national interests.

Every year, as we review our current posture, we must ask ourselves, as a Department, as a military, and as a nation, how to balance our national security demands. We face an increasing array of threats, conflicts and challenges around the globe, even as our fiscal and budgetary situation continues to strain resources. Consistently, when a crisis occurs, the leaders of this country want immediate options, so they ask for the Navy and Marine Corps, for our carrier strike groups and our amphibious ready groups, for our Sailors and Marines, for our presence. With 90 percent of global trade traveling by sea, 95 percent of all voice and data being transferred under the ocean and more than 80 percent of the world's population living within 60 miles of the sea, there is no question that now, more than ever, we are living in a maritime century.

The Value of Presence

What our Navy and Marine Corps uniquely provide is presence - around the globe, around the clock – ensuring stability, deterring adversaries, and providing the nation's leaders with options in times of crisis. We are "America's away team" because Sailors and Marines, equally in times of peace and war, are deployed around the world to be not just in the right place at the right time but in the right place all the time. In every case, from high-end combat to irregular warfare to disaster relief, our naval assets get on station faster, we stay longer, we bring whatever we need with us and, since we operate from our ships, which are sovereign American territory, we can act without having to ask any other nation's permission. While there has been discussion about posture versus presence, the simple fact is that for the Navy and Marine Corps, our posture is presence.

For more than seven decades, Navy and Marine Corps presence has kept international sea lanes open around the world. For the first time in history, one nation - America - is protecting trade and commerce not just for ourselves and our allies but for everyone. Today, $9 trillion in goods are traded by sea annually, supporting 40 million jobs in the U.S. alone and benefiting nearly every consumer on earth. These statistics make it clear that the health of the world's economy depends in large part on the United States Navy and Marine Corps.

The security and stability of the international system of trade and finance is tied irrevocably to the free movement of goods and data across, above and under the sea, and is more than just a military concern. It impacts every American in the prices we pay for goods and services and the very availability of those goods and services. While the Navy's activities often take place far away and out of sight of most citizens, the impact of our global naval presence isn't a theoretical construct; its effects are palpable throughout American life.

The economic benefit is just one that comes from our Sailors and Marines doing their job across the globe. That ubiquitous presence reassures our allies and deters our adversaries. And, if conflict comes, we will fight and win. Our presence is an unrivaled advantage that we provide our nation. There is no "next best thing" to being there. Maintaining that presence requires gray hulls on the horizon.

With each year's budget decisions, we determine what the future Navy and Marine Corps will look like. Just as the Fleet and Corps we have today are the result of decisions made a decade ago, so will tomorrow's Fleet and Corps be a result of the decisions we make today. For this

reason, we have to balance the needs of our Navy and Marine Corps today with those of our nation tomorrow.

Our combatant commanders understand the critical expeditionary capability the Navy and Marine Corps team brings to the fight. Whether we are conducting security cooperation around the world, deploying Marines in response to a humanitarian crisis or launching strikes from our carriers, it is clear Navy and Marine Corps presence provides great value to our decision makers and our nation. The emergence of a diverse set of challenges, including Russia, North Korea, China, Iran and ISIS demands continued emphasis on our Naval and expeditionary forces. We absolutely cannot afford to forfeit the capabilities of our future maritime power and superiority.

Around the Globe, Around the Clock

You only need to look around the world to see our Navy and Marine Corps are first on-station and demonstrate an instrumental and prominent role in our national security strategy.

For the first 54 days of the air campaign against Islamic State militants in Iraq and Syria, the only strikes came from Navy F/A-18 Hornets off USS GEORGE H.W. BUSH in the Arabian Gulf because land-based fighters could not participate until host nations approved.

During a 10-month deployment ending in June 2015, USS CARL VINSON Strike Group conducted 12,300 sorties, including 2,383 combat missions against Islamic State of Iraq and Syria (ISIS).

The operational tempo of Naval Special Operations Forces (NAVSOF) remains high, as they continue operations in the Middle East, Horn of Africa, and Central Asia. NAVSOF is manning the Combined Joint Special Operations Task Force-Iraq and deploying forces to Afghanistan.

In March 2015, USS GARY intercepted a suspected narcotics-trafficking vessel off the coast of Central America and seized 5,200 kilograms of cocaine.

In July 2015, USS PORTER entered the Black Sea to reassure NATO allies of our commitment to regional stability by conducting naval exercises with ships from 30 different nations including Spain, Portugal, France, Turkey, Greece and Bulgaria.

Last fall, as a visible demonstration of our commitment to maintaining freedom of navigation for everyone, USS LASSEN patrolled the Spratly Islands and nearby artificial reefs in the South China Sea. USS CURTIS WILBUR conducted similar freedom of navigation operations by patrolling near the disputed Triton Island earlier this year.

When tensions rose in Yemen last summer, Marines embarked with Sailors onboard Navy craft to shore up security and surveillance in surrounding waters in preparation for a potential crisis.

The 31st Marine Expeditionary Unit (MEU) deployed to Saipan to provide Defense Support to Civil Authorities after Typhoon SOUDELOR killed 30 people and displaced 150,000 others in the Commonwealth of the Northern Marianas.

Within 40 hours of President Obama's order, a Special Purpose Marine Air-Ground Task Force deployed Marines, Sailors, aircraft and equipment to Liberia to respond to the Ebola crisis, providing critical airlift and surgical capability as part of U.S disaster relief efforts.

Maritime presence has been a tenet of our democracy since its inception; the founding fathers wrote in the Constitution that Congress is authorized to "raise" an Army when needed, but mandated it "maintain" a Navy. Maintaining our great Navy and Marine Corps is what assures Americans at home, our friends and allies, as well as our adversaries that we are ready to respond when called upon to any crisis, anywhere.

Early on in my tenure as Secretary, I outlined four principles that enable our Navy and Marine Corps' to sustain their global presence. They are People, Platforms, Power and Partnerships. Those have been, and continue to be, the key factors in assuring the capability, capacity and success of our naval services, which is why they have been, and will remain, my top priorities.

People – Sustaining the World's Most Formidable Expeditionary Fighting Force

The Sailors, Marines, and civilians serving today are the best force we've ever had. But for more than a decade we asked a lot of everyone, because unlike other services, we deploy equally in peacetime and wartime. There are no permanent homecomings for Sailors and Marines. Despite all we've asked, they have performed magnificently. We've taken steps to maintain the health and resilience of our force across every facet of the Department. We have addressed issues like operational readiness levels, personal well-being for our people and their families, creating more options for career flexibility, opening new slots for graduate education, improving our advancement process, and promoting equality of opportunity. We have made the Navy and

Marine Corps stronger, focused not only on retaining the incredible expertise and professionalism that resides within these two services, but also that draws from the broadest talent pool America has to offer.

Our Sailors and Marines make Navy and Marine Corps presence possible by operating the platforms, harnessing the power, and building the partnerships necessary to fulfill our national security strategy. Seven years ago when I took office, we had a committed and capable force, but our people, and our platforms, were under stress from high operational tempo and extended deployments.

To return stability to our Sailors, Marines, their families, and to our maintenance cycles, one of our first priorities was to develop and institute the Optimized Fleet Response Plan (OFRP). This is a program that the Navy is using to schedule and plan our deployments and the maintenance of our platforms. Entering its third year since implementation, OFRP is beginning to fully demonstrate its advantages to the Fleet. USS EISENHOWER Carrier Strike Group and USS MAKIN ISLAND Expeditionary Strike Group will be first to deploy later this year entirely under the OFRP. Our men and women know there is no way to completely eliminate the unexpected, because events around the world can and do take on a life of their own. However, increasing the predictability of deployments will help improve resilience in our Sailors and Marines and their families and also has the added benefit of helping us properly support our maintenance requirements and readiness posture.

Under the OFRP, we continue to meet all operational commitments, and Sailors, Marines, and their families are giving us positive feedback on this and other initiatives like increases to

Hardship Duty Pay – Tempo (HDP-T), a pro-rated additional pay that kicks in when a deployment extends beyond more than 220 consecutive days, and Career Sea Pay, paid to those who have spent a total of three years at sea and Career Sea Pay-Premium for those E-6 and above who have spent a total of eight years in sea-going assignments. These incentives reward those who take the hard and challenging billets at sea, which form the backbone of our operations.

Taking care of our people is about more than just operational stability. Through our 21st Century Sailor and Marine Initiative, implemented in 2012, we have provided a holistic approach to assuring we have the healthiest, fittest, and most resilient force in the world. We have focused on helping our Sailors and Marines maximize their personal and professional readiness by assisting them and their families with the mental, physical and emotional challenges of military service. Eliminating the stovepipes that existed between many of the programs designed to support our people allows us to better address issues like suicide and sexual assault in a comprehensive way that protects our Sailors and Marines and makes them stronger.

In suicide prevention, we are continuing to accelerate our efforts in 2016 by becoming more assertive on early recognition, education and open dialogue to promote climates supportive of psychological health. We are expanding our Ask, Care, Treat (ACT) initiative that focuses on training, counseling, and intervention. To date, over 40,000 Sailors have received training via Navy Operational Stress Control (OSC) courses. And our partnerships with the Navy and Marine Corps Public Health Center, the Defense Suicide Prevention Office, and the Bureau of Navy Medicine and Surgery have maximized our public health approach to suicide prevention. Furthermore, we are adding to the nearly 800 Suicide Prevention Coordinators (SPC) trained in

2015, enhancing local suicide prevention efforts at the deckplate by having a qualified program advocate at nearly every command.

Sexual assault is a crime with devastating impacts to the Navy and Marine Corps. Every Sailor and Marine deserves a working environment respectful of all, completely intolerant of sexual assault, and supported by programs of prevention, advocacy, and accountability. So we've implemented many actions to attack this insidious threat. While there is still work to be done, we have instituted an increasingly effective Sexual Assault Prevention and Response program and Victim's Legal Counsel, which together encourage increased reporting and provide critical support to those who come forward, and I am the only Service Secretary who has my Sexual Assault Prevention Response Officer report directly to me. We are also taking steps to prevent and respond to perceptions of retaliation or ostracism on the part of the courageous people who report these crimes– whether by the chain of command or peers.

Our Sexual Assault Prevention and Response programs are many and varied. Through our InterACT Bystander intervention training we've educated more than 52,000 Sailors and Marines at 220 training events on how to stop a potentially dangerous scenario from leading to an assault. Our Navy Chaplain Corps has teamed with clinicians to establish CREDO, a 48-hour retreat event with workshops focused on teamwork, community building, personal resiliency and reconciliation. In-person education is augmented by numerous interactive training tools available to all Sailors and Marines ashore and afloat. But no matter how much we've done and continue to do, we will not consider our mission a success until this crime is eliminated.

Protecting our Department from instability and destructive and illegal behavior is important, but equally important is promoting healthy lifestyles that result in a more capable and ready fighting force. Our high operational tempo demands a year-round culture of fitness. So we have completely revamped the Physical Fitness Assessment to focus on producing warfighters, capable of accomplishing any mission any time, a measure that not only improves readiness but reduces overall medical costs. To set Sailors and Marines up for success, we opened a 24-hour a day, seven-day a week gym on every base worldwide and we began issuing the Navy Fitness Suit, a uniform item the Marines already have. Sailors earn Fitness Suit patches for outstanding performance, and those who maintain that level of performance over three cycles receive the "Outstanding Fitness Award."

To complement physical training with well-balanced diets, we've increased efforts to provide nutritious food options to Sailors and Marines at sea and ashore. In 2012, the Marines introduced the "Fueled to Fight" nutrition program, designed to promote a healthy lifestyle by providing more nutritious food choices. At base dining facilities, a labeling system identifies healthier options and enhances the Marine's ability to make a healthy choice. The Navy also created their version, called, "Fuel to Fight," launched by the SEALS at Naval Amphibious Base Little Creek, which increases the availability of lean-proteins, vegetables, and complex carbohydrates in our galleys. We are further developing the concept at one sea-based and one shore-based unit this year and will implement it Fleet-wide in 2017.

Part of overall health is emotional health. In order for Sailors and Marines to remain focused on the mission, they should not be distracted by concerns about their home life. The Department of the Navy takes very seriously its commitment to support our Navy and Marine Corps families,

and we have taken actions to make service more family friendly. We established 24/7 Child Care Development Centers at three Fleet concentration areas and increased access to childcare by a total of four hours, two hours on either side of the previously existing timeframe, at all locations.

And, in July of last year, I tripled paid maternity leave from 6 to 18 weeks, a period subsequently reduced to 12 weeks by the Secretary of Defense. Meaningful maternity leave when it matters most is one of the best ways that we can support the women who serve our county. This flexibility is an investment in our people and our Services, and a safeguard against losing skilled service members. In our line communities, for example, we were losing about twice as many female service members as male, most leaving between 7-12 years of service. We believe extending maternity leave will save money and increase readiness in the Department of the Navy by keeping people in.

Under a Congressional authorization, we piloted the Career Intermission Program (CIP) beginning in 2009. CIP allows a Sailor or Marine to take up to three years off, with a two-year payback for each year taken. When they return they compete against people who have been on active duty the same amount of time, as opposed to those from their previously assigned year-group. So career flexibility does not come at the cost of advancement potential. Our early participants have successfully rejoined the Fleet and, again due to Congressional action, we are expanding this program to help retain talented Sailors and Marines.

While we have taken steps to provide additional services and career flexibility so Sailors and Marines can address their needs personal needs, we have also aggressively enhanced

professional development opportunities to strengthen our all-volunteer force. In a world increasingly dependent on inter-service, inter-agency, and international cooperation, that development takes place over the entire span of one's career. To broaden background diversity in our officer corps, we re-opened NROTC units at Harvard, Yale, Columbia and Princeton after a 40-year hiatus.

We also established the Fleet Scholars Education Program, adding 30 new graduate school positions allocated by warfighting commanders to eligible officers. Our first participants are now studying at Harvard, Dartmouth, and Yale.

Outside the classroom, we recognize the value that private sector ingenuity adds to American innovation, so we have also sent officers to work at places like FedEx and Amazon as part of SECNAV Industry Tours. Those who participate in these programs are our very best, and, in return for their experience, we expect them to bring their knowledge back to the Fleet and to continue to serve under the requirement that for every month spent away, a Sailor or Marine owes three months back.

We want people to take advantage of these and other opportunities, and we want them to commit to a career beyond any prescribed service obligation. That means creating an advancement system based primarily on merit, not tenure. In the Navy, we removed arbitrary "zone stamps" from officer promotion boards this year which can unnecessarily create bias. Additionally, for enlisted, we increased the number of advancement opportunities available to Commanding Officers to spot promote their best and brightest Sailors via the Meritorious Advancement Program. Next year, we expect those numbers to grow even further.

In the Marine Corps we are revamping our manpower models to develop the force and address gaps in our Non-commissioned Officer ranks. Sixty percent of Marines are on their first tour and 40 percent are E-3 and below. So we've implemented the Squad Leader Development Program to mature and further professionalize the force. This Program screens small unit infantry Marines, selects candidates based on performance and provides them with opportunities for education, qualification and assignment.

After returning predictability to the Navy and Marine Corps and creating an environment that supports families and promotes professional development, I took actions to make a career in the Department attractive and viable to the broadest spectrum of American talent. We now actively cultivate a force representative of the nation it defends. Doing so maximizes our combat effectiveness, because a diverse force is a stronger force.

This year, twenty-seven percent of the freshman class at the Naval Academy Class is comprised of women, more than a one-third increase from the summer of 2009 when I first took office. And for the first time in American history, all billets in the Navy and Marine Corps will be open to every member of this year's graduating class, and to all others, officers and enlisted, throughout the Fleet.

I started integrating women into previously closed jobs shortly after taking office by opening up submarines and the coastal riverines to women. Later, in 2013, Secretary Panetta and Chairman Dempsey decided that the default position would be to open all military positions to women or seek an exemption to the policy. When weighing this decision, I took a methodical and

comprehensive approach. Ultimately, I decided that denying any individual who meets an established standard the opportunity to serve because of their gender not only goes against everything we value as Americans, but it will most certainly diminish our combat effectiveness. We have already proven that is the case with respect to things like the color of someone's skin or who they love.

While we celebrate diversity in all of our people, we are uniform in purpose as part of an organization that prioritizes service over self. Rather than highlighting differences in our ranks, we have incorporated everyone as full-participants by moving, with some few exceptions, to common uniforms in both the Navy and the Marine Corps so that our forces have a common appearance. Now and in the future, we will present ourselves not as male and female Sailors and Marines, but as United States Sailors and Marines.

In the Reserves, during FY15 we mobilized 2,700 individual Reserve Sailors and Marines to support operations worldwide. This allows us to focus our active component on filling critical sea billets to help ensure Fleet wholeness and readiness. This year, we were reminded of the sacrifices our reserves make with the attack at Navy Operational Support Center (NOSC) Chattanooga that took the lives of five of our Sailors and Marines. At home, we have taken steps to provide force protection against these kinds of terrorist acts at off-installation NOSCs, and as of December 2015, 70 of 71 off-installation NOSCs now have armed Selected Reservists. More than 150 NOSC staff personnel have graduated the Navy's Security Reaction Force Basic (SRF-B) course in support of the Navy Reserve Force Protection mission. For Marine Corps reserve centers, 146 of 161 locations have armed duty personnel, and the remaining 15 sites are in the process of training personnel to be armed. Abroad, our Reserve Sailors and Marines are

deployed globally, and we will continue to maintain a Reserve that is ready, relevant, and responsive to the nation's needs.

The Department's civilian workforce supports our uniformed force and is critical to the success of our missions. Our civilian employees have endured multi-year pay freezes, a hiring freeze, furloughs and continued limits on performance awards that impacted morale. Results of a Federal Employee Viewpoint Survey indicated that, while our civilians appreciated the role they play in our mission, they felt recognition and training were lacking. Where possible, through such efforts as Operation Hiring Solutions, the Department has mitigated the impacts to Fleet readiness and operations and to increase civilian employee job satisfaction. Our efforts have produced tangible results, demonstrated by increased civilian retention rates over the last two consecutive years.

This patriotic workforce is the foundation of how the Department of the Navy operates. In order to ensure we have the most capable people, in the right positions, we run a number of leadership development programs. Annually we select participants for senior leader, executive leader, and developing leader programs to provide education and training that will help our people tackle the issues we face now and in the future.

Platforms –Growing Our Fleet Despite Shrinking Budgets

To provide the presence the American people and our nation's leaders expect and have come to rely on, our Sailors and Marines need the right number and composition of ships, aircraft, weapons, vehicles, and equipment to execute the missions mandated by our National Security Strategy. That means we must have a properly sized Fleet. Quantity has a quality all its own.

When I first took office, I committed to growing the Fleet to meet our validated requirement and strengthen the acquisition process by employing stricter management and increased competition. In the seven fiscal years from 9/11/2001 to 2009, our Fleet declined from 316 to 278 ships, and during that period, the Navy contracted for only 41 ships, not enough to keep our Fleet from declining nor keep our shipyards open and healthy. In the seven fiscal years following 2009, we will have contracted for 84 ships. And we will have done so while increasing aircraft purchases by 35 percent, despite decreasing defense budgets.

Shipbuilding

Navy shipbuilding is an essential part of our country's larger shipbuilding and repair industry, which provides more than 400,000 jobs and contributes more than $37 billion to America's gross domestic product. Shipbuilding enhances and strengthens economic security as well as national security. The work we have done, and must continue to do, will reinforce the importance of maintaining a partnership with the industrial base, as well as keep our shipbuilding industry strong and ready to support the national security needs of our Navy and our country.

Across our shipbuilding portfolio, we have employed direct, impactful actions including increased competition within and across product lines, using block buys and multi-year procurements when products are mature; ensuring designs are stable before entering into production; pursuing cross-program common-equipment buys; and achieving affordability through hard-but-fair bargaining. This would not have been possible without Congressional approval on items like multi-year procurements.

Stability and predictability are critical to the health and sustainment of the industrial base that builds our Fleet. Changes in ship procurement plans are significant because of the long lead time, specialized skills, and extent of integration needed to build military ships. The skills required to build ships are perishable, and, in the past, we have lost talent in this critical industry when plans have changed. Each ship is a significant fraction of not only the Navy's shipbuilding budget but also industry's workload and regional employment. Consequently, the timing of ship procurements is a critical matter to the health of American shipbuilding industries, and has a two-to-three times economic multiplier at the local, regional and national levels.

The Navy will continue to consider and, when appropriate, use innovative acquisition strategies that assure ship construction workload and sustain the vendor base while imposing cost competition. And we will continue to invest in design for affordability, modularity and open systems architectures while incentivizing optimal build plans and shipyard facility improvements and supporting shipbuilding capability preservation agreements. These initiatives support affordability, minimize life-cycle costs, improve and ensure quality products, facilitate effective and efficient processes, and promote competition - which all support Department priorities.

Our efforts to maintain and affordably procure our Fleet's ships and submarines have continued through this past year. The Department has established a steady state Ford Class procurement plan designed to deliver each new ship in close alignment with the Nimitz Class ship it replaces. CVN 78 cost performance has remained stable since 2011 and this lead ship will deliver under the Congressional cost cap. The FY16 National Defense Authorization Act (NDAA) reduced this cost cap for follow-on ships in the CVN 78 class by $100 million. Stability in requirements, design, schedule, and budget, is essential to controlling and improving CVN 79 cost, and

therefore is of highest priority for the program. In transitioning from first-of-class to follow-on ships, the Navy has imposed strict configuration and cost controls to ensure CVN 79 is delivered below the cost cap. CVN 80 planning and construction will continue to use class lessons learned to achieve cost and risk reduction. The CVN 80 strategy seeks to improve on CVN 79 efforts to schedule as much work as possible in the earliest phases of construction, where work is both predictable and more cost efficient.

In our attack submarine program, we awarded the largest contract in Navy history, $18 billion, to build 10 Virginia-class submarines. Because Congress authorized a multi-year contract for these 10 boats, giving our shipyards stability and allowing them to order materials in economic quantities, we were able to save the taxpayer more than $2 billion and effectively procured 10 boats for the price of nine.

We are continuing procurement of two Virginia Class submarines per year under the Block IV 10-ship contract which runs through FY18. We will also continue to develop the Virginia Payload Module (VPM), which is planned for introduction in FY19, as part of the next Virginia Class multiyear procurement (Block V).

The Arleigh Burke Class (DDG 51) program is one of the Navy's most successful shipbuilding programs – 62 of these ships are currently operating in the Fleet. We are in the fourth year of a multi-year procurement, and thanks to the work at shipyards in Mississippi and Maine and our acquisition team, the DDG 51 competitive multiyear contract is saving more than $2 billion. The two Arleigh Burke Class destroyers requested in FY17, which will complete the current multiyear contracts, will provide significant upgrades to integrated air and missile defense and

additional ballistic missile defense capability (Flight III) by incorporation of the Air and Missile Defense Radar.

With our Littoral Combat Ships (LCS), the average ship construction cost, under the current block buy contracts, has decreased by nearly 50 percent in comparison to LCS hulls contracted prior to 2009. We now have six ships of this class delivered, 18 currently on contract, and two additional ships to award this fiscal year. We are currently upgrading the design, which will significantly increase LCS lethality and survivability, to be introduced no later than FY19, and potentially as early as FY18. Because of these ships' enhanced counter-surface and counter-submarine capabilities, contributing to their role in Battle Group operations, we are re-designating these future ships as Frigates.

Our budget request also includes incremental funding for the next big deck amphibious assault ship, LHA 8. We are in the midst of an innovative solicitation which solicits bids for LHA 8, the replacement Fleet oiler T-AO(X), and early design efforts for the replacement for the LSD 41/49 class LX(R). These bids which uniquely support both stability and competition within the amphibious and auxiliary sectors of the industrial base, will be awarded this fiscal year

Ohio Replacement (OR) remains our top priority program. Prior modernization programs, such as our first strategic deterrence procurement, "41 for Freedom," were accompanied by topline increases. The Navy greatly appreciates Congressional support in overcoming the challenges posed by funding the OR Program.

The fiscal realities facing the Navy make it imperative that we modernize and extend the service lives of our in-service ships to meet the Navy's Force Structure Assessment requirements. An

important element of mitigation is the extension and modernization of our Arleigh Burke class destroyers and Ticonderoga class cruisers (CGs).

The FY 2017 President's Budget includes funding for the modernization of two destroyers to sustain combat effectiveness, ensure mission relevancy and to achieve the full expected service lives of the AEGIS Fleet. The destroyer modernization program includes Hull, Mechanical, and Electrical (HM&E) upgrades as well as combat systems improvements with upgraded AEGIS weapons systems. Advanced Capability Build (ACB) 12 to include open architecture computing environment, BMD capability, installation of the Evolved Sea Sparrow Missile (ESSM), integration of the SM-6 missile, and improved air dominance with processing upgrades and Naval Integrated Fire Control-Counter Air capability. This renovation reduces total ownership costs and expands mission capability for current and future combat capabilities.

Cruiser modernization ensures long-term capability and capacity for purpose-built Air Defense Commander (ADC) platforms. Of our 22 total cruisers, 11 recently modernized CGs will perform the ADC function for deploying Carrier Strike Groups while the Navy modernizes our other 11 ships. As these are completed, they will replace the first 11 on a one-for-one basis as each older ship reaches the end of its service life (35 years) starting in FY20. Our modernization schedule commenced in FY15 on a 2-4-6 schedule in accordance with Congressional direction: two cruisers per year for a long-term phase modernization, for a period no longer than four years, and no greater than six ships in modernization at any given time.

The Budget supports CG Modernization and proposes a plan that will save $3 billion over the FYDP by inducting the remaining cruisers into modernization following their current planned

operational deployments. This differs from the current plan in that we would put a total of four CGs in phased modernization in FY17. We understand that this request does not align with previous Congressional direction, but feel it is the best way to honor today's operational demands as we prepare for future strategic requirements.

Aviation

With the support of Congress, we continue to strengthen our Naval Aviation force. We are in the process of re-capitalizing every major aviation platform in the Navy and Marine Corps inventory. The MV-22B has replaced the CH-46E/CH-53D, and we are in the process of replacing all other Navy and Marine Corps aircraft. We also continue to focus on unmanned aviation. We are investing in the MQ-4C Triton, MQ-8C Fire Scout, RQ-21 Blackjack, and RQ-7B Shadow plus initiating efforts to provide carrier-based unmanned aviation capability with the RAQ-25 Stingray.

Our investments focus on developing and integrating capabilities by using a family of systems approach, when viable, to maintain superiority against rapidly evolving threats. Using current and future platforms, weapons, networks and technologies, we will ensure Naval Aviation relevance and dominance in the future. For legacy weapons systems, we are addressing aviation readiness by investing in operations and support accounts to mitigate training and platform readiness issues. Our procurement of new aircraft and synchronization of readiness enablers will improve our ability to project power over and from the sea.

The Strike Fighter inventory should be viewed in two separate and distinct phases. The near term challenge is managing a Department of Navy Tactical Aviation (TACAIR) force that has

been reduced in capacity through a combination of flying many more flight hours than planned, pressurized sustainment and enabler accounts, legacy F/A-18A-D Hornet depot throughput falling short of the required output due to sequestration and other factors, and the impact of delays to completing development of the Joint Strike Fighter program. As a result of aggressive efforts instituted in 2014 across the Department to improve depot throughput and return more aircraft back to service, FY15 depot throughput improved by 44 percent as compared to FY14, returning to pre-sequestration levels of throughput. TACAIR aviation depots are expected to continue to improve productivity through 2017, and fully recover the backlog of F/A-18A-D aircraft in 2019 at which time the focus will shift toward F/A-18E/F service life extension. In the far term, the Strike Fighter inventory is predominantly affected by the rate at which we can procure new TACAIR aircraft. The FY2017 budget request increases both the F/A-18E/F and F-35 strike fighter aircraft in order to mitigate near-term and far-term risks to our strike fighter inventory in the most affordable, effective manner possible.

Critical to power projection from the sea, the E-2D Advanced Hawkeye, our new and upgraded airborne early-warning aircraft, completed Fleet integration and deployed with USS ROOSEVELT (CVN 71) Carrier Strike Group. We are continuing Full Rate Production under a multi-year contract and Fleet transition is underway. We expect to integrate the advanced capabilities with Forward Deployed Naval Forces (FDNF) by 2017. We continue to recapitalize the P-3C Orion with P-8As, and are on-schedule to complete the purchase within the FYDP to bring a total of 109 P-8As to the Fleet. And our P-8s will continue to undergo incremental improvements.

Finally, we expect to complete EA-18G Growler Fleet transition in FY16. As the DoD's premier tactical Airborne Electronic Attack / Electronic Warfare aircraft, the Growler is crucial to power projection ashore in a saturated electronic warfare environment. With Congress' addition of seven EA-18Gs in FY16, we will have 160 of these aircraft in 15 squadrons to support the Navy requirement. With the retirement of the Marine Corps' last EA-6B Prowlers in 2019, these highly capable aircraft take over the nation's airborne electronic attack mission.

Our rotary wing and assault support communities are in the midst of large-scale recapitalization. In the vertical lift community, multi-year production contracts for the MV-22 continue. We have taken advantage of joint service commonality in the V-22 to fill a crucial enabler in the Carrier On-board Delivery mission. In the Marine Corps, procurement of the AH-1Z continues to deliver combat proven-capabilities. Finally, with its first flight last fall, the CH-53K King Stallion is poised to bring significant improvements in our heavy lift capabilities.

Unmanned Systems

Currently, our warfare communities - air, sea, undersea and ground - are all doing superb work in unmanned systems which are critical to our ability to be present. They increase the combat effectiveness of our deployed force while reducing the risk to our Sailors and Marines, allowing us to conduct missions that last longer, go farther, and take us beyond the physical limits of pilots and crews. Launching and recovering unmanned aircraft from the rolling decks of aircraft carriers, launching unmanned rotary-wing patrols from our small surface combatants, and deploying unmanned underwater vehicles globally are vital elements both now and in the future for maritime presence and naval warfare. We have enhanced our focus on unmanned systems and prioritized efforts under purposeful leadership at the level of the Deputy Assistant Secretary

of the Navy for Unmanned Systems and the new office of Unmanned Warfare Systems of the staff of the Chief of Naval Operations, also known as N99.

We are moving ahead with a number of unmanned programs in the effort to rapidly integrate new capability into the fleet. The MQ-8B Fire Scout began regular deployments in 2014. When USS FORT WORTH deployed to Singapore recently, the ship took a mixed aviation detachment of a manned MH-60R helicopter and MQ-8B Unmanned Aerial Vehicle's (UAV). This kind of hybrid employment, pairing our manned and unmanned systems to take advantage of the strengths of each, will be a hallmark of our future approach to unmanned systems. The first operational variant of the larger and more capable next generation Fire Scout, the MQ-8C, recently completed developmental testing and a successful operational assessment. This aircraft is scheduled to be deployable by the end of 2017 and will bring double the endurance and double the payload of the older versions.

The MQ-4C Triton is a key component of the Navy Maritime Patrol Reconnaissance Force. Its persistent sensor dwell capability, combined with networked sensors, will enable it to effectively meet ISR requirements in support of the Navy Maritime Strategy. The MQ-4C Triton will establish five globally-distributed, persistent maritime ISR orbits beginning in Fiscal Year 2018 as part of the Navy's Maritime ISR transition plan. Currently, MQ-4C Triton test vehicles have completed 53 total flights and will continue sensor flight testing this spring.

In 2015, the Office of the Secretary of Defense conducted a comprehensive Strategic Portfolio Review (SPR) of DoD ISR programs. The results of the SPR, and a subsequent ISR portfolio review, as reflected in our PB17 budget is the restructure of the Unmanned Carrier-Launched

Airborne Surveillance and Strike (UCLASS) program. The RAQ-25 Stingray will deliver the Navy's first carrier-based unmanned aircraft, a high-endurance platform that will replace today's F/A-18E/F aircraft in its role as the aerial tanker for the Navy's Carrier Air Wing (CVW), thus preserving the strike fighter's flight hours for its primary missions. Stingray will also have the range and payload capacity associated with high-endurance unmanned aircraft to provide critically-needed, around the clock, sea-based ISR support to the Carrier Strike Group and the Joint Forces Commander. The Navy envisions that the open standards to be employed in the Stingray design will enable future capabilities to be introduced to the aircraft after it has been fully integrated into the CVW.

Autonomous Undersea Vehicles (AUV) are a key component of the Navy's effort to expand undersea superiority AUVs are conducting sea sensing and mine countermeasure tasks today with human-in-the-loop supervision. While nominal force structure requirements for FY25 have not been determined, the Navy is committed to growing both the size and composition of the AUV force. In the near-term, AUVs present an opportunity to increase undersea superiority and offset the efforts of our adversaries.

The Large Displacement Unmanned Underwater Vehicle (LDUUV) is an unmanned undersea vehicle to offload "dull, dirty, dangerous" missions from manned platforms beginning in 2022. LDUUV will be launched from a variety of platforms, including both surface ships and submarines. The craft's missions will include ISR, acoustic surveillance, ASW, mine counter-measures, and offensive operations.

The Surface Mine Countermeasure Unmanned Undersea Vehicle (SMCM UUV) commonly referred to as Knifefish employs low-frequency broadband synthetic aperture sonar. Knifefish is planned for incorporation into increment four of the LCS mine countermeasures mission package.

Weapons

The FY17 budget invests in a balanced portfolio of ship self-defense and strike warfare weapons programs. The Navy has made significant strides in extending the Fleet's layered defense battle-space while also improving the capabilities of the individual ship defense layers in order to pace the increasing anti-ship missile threat.

Standard Missile-6 (SM-6) provides theater and high value target area defense for the Fleet, and with Integrated Fire Control, has more than doubled its range in the counter-air mission. And as the Secretary of Defense announced a few weeks ago, we are modifying the missile to provide vital anti-surface capability. The Evolved Sea Sparrow Missile (ESSM) program awarded the Block 2 Engineering Manufacturing and Development contract in 2015, which will borrow from the SM-6 active guidance section architecture to improve ship self-defense performance against stressing threats and environments. Rolling Airframe Missile (RAM) Block 2 achieved IOC in May 2015, providing improved terminal ship defense through higher maneuverability and improved threat detection.

For strike warfare, the Department's Cruise Missile Strategy has been fully implemented with the PB17 budget submission. This strategy sustains Tomahawk Blocks III and IV through their

service lives; integrates modernization and obsolescence upgrades to the Block IV Tomahawk during a mid-life recertification program which adds 15-years of additional missile service life; fields the Long Range Anti-Ship Missile (LRASM) as the Offensive Anti-Surface Warfare (OASuW) Increment 1 solution to meet near to mid-term threats; and develops follow-on Next Generation Strike Capability (NGSC) weapons to address future threats and to replace or update legacy weapons. This plan brings next generation technologies into the Navy's standoff conventional strike capabilities. NGSC will address both the OASuW Increment 2 capabilities to counter long-term anti-surface warfare threats, and the Next Generation Land Attack Weapon (NGLAW) to initially complement, and then replace, current land attack cruise missile weapon systems.

Ground Forces

The focus of our Marine Corps ground modernization efforts continues to be our ground combat and tactical vehicle (GCTV) portfolio, along with the Command and Control (C2) systems needed to optimize this effectiveness of the entire MAGTF once ashore.

The key priority within the GCTV portfolio is the replacement of the legacy Amphibious Assault Vehicle (AAV) with modern armored personnel carriers through a combination of complementary systems. The Amphibious Combat Vehicle (ACV) program is the Marine Corps' highest ground modernization priority and will use an evolutionary, incremental approach to replace the aging AAVs with a vehicle that is capable of moving Marines ashore, initially with surface connectors and ultimately as a self-deploying vehicle. ACV consists of two increments, ACV 1.1 and ACV 1.2. Increment 1.1 will field a personnel carrier with technologies that are

currently mature. Increment 1.2 will improve upon the threshold mobility characteristics of ACV 1.1 and deliver C2 and recovery and maintenance mission role variants.

In parallel with these modernization efforts, a science and technology portfolio is being developed to explore a range of high water speed technology approaches to provide for an affordable, phased modernization of legacy capability to enable extended range littoral maneuver. These efforts will develop the knowledge necessary to reach an informed decision point in the mid-2020s on the feasibility, affordability, and options for developing a high water speed capability for maneuver from ship-to-shore.

We are also investing in the replacement of a portion of the high mobility, multi-purpose, wheeled vehicle (HMMWV) fleet which are typically exposed to enemy fires when in combat. In partnership with the Army, the Marine Corps has sequenced the Joint Light Tactical Vehicle (JLTV) program to ensure affordability of the entire GCTV portfolio while replacing about one third (5,500 vehicles) of the legacy HMMWV fleet with modern tactical trucks prior to the fielding of ACV 1.1.

Critical to the success ashore of the MAGTF is our ability to coordinate and synchronize our distributed C2 sensors and systems. Our modernization priorities in this area are the Ground/Air task Oriented radar (G/ATOR) and the Common Aviation Command and Control System (CAC2S) Increment I. These systems will provide modern, interoperable technologies to support real-time surveillance, detection and targeting and the common C2 suite to enable the effective employment of that and other sensors and C2 suites across the MAGTF.

Innovation

As we continue to use better procurement strategies for ships, aircraft, and other weapons systems, we are also using better ideas to enhance the utility of current assets and to accelerate future capabilities to the Fleet. The Navy and Marine Corps have always been at the cutting edge of technology. To tap into the ingenuity inherent in our force, I created Task Force Innovation: a group from across the department comprised of thinkers, experts, and warfighters with diverse backgrounds and from every level. The Task Force is anchored in the Department as the Naval Innovation Advisory Council, with a location on each coast. These councils rely on feedback from databases such as "the Hatch," a crowdsourcing platform that cultivates solutions from those who know best, our deckplate Sailors and Marines in the field.

To facilitate ways for new technologies to reach the Fleet unhindered by the overly-bureaucratic acquisitions process, we are implementing Rapid Prototyping strategies. This initiative provides a single, streamlined approach to prototyping emerging technologies and engineering innovations to rapidly response to Fleet needs and priorities.

We are also continuing the research and development of promising technologies such as 3D printing, directed energy weapons, robotics, adaptive force packaging at sea and unmanned vehicles to counter projected threats and using the entire force to prove these concepts. We are continuing the development and testing of the Electromagnetic Railgun and Hyper Velocity Projectile (HVP) as part of a broader Gun/Projectile Based Defense strategy. We plan to demonstrate this capability this fiscal year in preparation for follow-on at sea testing. In 2014, we deployed the first operational Laser Weapons System (LaWS) onboard PONCE in the Arabian Gulf. Lessons-learned from the 30 kilowatt LaWS installation are directly feeding the

Navy's investment in Solid State Laser weapons. The Navy is developing a 100-to-150 kilowatt laser prototype for at-sea testing by 2018.

To secure our superiority in cyberspace, we are building a new cyber warfare center of excellence at the Naval Academy, and we have more than doubled our cyber workforce since 2009. In addition to growing the cyber domain, we are also re-designating appropriate positions to count as part of the cyber workforce. The Department is diligently working on ensuring cyber workforce billets are properly coded in our manpower databases for tracking and community management efforts.

There has been a concerted effort to protect cyber positions from drawdowns and maximize direct and expedited civilian hiring authorities to improve cyber readiness and response. Additionally, the DON is supporting the DoD Cyber Strategy in the stand-up of the Cyber Mission Force teams; 40 teams by Navy, 3 teams by Marine Corps and 1,044 cyber security positions within Fleet Cyber and Marine Forces Cyber commands. These positions require unique cyber security skills and qualifications to perform a multitude of cyber security functions that will enhance the Department of the Navy cyber security and defense capability.

Power – Alternative Energy Fueling the Fight

Energy is a necessary commodity for modern life, and it plays a critical geopolitical role around the world. Access to fuel is often used as a weapon, as we have seen with Russian action against Ukraine, and threats against the rest of Europe. Although the price of oil has recently declined, the overall trend strongly suggests that over time, the prices could return to the higher levels.

Aside from the obvious economic instability that comes with the volatile price of oil, being overly reliant on outside energy sources poses a severe security risk, and we cannot afford to limit our Sailors and Marines with that vulnerability and lack of stability. When I became Secretary, our use of power was a vulnerability; we were losing too many Marines guarding fuel convoys in Afghanistan and volatile oil prices were stressing many areas, particularly training.

In 2009, the Department of the Navy set out to change the way we procure, as well as use, energy, with the goal of having at least half of naval energy- both afloat and ashore- come from non-fossil fueled sources by 2020. By using alternative energy sources, we improve our warfighting capabilities; reduce our reliance on foreign sources of fossil fuels; and reduce the ability of potential adversaries the opportunity to use energy as a weapon against us and our partners.

Pioneering new advancements in how we power our platforms and systems is nothing new for the Navy and Marine Corps. For two centuries we have been a driver of innovation, switching from sail to steam, steam to coal, coal to oil, and harnessed the power of nuclear propulsion. Operationally, energy matters now more than ever; our weapons platforms today use far more energy than their predecessors. The new technology we develop and acquire will ensure we maintain a strategic advantage for decades to come. Fueling the ships, aircraft, and vehicles of our Navy and Marine Corps is a vital operational concern and enables the global presence necessary to keep the nation secure.

After successfully testing the Great Green Fleet at the Rim of the Pacific Exercise in 2012, just last month USS JOHN C. STENNIS Strike Group departed on a routine operational deployment,

steaming on an blend of conventional and alternative fuels, as well as conducting underway replenishments at sea with these fuels. The three stipulations we have for our alternative fuels are they must be drop-in, they cannot take away from food production, and they must be cost competitive.

The alternative fuels powering the Great Green Fleet 2016 were procured from a company that makes its fuel from waste beef fats. These alternative fuels cost the Department of Defense $2.05 per gallon. It is critical we continue to use cost-competitive blended alternative fuels in our ships and aircraft to ensure operational flexibility. For example, of the three crude oil refineries in Singapore one is 50 percent owned by China, while an alternative fuel plant is owned by a Finnish company.

This past year, we surpassed the goal the President set in his 2012 State of the Union Address, when he directed the Department of the Navy to have a gigawatt (one-half of our total ashore energy needs in the U.S.) of renewable energy by 2020. The Renewable Energy Program Office (REPO) coordinates and manages the goal of producing or procuring cost-effective renewable energy for our bases, and the power we are buying through our REPO projects will be cheaper than our current rates over the life of the contract. Today, we have in procurement more than 1.1 gigawatts of renewable energy for our shore installations--five years ahead of schedule.

In August, the Department of the Navy awarded the largest renewable contract in federal government history with the Western Area Power Administration. This solar project will meet a third of the energy needs for 14 Navy and Marine Corps installations, bringing them 210 MW of renewable power for 25 years, and saving the Navy $90 million.

In the Marine Corps, the Expeditionary Energy Office (E2O) continues to focus on increasing their operational reach and empowering Marines in the field. E2O is doing amazing work. The Marine Corps hosts two expos- one on each coast- every year where they ask industry leaders to bring their latest technology, and, if the Marines see an operational use for it, they can buy it. They have invested in items such as small, flexible and portable solar panels that can save a company of Marines in the field 700 pounds in batteries. The Marines are also working on kinetic systems for backpacks and knee braces that harvest energy from a Marine's own movement. These technologies are making our Marines lighter, faster and more self-sustainable on the battlefield.

Across the Fleet and Marine Corps, we have taken numerous energy conservation measures that are aimed at energy efficiency, and have had dramatic impact on our energy use.

For example, two of our newest amphibious ships, USS MAKIN ISLAND and USS AMERICA use a hybrid propulsion system that has an electric power plant for slower speeds and traditional engines for speeds over 12 knots. When MAKIN ISLAND returned from her maiden deployment, she came back with almost half her fuel budget, despite the fact she stayed at sea an additional 44 days.

We had a Chief suggest we change all the lightbulbs on our ships to LEDs. Now every time a ship comes in for overhaul, we are changing out the bulbs. This simple change is saving us more than 20 thousand gallons of fuel per year per destroyer. They also last far longer, give off better light, and reduce our maintenance costs.

Our Sailors are using a Shipboard Energy Dashboard that provides them with real-time situational awareness of the energy demand on the various systems that are running, allowing Sailors to see the impact the way they operate a ship can have on fuel consumption. Sailors across the Fleet are taking it upon themselves to make their own platforms as efficient as possible, and the results are tangible.

The Department of the Navy's efforts in energy efficiency have strongly contributed to a decline in the Navy's demand for oil nearly 15 percent from fiscal 2008 to fiscal 2014, and the Marines slashed their oil consumption 60 percent over that same period, according to a recent report by the Office of the Undersecretary of Defense for Acquisitions, Technology and Logistics. While drawdowns in Iraq and Afghanistan have certainly contributed to these numbers, improvements in our use of energy have had an impact on our overall consumption.

Diversifying our energy supply for our ships, our aircraft, and our bases helps guarantee our presence and ability to respond to any crisis because we can remain on station longer or extend our range, reducing the delays and vulnerabilities associated with refueling.

We are a better Navy and Marine Corps for innovation, and this is our legacy. Employment of new energy sources has always been met with resistance, but in every case, adoption of new technologies enhanced the strategic position of our nation through improvements in the tactical and operational capabilities of our force. Our focus on power and energy is helping to ensure the United States Navy and Marine Corps remain the most powerful expeditionary fighting force in the world and enhance their ability to protect and advance American interests around the globe.

Partnerships – Building Partnerships to Advance our Shared Values

In this maritime century, cooperation with our international allies and partners is critical to defending the global system, as it broadens responsibility for security and stability, while diffusing tensions, reducing misunderstandings, and limiting conflict. It is through a cooperative effort that we will assure our navies can provide the necessary presence to maintain freedom of navigation and maritime security around the world.

I have traveled almost 1.2 million miles and visited 144 countries and territories and all 50 states to meet with Sailors and Marines and to build partnerships both at home and abroad. International meetings establish the trust that helps us deter conflict and respond in a coordinated and effective manner to manmade or natural crises. We strengthen these partnerships in times of calm because, in times of crisis, you can surge people, you can surge equipment, but you cannot surge trust.

We continue to focus our efforts on the rebalance of assets to the Pacific as an important part of our partnership efforts. Having the right platforms in the right places is a vital piece of ensuring our friends and allies understand our commitment to this complex and geopolitically critical region. We're moving more ships to the central and western Pacific to ensure our most advanced platforms and capabilities are in the region, including forward basing an additional attack submarine in Guam and forward stationing four Littoral Combat Ships in Singapore. Also, we're providing two additional multi-mission Ballistic Missile Defense destroyers to Forward Deployed Naval Forces (FDNF) in Japan and the P-8A maritime patrol aircraft are making their

first rotational deployments in the region. Additionally, USS RONALD REAGAN replaced USS GEORGE WASHINGTON as our carrier homeported in Japan.

We are hubbing Expeditionary Transfer Docks (T-ESD) 1 and 2 in the vicinity of Korea/Northeast Asia, and hubbing Expeditionary Fast Transports (T-EPF) to Japan and Singapore. In the longer term, by 2018 we will deploy an additional Amphibious Ready Group to the Pacific region and we will deploy a growing number of Expeditionary Fast Transports and an additional Expeditionary Sea Base there.

The U.S. Seventh Fleet along with allies and partner nations combined for over 110 exercises throughout 2015 to train, build partner capability and relationships, and exchange information. The largest exercise, Talisman Sabre in the Asia-Pacific region, in July 2015, featured 21 ships, including U.S. Navy aircraft carrier USS GEORGE WASHINGTON and more than 200 aircraft and three submarines. USS FORT WORTH participated in Cooperation Afloat Readiness and Training (CARAT) exercises with partner navies from Cambodia, Philippines, Malaysia, Indonesia, Brunei, and Bangladesh to conduct maritime security cooperation exercises.

In addition to participating in many of the exercises as part of the Navy-Marine Corps team, the Marine Corps is also building its capacity to work with our Asia-Pacific partners. Marines participated in 46 exercises in the region in 2015. Examples include Cobra Gold, a crisis-response exercise with partners from Thailand, Singapore, Japan, Republic of Korea, Indonesia, and Malaysia, and exercise Talisman Saber, a U.S.-Australia exercise focusing on high-end combat operations and peacekeeping transitions. Additionally, Marine Rotational Force Darwin sustains more than 1,000 Marines on a revolving basis to conduct exercises, security cooperation

and training with the Australian Defense Force and other countries in the region. This will increase over the next few years to a full Marine Air Ground Task Force.

As we rebalance our expeditionary forces to the Pacific, we will remain focused on maintaining maritime superiority across all domains and geographies, ensuring we don't neglect obligations in places like Europe.

As a continuation of the North Atlantic Treaty Organization's 65-year mission to keep all nations free without claiming territory or tribute, we moved the fourth ballistic missile defense capable DDG, USS CARNEY, to Rota, Spain, to join USS DONALD COOK, USS ROSS and USS PORTER to enhance our regional ballistic missile defense capability, provide maritime security, conduct bi-lateral and multilateral training exercises, and participate in NATO operations. We've also established an AEGIS ashore site in Romania to provide additional shore-based ballistic missile defense capability in Europe, with a second installation in Poland scheduled to come online in the 2018 timeframe.

The Navy and Marine Corps continue to demonstrate support for our allies and friends and American interests in the European region. Alongside the Marine Corps' Black Sea Rotational Force's operations in Eastern Europe, a series of Navy ships have deployed into the Black Sea to ensure freedom of navigation and work with our partners there.

This past fall USNS SPEARHEAD completed the Southern Partnership Station 2015 in South America. As SPEARHEAD sailed through the Americas, the Sailors and Marines aboard participated in subject matter expert exchanges and building partner capacity throughout the

region. In October, USS GEORGE WASHINGTON and USS CHAFEE participated in the annual multinational exercise UNITAS, which was hosted by the Chilean Navy and included personnel from Brazil, Ecuador, El Salvador, Guatemala, Honduras, New Zealand and Panama to conduct intense training focused on coalition building, multinational security cooperation and promoting tactical interoperability with the participating partner nations. USS GEORGE WASHINGTON also deployed as part of Southern Seas 2015, which seeks to enhance interoperability, increase regional stability, and build and maintain relationships with countries throughout the region while circumnavigating South America. A unique symbol of our desire to build a strong relationship is evident in deployments by our world class hospital ship USNS COMFORT. As part of CONTINUING PROMISE 2015, medical and support staff from across the U.S. military and the region worked alongside nearly 400 volunteers to treat 122,268 patients and conduct 1,255 surgeries. In an historic event during the USNS COMFORT port call in Haiti, U.S. and Cuban medics worked side-by-side to treat Haiti's poor and exchange best medical practices. CONTINUING PROMISE is without doubt one of the U.S. military's most impactful missions, but future USNS COMFORT deployments will be affected by today's budget realities. Our security is inextricably linked with that of our neighbors, and we continue to work with innovative and small-footprint approaches to enhance our interoperability with partners in the Americas.

For some people around the world, Sailors and Marines who sail aboard our ships are the only Americans they will ever meet, and it is they who represent our country around the world.

In December, I hosted the leaders of our partner navies from West Africa and from Europe and the Americas for the Gulf of Guinea Maritime Security Dialogue. Naval leaders from 16 nations

bordering the Gulf of Guinea as well as 37 heads of navy, delegates and representatives from Europe and the Americas came to discuss collaborative solutions to piracy, extremism, trafficking and insecurity in the region. We discussed a unified code of conduct for maritime law enforcement and more direct cooperation in the region. As the economies in the Gulf of Guinea continue to grow, so does the increasing relevance of guarding against maritime terrorism, illicit trafficking of drugs, people and weapons, extremism moving from east to west, and other transnational crime. The U.S. Navy and Marine Corps will continue to work with our partners in West Africa and help them improve their capabilities and promote collaboration.

Working alongside other navies enhances interoperability, provides key training opportunities, and develops the operational capabilities of the countries and navies with which we have shared values. As we look toward future operations, multinational cooperation will continue to be vital to suppressing global threats, and building these strong partnerships now seeks to enhance and ensure our operational superiority into the future.

Outside of our international partnerships, the Department of the Navy's collaboration with industry, both in technology development and ship and aircraft building and repair, bolsters economic security as well as national security interests at home and abroad.

Finally, our Navy and Marine Corps require the support of the American people to maintain presence. I continue to honor our most important partnership- the one with the American people- by naming ships after people, cities, and states, as a reflection of America's values and naval heritage, and to foster that powerful bond between the people of this country and the men and women of our Navy and Marine Corps.

FY17 Budget Summary

The Department of the Navy's proposed budget for FY17 is designed to achieve the President's Defense Strategic Guidance (DSG): protect the homeland, build security globally, and project power and win decisively when called upon. In doing so we have looked across the FYDP to maintain our ability to conduct the primary missions listed in the DSG to 2021 and beyond. Overall the FY17 President's Budget balances current readiness needed to execute assigned missions while sustaining a highly capable Fleet, all within a continually constrained and unpredictable fiscal climate.

Our approach to this budget has focused on six objectives. First, maintain a credible and modern sea-based strategic deterrent. Second, sustain our forward global presence to ensure our ability to impact world events. Third, preserve the capability to defeat a regional adversary in a larger-scale, multi-phased campaign, while denying the objectives of- or imposing unacceptable costs on- a second aggressor in another region. Fourth, ensure that the force is ready for these operations through critical afloat and shore readiness and personnel issues. Fifth, continue and affordably enhance our asymmetric capabilities. Finally, sustain our industrial base to ensure our future capabilities, particularly in shipbuilding.

Even as we deal with today's fiscal uncertainty, we cannot let slip away the progress we've made in shipbuilding. It takes a long time, measured in years, to produce a deployable ship. It is the least reversible thing we might do to deal with budget constraints. If we miss a year, if we cancel a ship, it is almost impossible to recover those ships because of the time involved and the inability of the industrial base to sustain a skilled set of people without the work to support them.

To do the job America and our leaders expect and demand of us, we have to have those gray hulls on the horizon.

Because of the long lead time needed for shipbuilding, it is not the responsibility of just one administration. This Administration and Congress, in previous budgets, have guaranteed we will reach a Fleet of 300 ships by FY19 and 308 by FY21. This FYDP establishes a proposed shipbuilding trajectory for our Battle Force and its underpinning industrial base in the years following FY21, while maintaining decision space for the next Administration and Congress. As such, the FY17 President's Budget requests funding for seven ships: two Virginia class attack submarines, two DDG 51 Arleigh Burke class destroyers, two Littoral Combat Ships (LCS), and the LHA 8 Amphibious Assault Ship. The budget request also includes funding for refueling and complex overhauls (RCOH) for aircraft carriers USS GEORGE WASHINGTON and USS JOHN C. STENNIS.

The plan for LCS/FF requests funding for two ships in FY17, preserving the viability of the industrial base in the near term and creating future decision space for Frigate procurement should operational requirements or national security risk dictate the need.

The FY17 President's Budget includes funding for the modernization of destroyers ($3.2 billion total invested in FY17 – FY21) to sustain combat effectiveness, to ensure mission relevancy, and to achieve the full expected service lives of the AEGIS Fleet. The budget also requests $521 million across the FYDP, in addition to current Ships Modernization, Operations and Sustainment Fund (SMOSF) funding, to support cruiser modernization. The Navy will continue

to work with Congress to develop and evaluate funding options to continue this vital modernization.

Above the sea, our naval aviation enterprise grows. Specifically, we continue our recapitalization efforts of all major platforms and increase procurement of F/A-18E/F and F-35 aircraft, and make key investments in current and future unmanned aviation systems and strike warfare weapons capabilities.

While accelerating new platforms and capabilities to the Fleet is a priority, it is equally important to reduce the maintenance backlog created by sequestration. The FY17 budget provides additional investments in shipyard and aviation depots in both civilian personnel and infrastructure to achieve that end. As we execute our readiness strategy, our focus remains on properly maintaining ships and aircraft to reach their expected service lives and supporting a sustainable operational tempo.

The cyber domain and electromagnetic spectrum dominance remain Department priorities. The budget includes an increase of $370 million over the FYDP ($107 million in FY17) across a spectrum of cyber programs, leading to significant improvements in the Department's cyber posture. Specific elements include funding for engineering of boundary defense for ship and aviation platforms and for afloat cyber situational awareness.

While hardware upgrades and additions are crucial, our investment in people must be equally prioritized. The FY17 budget includes a 1.6 percent pay raise for Sailors and Marines and adds

billets for base security. Our personnel initiatives receive funding aimed to recruit, train, and retain America's best.

Our priorities combine to achieve one objective – naval presence. And that presence is weighted to meet the national security strategy. The FY17 budget sustains a forward deployed presence and continues the rebalance to the Pacific. The number of ships operating in the Asia-Pacific will increase from 52 today to 65 by 2020.

Crafting the Department of the Navy's budget did not come without hard choices. To achieve a balance between current and future capabilities, we were compelled to make several risk-informed decisions. We have proposed deactivating the 10th Carrier Air Wing. This primarily administrative move improves the alignment of carrier air wing and aircraft carrier deployment schedules and alleviates excessive time between deployments for CVWs attached to CVNs in lengthy maintenance phases, without losing any aircraft.

Finally, throughout my tenure, as part of my Department of the Navy Transformation Plan, I have stressed the importance of accountability. We are moving very quickly to an audit ready environment. Congressional support has been critical in providing the resources we need to bring our systems into compliance.

Conclusion

As the longest-serving Secretary since World War I, I have truly been able to get to know the men and women of this Department, and I have led institutional change – from inception to reality.

In order to provide our nation with presence, to deter our adversaries and assure our allies, and provide our nation's leaders with options in times of crisis, we have enhanced our capabilities across every area of this department. By focusing on our people, platforms, power and partnerships, we assure we remain the greatest expeditionary fighting force the world has ever known.

Today there is no operational billet in the Navy or Marine Corps that is closed to anyone based on their gender. Men and women wear uniforms common in appearance so they are uniformly United States Sailors and United States Marines. Career paths are flexible and provide unprecedented opportunities for professional growth. We promote based more on merit and not just tenure. We are encouraging retention in the Department by creating an environment that doesn't force our Sailors and Marines to choose between serving their country and serving their families.

We are seeking innovation from within the talent inherent in our Sailors and Marines. We have established an innovation network, with crowdsourcing platforms established to allow new ideas to get from the deckplates to our leaders.

We are growing the fleet. By the end of this fiscal year, we will have contracted for 84 ships, which will give America a 300-ship Navy by 2019 and a 308-ship Navy by 2021. We stood up a new Deputy Assistant Secretary of the Navy and OPNAV staff for Unmanned Systems development, making us leaders in this emerging capability.

The Navy has fundamentally changed the way we procure, use and think about energy. In the past seven years, the Navy and Marine Corps have significantly lowered fuel consumption. We have sailed the Great Green Fleet on alternative fuel blends and met our goal of having 1 gigawatt of renewable energy powering our shore-based installations five years early.

We are rebalancing our Fleet to meet the goal of having 60 percent of our assets in the Pacific region by the end of the decade, and we continue to contribute to security cooperation and international exercises with our friends and allies around the world.

Since the inception of our nation, America's Navy and Marine Corps have paved the way forward for this country.

As President George Washington once said, "It follows then as certain as that night succeeds the day, that without a decisive naval force we can do nothing definitive, and with it, everything honorable and glorious."

The Honorable Ray Mabus
Secretary of the Navy

Office Term: 5/19/2009 - Present

Ray Mabus is the 75th United States Secretary of the Navy and leads America's Navy and Marine Corps.

As Secretary of the Navy, Mabus is responsible for conducting the affairs of the Department of the Navy, including recruiting, organizing, equipping, training and mobilizing. Additionally, he oversees the construction and repair of naval ships, aircraft, and facilities, and formulates and implements policies and programs consistent with national security policies. Secretary Mabus is responsible for an annual budget in excess of $170 billion and leadership of almost 900,000 people.

Upon assumption of office and throughout his tenure, Mabus has prioritized improving the quality of life of Sailors, Marines and their families, decreasing the Department's dependence on fossil fuels, strengthening partnerships and revitalizing the Navy's shipbuilding program.

Leading the world's only global Navy, Mabus has traveled more than 900 thousand miles to over 100 countries to maintain and develop relationships with national and international officials and visit with Sailors and Marines forward deployed or stationed around the world. He has traveled to Afghanistan on 12 separate occasions, in recognition of the sacrifice and service of Sailors and Marines deployed in combat zones.

To prepare service members and their families for the high tempo operations of today's Navy and Marine Corps, Mabus announced in 2012 the "21st Century Sailor and Marine" initiative, designed to build and maintain the most resilient and ready force possible.

Mabus also directed the Navy and Marine Corps to change the way they use, produce and acquire energy, and set an aggressive goal that no later than 2020, the Navy and Marine Corps obtain at least 50% of their energy from alternative sources. In pursuit of that goal the Department has achieved several milestones. In 2012, President Obama announced in his State of the Union address that the Department will purchase or facilitate the production of 1GW of renewable energy for use on Navy and Marine Corps installations. The Navy also demonstrated the Great Green Fleet in 2012, a carrier strike group in which every participating U.S. Navy ship and type of aircraft operated on alternative energy sources including nuclear energy and biofuels.

Secretary Mabus has made increasing the size of the naval fleet and protecting the industrial base a top budget priority of the Department. During his tenure, the Navy went from building fewer than five ships a year to having more than 40 ships under contract, most of them in fixed-price, multi-year deals that assure value for taxpayers, certainty for industry partners and strength for our nation.

In June 2010, as an additional duty, President Obama appointed Mabus to prepare the long-term recovery plan for the Gulf of Mexico in the wake of the Deepwater Horizon oil spill. Mabus' report was released in September 2010 and met with broad bi-partisan support with most recommendations passed into law by Congress as the Restore Act. Included in the legislation was a fund to aid in the Gulf Coast's recovery by distributing 80 percent of any civil penalties awarded as a result of the damage caused by the disaster. To date, civil penalties total more than one billion dollars.

Before his appointment, Mabus held a variety of leadership positions. From 1988 to 1992, Mabus served as Governor of Mississippi, the youngest elected to that office in more than 150 years. Mabus was

Ambassador to the Kingdom of Saudi Arabia from 1994-1996 and later was Chairman and CEO of a manufacturing company.

Mabus has been recognized for his leadership of the Navy and Marine Corps on multiple occasions. In 2013, he was named one of the top 50 highest rated CEOs by Glassdoor, an online jobs and career community. Mabus was the only leader of a federal agency to receive this award.

Secretary Mabus is a native of Ackerman, Mississippi, and received a Bachelor's Degree, summa cum laude, from the University of Mississippi, a Master's Degree from Johns Hopkins University, and a Law Degree, magna cum laude, from Harvard Law School. After Johns Hopkins, Mabus served in the Navy as an officer aboard the cruiser USS Little Rock.

NOT FOR PUBLICATION UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

ADMIRAL JOHN M. RICHARDSON

U.S. NAVY

CHIEF OF NAVAL OPERATIONS

BEFORE THE

HOUSE ARMED SERVICE COMMITTEE

ON THE

FISCAL YEAR 2017 ALL SERVICES POSTURE

MARCH 16, 2016

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

Chief of Naval Operations
9/18/2015 – Present
Admiral John M. Richardson

Admiral John Richardson graduated from the U.S. Naval Academy in 1982 with a Bachelor of Science in Physics. He holds master's degrees in electrical engineering from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution, and National Security Strategy from the National War College.

At sea, Richardson served on USS Parche (SSN 683), USS George C. Marshall (SSBN 654) and USS Salt Lake City (SSN 716). He commanded USS Honolulu (SSN 718) in Pearl Harbor, Hawaii.

Richardson also served as commodore of Submarine Development Squadron (DEVRON) 12; commander, Submarine Group 8; commander, Submarine Allied Naval Forces South; deputy commander, U.S. 6th Fleet; chief of staff, U.S. Naval Forces Europe and U.S. Naval Forces Africa; commander, Naval Submarine Forces, and director of Naval Reactors.

His staff assignments include duty in the attack submarine division on the Chief of Naval Operations staff; naval aide to the President; prospective commanding officer instructor for Commander, Submarine Forces, U.S. Pacific Fleet; assistant deputy director for Regional Operations on the Joint Staff; and director of Strategy and Policy at U.S. Joint Forces Command.

Richardson served on teams that have been awarded the Presidential Unit Citation, the Joint Meritorious Unit Award, the Navy Unit Commendation, and the Navy "E" Ribbon. He was awarded the Vice Admiral Stockdale Award for his time in command of USS Honolulu.

Richardson began serving as the 31st Chief of Naval Operations September 18, 2015.

Chairman Thornberry, Ranking Member Smith, and distinguished members of the Committee, it is an honor to appear before you today. This is my first of hopefully many chances to discuss the future of the United States Navy with you, and as your Chief of Naval Operations, I look forward to continuing to work closely with you to ensure that your Navy is best postured to defend America's interests around the globe.

Prior to my confirmation, I testified that my most serious concern was the gap between challenges to America's security and prosperity and the resources available to protect them. In January of this year, I outlined this gap in more detail when I released *A Design for Maintaining Maritime Superiority* (the *"Design"*), which describes an increasingly competitive environment and the lines of effort the Navy will pursue to execute our mission in that environment. The thinking in the *Design* reflects inputs from leaders inside and out of the Navy and is guiding our way forward. It shaped our budget submission and shapes my testimony below.

The 2017 budget is this year's best approach to solving the problems and seizing the opportunities that face the Navy today. The budget reflects some constants; America has been a maritime nation since we began. Our prosperity continues to depend on our maritime security -- over 90 percent of our trade is shipped over the seas -- and this linkage will only tighten in the future. Against the backdrop of this historical truth, current problems and opportunities are growing rapidly. The maritime environment has remained remarkably constant since man first put to sea thousands of years ago. The oceans, seas, shipping lanes and chokepoints are physically unchanged in the modern era, but the maritime system has seen explosive growth in the past 25 years. Traffic over the seas has increased by 400 percent since the early 1990's, driving and outpacing the global economy, which has almost doubled in the same period. Climate change has opened up trade routes previously closed. Access to resources on the seafloor has also increased, both as Arctic ice has receded and as technology has improved. And just as it has in the past, our future as a nation remains tied to our ability to operate freely on the seas.

That maritime freedom is coming under increasing pressure and stress. For the first time in 25 years, there is competition for control of the seas. Nations like China and

Russia are using their newfound maritime strength not only to advance their national goals, but also to challenge the very rules and standards of behavior upon which so many nations since the end of World War II have based their growth. We should interpret this challenge to international rules and order as a challenge to our own security and prosperity, and to the security and prosperity of all who support an open, fair architecture.

It is against this background that I consider the gravity of the Navy's mission statement, as reflected in the *Design*:

> "The United States Navy will be ready to conduct prompt and sustained combat incident to operations at sea. Our Navy will protect America from attack and preserve America's strategic influence in key regions of the world. U.S. naval forces and operations – from the sea floor to space, from deep water to the littorals, and in the information domain – will deter aggression and enable peaceful resolution of crises on terms acceptable to the United States and our allies and partners. If deterrence fails, the Navy will conduct decisive combat operations to defeat any enemy."

To me these words are not an abstraction, and are easiest to appreciate in the context of what naval forces do every day. As just one example, there was a day last fall when:

- The destroyer USS *Donald Cook* transited the Mediterranean, following an 11-nation multinational exercise in the Black Sea and a port visit to Odessa, Ukraine - demonstrating our commitment to our NATO allies;
- Sailors at the Navy Cyber Defense Operations Command in Suffolk, VA monitored intrusion prevention sensors that actively mitigated almost 300,000 instances of unauthorized or adversary activity across the Navy network enterprise, including more than 60,000 threats to afloat networks;
- The *Kearsarge* Amphibious Readiness Group, with the 26th Marine Expeditionary Unit aboard, participated in a Turkish-led amphibious exercise, demonstrating our combined capability and physically displaying our commitment to U.S. allies and partners;

- Five ballistic missile submarines patrolled the oceans (the latest in over 4,000 patrols since 1960), providing 100 percent readiness in providing strategic deterrence;
- USS *Fort Worth*, a Littoral Combat Ship, swapped crews in Singapore after participating in a Cooperation Afloat Readiness And Training (CARAT) exercise with the Bangladesh Navy, developing cooperative maritime security capabilities that support security and stability in South and Southeast Asia.
- Sailors from a Coastal Riverine Squadron and an Explosive Ordnance Disposal unit participated in an exercise in Cambodia, increasing maritime security cooperation and interoperability between the two navies;
- Navy SEALS trained and advised Iraqi forces in the fight against ISIL extremists, facilitating, mentoring, and enhancing their ability to secure their territory;
- Members of the Navy Expeditionary Combat Command provided tactical intelligence training to Ghanaian Maritime Law Enforcement and Naval service members at Sekondi Naval Base, increasing our partners' capacity and capability to secure their territorial waters;
- The aircraft carrier USS *Ronald Reagan* launched four F/A-18 fighters to intercept and escort two approaching Russian TU-142 Bear aircraft that approached as the carrier was operating in the Sea of Japan, operating forward to preserve freedom of action; and
- The fast-attack submarine USS *City of Corpus Christi* operated in the Western Pacific, after participating with the Indian and Japanese Navies in Exercise Malabar 2015, increasing our level of engagement with our partners across the Indo-Asia Pacific.

All of these events occurred on a single day: October 27, 2015. But none were in the headlines. That is because on that day the guided missile destroyer USS *Lassen* conducted a freedom of navigation operation in the South China Sea, one of the many visible demonstrations of our international leadership and national commitment to preserving a rules-based international order that the Navy conducts routinely around the world.

Your Navy's ability to execute these responsibilities -- our mission -- is becoming more difficult as three interrelated forces act on the global economic and security environments, and as new actors rise to challenge us. I have already described the first force - the force exerted by the expanding use of the maritime domain, on, over, and under the seas. This global system is becoming more used, stressed, and contested than perhaps ever before, and these trends show no signs of reversing.

The second force is the rise of the global information system. Newer than the maritime system, the information system is more pervasive, enabling an even greater multitude of connections between people and at a much lower cost of entry. Information, now passed in near-real time across links that continue to multiply, is in turn driving an accelerating rate of change.

The third interrelated force is the rising tempo at which new technologies are being introduced. This is not just information technologies, but also those that incorporate advances in material science, increasingly sophisticated robotics, energy storage, 3-D printing, and networks of low-cost sensors, to name just a few examples. The potential of genetic science and artificial intelligence is just starting to be realized, and could fundamentally reshape every aspect of our lives. And as technology is developed at ever-increasing speeds, it is being adopted by society more quickly as well – people are using these new tools as quickly as they are produced, in new and novel ways.

Our competitors and adversaries are moving quickly to use these forces to their advantage, and they too are shifting. For the first time in decades, the United States is facing a return to great power competition. Russia and China demonstrate both the advanced capabilities and the desire to act as global powers. This past fall, the Russian Navy operated at a pace and in areas not seen since the mid-1990's, and the Chinese PLA(N) continued to extend its reach around the world. Their national aspirations are backed by a growing arsenal of high-end warfighting capabilities, many of which are focused specifically on our vulnerabilities. Both nations continue to develop information-enabled weapons with increasing range, precision and destructive capacity, and to sell those weapons to partners like Iran, Syria, and North Korea.

From a strategic perspective, both China and Russia are also becoming increasingly adept in coercion and competition below the thresholds of outright conflict, finding ways to exploit weaknesses in the system of broadly accepted global rules and standards. For example, Russia has continued its occupation and attempted annexation of another nation's territory. And, as perhaps the most startling example, China's land reclamation and militarization of outposts amidst the busiest sea lanes on the planet casts doubt on the future accessibility of our maritime domain. China is literally redrawing the map in the South China Sea by creating artificial islands, to which they then claim sovereign territorial rights, now complete with surface to air missiles and high performance radars. Their activity creates great uncertainty about the intentions and credibility of their leadership.

Russia and China are not the only actors seeking to contest U.S. and global interests in the emerging security environment. Others are also pursuing advanced technology, including military technologies that were once the exclusive province of great powers; this trend will persist. Coupled with an ongoing dedication to furthering its nuclear weapons and missile programs, North Korea's provocative actions continue to threaten security in Northeast Asia and beyond. Iran's advanced missiles, proxy forces and other conventional capabilities pose threats to which the Navy must remain prepared to respond. Finally, international terrorist groups such as ISIL and Al Qaeda have proven their resilience and adaptability and pose a long-term threat to stability and security around the world.

In summary, these new forces have changed what it means for the Navy and Marine Corps to provide maritime security; the problems are more complex, demanding, and numerous than ever before. But our responsibility remains the same. Naval forces must provide our leaders credible options that allow them to advance the nation's prosperity, defend its security, further its strategic interests, assure its allies and partners, and deter its adversaries -- which rests on the ability of the Navy and our sister services to decisively win if conflict breaks out. The breadth of challenges we face demands a range of options, and they must be credible. Only then can the United States effectively

advocate as a maritime power for the system of global rules and standards that underpin shared prosperity now and in the future.

It is becoming increasingly difficult for the Navy to present a sufficient number of credible options for leadership. While the predictability provided by the 2015 Bipartisan Budget Act is greatly appreciated, the Navy's Fiscal Year (FY) 2017 budget submission comes on the heels of four prior years' budgets that collectively provided $30 billion less than requested levels to the Department of the Navy. It represents yet another reduction of almost $5 billion from 2016 funding levels. And we have started the last six years with a continuing resolution, with an average duration of 120 days. In response, we have had to modify our behaviors with a host of inefficient practices, the use of short-term contracts offering less than best value to the government, and the associated increased workload on our shrinking headquarters staffs. Continuing Resolutions can also delay critical programs, including those with little to no margin for delay, such as the Ohio Replacement Program. And it's worse than that: the fiscal uncertainty sends ripples through the entire system - the industrial base is hesitant to invest, and our people remain concerned about the next furlough or hiring freeze or overtime cap. This unpredictability adds to the burden on our Navy team and drives prices up.

So the challenges are increasing and funding is decreasing. America remains the primary leader of the free world, with the most capable military force on the planet. And we remain a maritime nation whose future is inextricably tied to the seas. Our Navy has tremendous responsibilities to ensure that future is secure and prosperous. Within those constraints, our FY 2017 budget proposal reflects the best portfolio of credible options to achieve our mission. Budget constraints are forcing choices that limit our naval capability in the face of growing and rising threats. The Navy's budget addresses our gaps on a prioritized basis, and starts to accelerate our capabilities so that we can maintain overmatch relative to our adversaries.

Strengthen Our Navy Team for the Future

Without question, the most important part of our budget is our investment in our Navy Team - our Active and Reserve Sailors, our Navy Civilians, and their families. I am

pleased that we were able to provide a 1.6 percent pay raise for our Sailors this year, outpacing inflation and 0.3 percent more than last year. Just as important are the investments we are making to improve the environment for the Team. As the *Design* makes clear, some of the biggest impacts that we can make on our warfighting capability do not involve a lot of money, but instead are changes to how we do business.

These changes can't come soon enough. As our platforms continue to become more technologically advanced and missions become more complex, our need for talented, qualified recruits will grow. Further, the competition for that talent grows more intense every day. This budget keeps us on a good path. Our Sailor 2025 program is a dynamic set of initiatives, process improvements and management tools designed to increase career choice and flexibility, provide advanced, tailored learning, and expand support to our Navy families. In FY 2017, we begin to fully invest in the Sailor 2025 Ready Relevant Learning initiative, which will begin to create a new way of training our Sailors through mobile, modular learning, re-engineered content, and an improved IT infrastructure.

In this budget, we fund a wide range of initiatives to strengthen our Sailors individually and as a team. The *Design* highlights the importance of our core values of honor, courage and commitment, as demonstrated through four core attributes - integrity, accountability, initiative, and toughness. We are implementing a strategy, headed up by our 21st Century Sailor Office, to inculcate these attributes throughout the fleet and improve Sailor readiness and resilience. We continue to further develop a climate of dignity and respect throughout the Fleet. We also look to eliminate the toxic behaviors that destroy the fabric of the team - including sexual harassment and assault, hazing and alcohol abuse. We have increased funding over the FYDP to address sexual assault prevention and response, adding 24 new positions to the Naval Criminal Investigative Service -- on top of 127 additions in the previous two years -- to speed investigations while continuing our support for programs aimed at prevention, investigation, accountability, and support for survivors such as the Victim Legal Counsel Program.

As we seek greater efficiencies, planned adjustments allow us to take modest reductions (3,600 Sailors in FY 2017) in our active duty end strength. These are consistent with advances in training methods and with standing down the Carrier Air Wing 14. There will be no reductions in force or any other force-shaping initiatives - we will achieve this through natural attrition. Nobody will lose their job.

One of my observations since taking office is that we can do more to increase the synergy between our military and civilian workforces. Your Navy civilians are integral to all that we do. They work in our shipyards and aviation depots, provide scientific and technical expertise in our labs, and guard our bases and other facilities. To respond to increasing security concerns, we have invested this year in increased force protection measures, including in those civilians who keep our people and property safe. Some of the maintenance and readiness shortfalls we are still digging out from were made worse by civilian hiring and overtime freezes and a furlough in FY 2013. Worse, these actions strained the trust within our team. This budget adds a net of over 1,300 civilian positions in FY 2017 to support additional maintenance, enhance security, and operate our support ships, and continues the investments in our civilian shipmates that help to forge one seamless team. Even as we implement these key initiatives to address security and to recover readiness, we balance that growth with reductions over the FYDP of 3,200 FTE (1.8%), for a net reduction of 1,900.

Strengthen Naval Power at and From the Sea

That team, with our Marine Corps partners, is committed to our mission, which must be conducted in the environment I described above. The *Design* calls for us to strengthen naval power at and from the sea to address the growing scale, congestion, and challenge in the maritime domain. The *Ohio* Replacement Program (ORP) is paramount to that effort, and remains our top priority. In my opinion, it is foundational to our survival as a nation. This budget funds the ORP; construction is planned to start in FY 2021. This start date is vitally important to prevent any impact to continuous at-sea deterrence at a time when it could be even more relevant than today.

To the maximum extent possible, we have also prioritized shipbuilding and the industrial base that supports it. Our current fleet of 272 ships is too small to meet the array of mission requirements our nation demands. In this budget, we remain on a path to achieve 308 ships by 2021. This year, we are funding two advanced guided missile destroyers with upgraded radars (DDG Flight IIIs with SPY-6), two *Virginia*-class attack submarines, two Littoral Combat Ships, and the procurement of an amphibious assault ship replacement (LHA(R)). The *Ford* carrier remains under its cost cap and will deliver in 2016; we are continuing to exercise strong oversight and discipline to ensure the cost of her sister ships *Kennedy* and *Enterprise* also remain under budget. And we have exceeded our shipyard investment goal - we're at 8.1 percent, well beyond the 6 percent legislative requirement.

As the *Design* emphasizes, we are fully committed to further ingraining information warfare into our routine operations. This is essential to the Navy's future. For example, we are increasing procurement of the Surface Electronic Warfare Improvement Program (SEWIP) Block II and III by 45 units. We are also investing in network modernization afloat and ashore through 10 installations of the Consolidated Afloat Networks and Enterprise Services (CANES) system in FY 2017.

To help remediate one of our most stressed areas, we have enhanced our investments in the naval aviation enterprise. We are investing in bringing fifth generation aircraft to the fleet, adding ten F-35Cs over the FYDP. We are also replacing F-18 airframes that are meeting the end of their projected service lives faster than projected, adding 16F/A-18 E/Fs over the next two years. Further, we are adding upgrades to the Super Hornet to make it more capable in a high-end fight. And we are updating our strategy to more rapidly integrate unmanned aerial vehicles into our future air wing. Revisions to our unmanned carrier-launched airborne surveillance and strike (UCLASS) program will help us to meet current mission shortfalls in carrier-based surveillance and aerial refueling capacity, and better inform us about the feasibility of future additional capabilities we desire.

To meet an increasingly lethal threat, this budget bolsters our investments in advanced weapons across the FYDP. We are buying 100 additional tactical Tomahawks, 79 more

air-to-air AMRAAM missiles, additional sea-skimming targets, and accelerating our investments in SM-6 missile development in order to provide a full range of capability enhancements to the fleet. However, budget pressures also caused us to cut other weapons investments such as the Mk-48 torpedo and AIM-9X air-to-air missile. Many of our production lines are at minimum sustaining rates, and the low weapons inventory is a continuing concern.

Achieve High Velocity Learning at Every Level

All of these investments will deliver important capabilities to better posture us for the current and future environment. But, as or more importantly, we must also adjust our behavior if we are to keep pace with the accelerating world around us.

This budget reflects some of that increase in pace. We are changing how we approach training and education to take advantage of new tools and to push learning out to where our Sailors spend the bulk of their time -- their units. The intent is not to burden those units more, but to empower their leaders and give Sailors the best tools to support what science is increasingly revealing about how people learn most effectively.

It also means that Navy leaders, up to and including me as the CNO, must exercise full ownership of how we develop and acquire new capabilities for the future. That ownership has four elements: authority, responsibility, accountability, and technical expertise. I am committed to exercising that ownership, and to creating or supporting new ways to exercise it faster.

We are doubling down on an approach that relies more heavily on experimentation and prototyping, connected at the hip with the Fleet, to help meet mission needs while simultaneously helping us to better define our requirements. We are pulling our more ambitious projects closer to the present so we can learn our way forward, faster and with better information. We are taking this approach with the Remote Minehunting System, Large Displacement Unmanned Undersea Vehicle (LDUUV), and UCLASS programs, and we will continue to seek additional programs to which it can be applied.

We are also reexamining our processes and organization to ensure they are best aligned to support a faster pace. This budget includes a small amount of funding for the Rapid Prototyping, Experimentation, and Demonstration initiative, a process we have already begun to implement that "swarms" technical experts to Fleet problems, rapidly generates operational prototypes, and gets them into the hands of Sailors and Marines so we can continue to refine and improve them. We also are standing up a capability along the lines of the Air Force's Rapid Capabilities Office; we'll call it the Maritime Accelerated Capabilities Office (MACO). This will concentrate requirements, technical, and acquisition expertise on high-priority projects to fast-track their development and fielding.

Finally, Congress has rightly pressed us to reexamine whether we are being as efficient as we can be. Our budget reflects some of the efforts that we are taking in that regard, but fundamentally, we are focused on making every dollar count. I am taking a personal role in that process, asking hard questions and pushing us to become more cost-effective and agile as we apply a learning-based approach to all that we do.

Conclusion

This year's budget request represents a portfolio of investments that employ our available resources to best effect. The gap between our responsibilities and our funding levels represents risk -- risk of Sailors' lives lost, of a weakened deterrent, of a slower response to crisis or conflict, of greater financial cost, of uncertainty for our international partners -- all of which affect the security and prosperity of America. While it is impossible to quantify this risk precisely, I believe the balance reflected in this proposal improves our prospects going forward.

Such improvements are much needed. Concurrent with increasing global challenges, budget pressures have led the Navy to reduce our purchases of weapons and aircraft, slow needed modernization, and forego upgrades to all but the most critical infrastructure. At the same time, maintenance and training backlogs -- resulting from continued high operational tempo and exacerbated by sequestration in 2013 -- have delayed preparation for deployments, which in turn has forced us to extend units

already at sea. Since 2013, eight carrier strike groups, four amphibious readiness groups, and twelve destroyers have deployed for eight months or longer. The length of these deployments itself takes a toll on our people and the sustainability and service lives of our equipment. Further, these extensions are often difficult to anticipate. The associated uncertainty is even harder on Sailors, Marines, and their families and wreaks havoc on maintenance schedules, complicating our recovery still further.

We cannot continue to manage the risks we face absent broader change. As CNO, I will strive to keep the U.S. Navy on the road to remaining a force that produces leaders and teams who learn and adapt to achieve maximum possible performance. We will achieve and maintain high standards to be ready for decisive operations and if necessary, to prevail in combat. We will fight for every inch of advantage. In this way, we will provide sufficient, credible, options to leadership in order to guarantee America's security and prosperity now and into the future. I very much look forward to working with you and your fellow Members of Congress as we proceed.

STATEMENT

OF

GENERAL ROBERT B. NELLER

COMMANDANT OF THE MARINE CORPS

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

ON

NAVY AND MARINE CORPS FY17 BUDGET REQUEST

16 MARCH 2016

RAYBURN HOUSE OFFICE BUILDING

ROOM 2118

General Robert B. Neller
Commandant of the Marine Corps

Biography

General Robert B. Neller is the 37th Commandant of the United States Marine Corps. Prior to his current assignment, he served as the Commander, Marine Forces Command from July 2014 to September 2015 and Commander, Marine Forces Central Command from September 2012 to June 2014.

A native of East Lansing, Michigan, General Neller graduated from the University of Virginia and was commissioned in 1975. He has served as an infantry officer at all levels, including command of Marine Security Force Company Panama during Operations JUST CAUSE and PROMOTE LIBERTY; 3d Light Armored Infantry Battalion during Operation RESTORE HOPE; 6th Marine Regiment; and 3d Marine Division.

General Neller also served as Deputy Commanding General, I Marine Expeditionary Force (Forward) during Operation IRAQI FREEDOM (05-07); Assistant Division Commander for 1st and 2d Marine Divisions; and President of Marine Corps University.

His Joint assignments include service in the Policy Division of Supreme Headquarters Allied Powers Europe (SHAPE) in Casteau, Belgium, and as the Director of Operations (J-3) of the Joint Staff in Washington, D.C.

General Neller is a graduate of the Armor Officer Advanced Course, Marine Corps Command and Staff College, NATO Defense College, and the Armed Forces Staff College. He holds a master's degree in Human Resource Management from Pepperdine University.

The Commandant's Posture of the United States Marine Corps
President's Budget 2017

Prologue

The United States Marine Corps is the Nation's expeditionary force in readiness. The intent of the 82nd Congress defined and shaped our culture, organization, training, equipment, and priorities. Marines appreciate the leadership of the 114th Congress in reaffirming that role, especially as the strategic landscape and pace of the 21st Century demands a ready Marine Corps to buy time, decision space, and options for our Nation's leaders. Congress and the American people expect Marines to answer the call, to fight, and to win.

Our global orientation, maritime character, and expeditionary capability have all been ably demonstrated during the past year. The capabilities of our total force are the result of the planning and execution of committed Marines and Sailors operating under the leadership of my predecessors. These capabilities and the posture of our force would not be possible without the support and actions of the Congress. As our attention is spread across the globe in a security environment where the only certainty is uncertainty, we must make decisions about our strategy and structure that will determine our Nation's military capability in the future. Today's force is capable and our forward deployed forces are ready to fight, but we are fiscally stretched to maintain readiness across the depth of the force, and to modernize, in order to achieve future readiness.

Situation

The current global security environment is characterized by violence, conflict and instability. Multidimensional security threats challenge all aspects of our national power and the international system. The expansion of information, robotics, and weapons technologies are causing threats to emerge with increased speed and lethality.

Over the last 15 years, the United States fought wars in the Middle East, and your Marines continue to respond to crises around the globe. There has not been an "inter-war period" to reset and reconstitute our force. Your Marines and Sailors have remained operationally committed at the same tempo as the height of our operations in Iraq and Afghanistan. As we have remained engaged in the current fight, our enemies and potential adversaries have not stood idle. They have developed new capabilities which now equal or in some cases exceed our own.

This unstable and increasingly dangerous world situation is further complicated by a constrained resource environment from which we must continue current operations, reset our equipment, maintain our warfighting readiness, and at the same time, modernize the force. Therefore, it has become necessary that we continually balance our available resources between current commitments and future readiness requirements. This requires pragmatic institutional choices and a clear-eyed vision of where we need to be in 10-20 years.

What Marines are doing today…

Today, Marines remain forward deployed in Iraq and Afghanistan, and ready to respond to crisis around the world. Marines and Sailors are presently managing instability, building partner capacity, strengthening allies, projecting influence, and preparing for major theater combat operations. In 2015, Marines executed approximately 100 operations, 20 amphibious operations, 140 theater security cooperation events, and 160 major exercises.

Our Nation has Marines on the ground in Iraq and Afghanistan today, and we anticipate our commitment could grow in the future. Marines continue to advise, train and enable the Iraqi Security Forces and other designated Iraqi forces with peer-to-peer advising and infantry training. In Afghanistan, Marines continue to serve as advisors with the Republic of Georgia's Liaison Teams (GLTs) in support of Operation RESOLUTE SUPPORT. From forward-deployed locations afloat and ashore, Marine tactical aviation squadrons continue to support operations in Syria and Iraq. In 2015, aviation combat assets executed over 1,275 tactical sorties and 325 kinetic strikes that have killed over 600 enemy combatants and destroyed over 100 weapons systems and 100 technical vehicles.

Our Amphibious Ready Group/Marine Expeditionary Unit (ARG/MEU) Teams continue to show their capability a flexible and agile maritime force. In 2015, the Marine Corps deployed over 12,000 Marines with our shipmates on Navy warships. This past year, five separate MEUs supported every Combatant Commander, participating in exercises and executing major operations. The 31st MEU, our Forward Deployed Naval Force in the Pacific, performed disaster relief operations on Saipan after Typhoon Soudelor passed through the Commonwealth of the Northern Mariana Islands (CNMI). Marines were ashore to support the relief effort within 12 hours of notification and delivered a total of 11,000 gallons of fresh water and 48,000 meals.

As part of the *New Normal* your Corps deployed two Special Purpose Marine Air Ground Task Forces – Crisis Response (SPMAGTF-CR) to US Central Command and US Africa Command. These

forces are tailored to respond to crises and conduct security cooperation activities with partner nations, but they do not provide the same flexibility and responsiveness of an ARG/MEU. Our SPMAGTF assigned to CENTCOM today provides dedicated Tactical Recovery of Aircraft and Personnel (TRAP) support to Operation INHERENT RESOLVE, in Iraq and Syria, and simultaneously provides a flexible force for crisis and contingency response. In AFRICOM, our SPMAGTF supported Embassies through reinforcement, evacuation, and operations to reopen a previously closed Embassy in Central African Republic. Your Marines also supported operations during the Ebola crisis and assisted with elections. Finally, a SPMAGTF deployed to the US Southern Command in 2015. SPMAGTF-SC's primary focus was the reconstruction of a runway in Mocoron Airbase, Honduras and theater security cooperation and training in Honduras, El Salvador, Guatemala and Belize.

The Marine Corps' activities in the Pacific are led by Marine Forces Pacific (MARFORPAC) headquartered in Honolulu, Hawaii, with a forward stationed Marine Expeditionary Force (MEF), III MEF, headquartered in Okinawa, Japan. III MEF contributes to regional stability through persistent presence and Marines remain the Pacific Command's (PACOM) forward deployed, forward stationed force of choice for crisis response. The Marine Corps continues to rebalance its force lay-down in the Pacific to support Defense Strategic Guidance (DSG), with 22,500 Marines West of the International Date Line, forward-based, and operating within the Asia-Pacific Theater. The planned end state for geographically distributed, politically sustainable and operationally resilient MAGTFs in the Pacific is a long-term effort that will span the next 15 years. The Marine Rotational Force-Darwin (MRF-D), based in Australia's Robertson Barracks, is in its fourth year of operation. This year we will deploy approximately 1,200 Marines to Darwin for a six-month deployment.

The Marine Corps continues to work closely with the State Department to provide security at our Embassies and Consulates. Today, Marines are routinely serving at 174 Embassies and Consulates in 146 countries around the globe. Approximately 117 Embassies have increased support in accordance with the 2013 NDAA. We have added 603 Marines to the previously authorized 1,000 Marine Security Guards; 199 in new detachments, 274 towards increased manning at current detachments, and 130 towards the Marine Security Augmentation Unit (MSAU). Additionally, the US Embassy in Havana, Cuba was reopened on July 2015, with Marines serving at this Embassy as they do in any other.

Our partnering capabilities assure allies, deter adversaries, build partner capacity, and set conditions for the readiness to surge and aggregate with a Joint, Coalition or Special Operations force

for major theater combat operations. Partnering also trains our Marines for environments in which we are likely to operate. In 2015, the Marine Corps, in conjunction with Combatant Commanders and the Marine Forces Component Commands, conducted more than 140 security cooperation activities, including exercises, training events, subject matter expert exchanges, formal education key leader engagements, and service staff talks. Your continued support has allowed the Marine Corps to operate throughout the world today; now we must ensure our readiness tomorrow.

Five Areas of Focus

Today, in addition to supporting the Combatant Commander's requirements, the Marine Corps is focused on near-term efforts in five interrelated areas that are vital to achieving our future success: People, Readiness, Training, Naval Integration, and Modernization. Across these five areas, three major themes run throughout: maintaining and improving the high quality people that make up today's Marine Corps; decentralizing the training and preparation for war while adhering to Maneuver Warfare principles in the conduct of training and operations; and modernizing the force, especially through leveraging new and emerging technologies. The future requires Marines to embrace change to leverage the rapid advancements in technology at the pace of the 21st Century in order to gain an operational advantage over any potential adversary we may face in the future.

People

The success of the Marine Corps hinges on the quality of our Marines. This is the foundation from which we make Marines, win our Nation's battles, and return quality citizens to American society. The Marine Corps will maintain a force of the highest quality which is smart, resilient, fit, disciplined and able to overcome adversity. Maintaining the quality of the men and women in today's Corps is our friendly center of gravity. Our goal is to ensure every Marine is set up for success on the battlefield and in life, and understands their value to the Marine Corps and the Nation.

The Marine Corps continues to benefit from a healthy recruiting environment that attracts quality people who can accomplish the mission. Our recruiting force continues to meet our recruiting goals in quantity and quality and is postured to make this year's recruiting mission. We are on track to meet our active duty end strength goal of 182,000 Marines in Fiscal Year 2016, and we will look to maximize the capabilities of each and every Marine. Where it makes sense, we will look to leverage

the unique skills of our Reserve Marines to align what they bring from the civilian sector and better enable the readiness of our Total Force.

As the Marine Corps completes our current draw down, competition for retention will continue. We will strive to retain the very best Marines capable of fulfilling our leadership and operational needs. This is accomplished through a competitive career designation process for officers and a thorough evaluation process for enlisted Marines designed to measure, analyze, and compare Marines' performance, accomplishments, and future potential. The Marine Corps continues to retain quality Marines in a majority of occupational fields while others, like aviation and infantry, are more challenging. An additional challenge for all Marines is remaining focused on training for war balanced against the volume of mandatory "top down" training requirements not directly associated with warfighting.

Marine Leaders have a moral obligation to ensure the health and welfare of the Nation's Marines from the day they make the commitment to serve. We take this responsibility very seriously and strive to maintain the trust and confidence of Congress and the American People by immediately addressing any challenge to Marine Corps readiness and finding solutions through our people and readiness programs. We have reinvigorated the Marine for Life Program and continue to progress with our Marine Corps Force Integration Plan (MCFIP), Sexual Assault Prevention and Response Program (SAPR), Protect What You've Earned Campaign (PWYE), Suicide Prevention and Response Program, our Wounded Warrior Regiment, Marine and Family Programs, and Transition Assistance Programs. The Marine Corps remains focused on solutions to address the destructive behavior of sexual assault, suicide and hazing. The abuse of alcohol has proven to be a contributing factor across the spectrum of force preservation issues that impact the readiness of our force. Our goal continues to be the elimination of this destructive behavior from our ranks, and we believe that preserving our commanders' ability to lead in this area is a vital element to reaching this objective.

Readiness

The Congressional intent to serve as the "Nation's Force in Readiness" guides who we are and what we do – being ready is central to our identity as Marines. As a force, we will remain ready to fight and win across the range of military operations and in all five warfighting domains – maritime, land, air, cyber and space. The fiscal reductions and instability of the past few years have impacted our readiness. As resources have diminished, the Marine Corps has protected the near-term

operational readiness of its deployed and next-to-deploy units in order to meet operational commitments. This has come at a risk.

The Marine Corps will continue to prioritize the readiness of deployed and next-to-deploy units over non-deployed units. The majority of our units are deploying ready while our non-deployed commands lack sufficient resources to meet the necessary personnel, training, and equipment readiness levels in order to respond today. However, to meet Congress' intent that we remain the nation's force in readiness, the Marine Corps requires a "ready bench" that is able to deploy with minimal notice and maximum capability.

Our aviation units are currently unable to meet our training and mission requirements primarily due to Ready Basic Aircraft shortfalls. We have developed an extensive plan to recover readiness across every type/model/series in the current inventory, while continuing the procurement of new aircraft to ensure future readiness. The recovery and sustainment of our current fleet is necessary to support both training and warfighting requirements. Each type/model/series requires attention and action in specific areas; maintenance, supply, depot backlog, and in-service repairs. For example, in our F/A-18 community we are 52 aircraft short of our training requirement and 43 aircraft short of our warfighting requirement due to back log and throughput at the Fleet Readiness Depot and our inventory of spares. If these squadrons were called to on to fight today they would be forced to execute with 86 less jets than they need. With the continued support of Congress, Marine Aviation can recover its readiness by re-capitalizing our aging fleet first as we procure new aircraft to meet our future needs and support our ground forces.

Simultaneous readiness initiatives are occurring with our ground equipment. Our post-combat reset strategy and Equipment Optimization Plan (EOP) are key components of the overall ground equipment "Reconstitution" effort. As of Jan 2016, the Marine Corps has reset 78% of its ground equipment with 50% returned to the Operating Forces and our strategic equipment programs. This strategic war reserve is our geographically prepositioned combat equipment both afloat and ashore where it makes the most sense to respond to contingencies. We remain focused on this recovery effort and project its completion in May of 2019. This service-level strategy would not have been possible without the continued support of Congress and the hard work of your Marines.

The Facility Sustainment, Restoration and Modernization (FSRM) initiative and current state of facilities is the single most important investment to support training, operations, and quality of life.

The 2017 budget proposes funding FSRM at 74% of the OSD Facilities Sustainment Model. This reduced funding level is an area of concern. FSRM is a top priority to fix.

The sustainment of military construction (MILCON) funding is crucial to managing operational training and support projects. Marine Corps readiness is generated aboard our bases and stations. As we transition to new capabilities and realign our forces in the Pacific, adequate MILCON will be a key enabler for the Marine Corps' future success.

Readiness is not just in our equipment supply and maintenance, but in the quality and challenging nature of our training through the mental, spiritual and physical readiness of Marines and Sailors across the force. Readiness is the result of a variety of factors: commitment by leadership, standards-based inspections, evaluated drills and training exercises, and an understanding by all Marines and Sailors that the call can come at any time. And we must be ready and able to answer.

Training, Simulation and Experimentation

The Marine Corps' training and education continuum requires parallel and complementary efforts, from Squad Leader to MAGTF Commander. Organizing and executing high quality training is a difficult task. It takes time, deliberate thought, and effort. Our approach to training must evolve. It will emphasize the basics: combined arms, competency in the use of our weapons and systems, and expeditionary operations; but it must reemphasize operations in a degraded command, control, communications, computers and intelligence (C4I) environment, camouflage/deception, operations at night, operations in a nuclear, biological and chemical (NBC) environment, and decision-making in rapidly unfolding and uncertain situations. We must provide opportunities to experiment and work with the latest technological advances.

Our war gaming supports the combat development process in order to develop and refine emerging concepts, conceptualize force design, and identify future capabilities and deficiencies within the future operating environments. War gaming achieves this purpose by permitting the dynamic, risk-free consideration of disruptive ideas and capabilities which enable innovation and inform Service priorities. War gaming also supports the development of operating concepts and facilitates analysis of alternatives across the ROMO. The Marine Corps is committed to the future development of a war gaming facility at Marine Corps Base Quantico to enhance the study of the evolving characteristics of, and the requirements for, successful warfighting in the future. The Marine Corps is working to leverage virtual and constructive training environments with better tools to train higher level staffs and

a focus on our leaders, from the Battalion to the Marine Expeditionary Force level. Enabled by technology, we will increase the amount of training each unit can accomplish in mentally and physically stressing environments for all elements of the MAGTF before they execute on a live training range or in combat.

Our current training schedule of major events will all focus on building on our maritime based operational capability and at the same time providing venues for experimentation. We will emphasize and increase opportunities for force-on-force training and operations in degraded environments in order to challenge Marines against a "thinking enemy" and maximize realism.

Demanding and challenging Professional Military Education (PME) is the best hedge against uncertainty and its purpose is to prepare for the unknown. Marines and Sailors of all ranks have the responsibility to educate themselves. The Marine Corps University (MCU) educates over 75% of Marine Corps' Captains and Majors and provides PME opportunities for 100% of our enlisted force. Our training and education initiatives contribute to our readiness and enhance our ability to integrate with the Naval and Joint Force.

Integration with the Naval and Joint Force

In order to be the Nation's expeditionary force in readiness the Marine Corps must remain a naval combined arms expeditionary force. Our naval heritage is based on more than tradition; it is mandated by law as our primary service responsibility. Marines will reinforce our role as a naval expeditionary force to create decision space for national leaders and assure access for the Joint force as part of a naval campaign. As the service with the primary Department of Defense Directive and Title 10 responsibility for the development of amphibious doctrine, tactics, techniques, and equipment, our capabilities are reliant on the Nation's investment in our partnered Navy programs. This requires the proper balance of amphibious platforms, surface connectors, and naval operating concepts to shape our force explicitly as part of the Joint Force, understanding where we will both leverage and enable the capabilities of the Army, Air Force and Special Operations Forces.

The Navy and Marine Corps Team require 38 amphibious warships, with an operational availability of 90%, to support two Marine Expeditionary Brigades, in order to provide the Nation a forcible entry capability. The Marine Corps fully supports the Secretary of the Navy and Chief of Naval Operations' efforts to balance amphibious platforms and surface connectors that facilitate operational maneuver from the sea and ship-to-objective maneuver. The Long Range Ship Strategy

(LRSS) increases the amphibious warship inventory to 34 by FY22. We appreciate Congress providing the funding to procure a 12th LPD and the funding for a second ship with the same hull form.

The LPD and the LXR represent the Department of the Navy's commitment to a modern expeditionary fleet. L-Class ships with aircraft hangars and the command and control capabilities for the distributed and disaggregated operations that have become routine for our ARG/MEU teams. The Marine Corps fully supports the Navy's decision to use the LPD-17 hull for the LXR program. This decision is an acquisitions success story that provides a more capable ship, at lower cost, with increased capacity, on a shorter timeline to better support how Marines are operating today and are likely to in the future.

Steady state demand and crisis response sea basing requirements must be met through creative integration of all platforms and formations. This requires an integrated approach that employs warships, alternative shipping and landing basing in a complementary manner. Corresponding to the amphibious ship effort is our investment in tactical ship-to-shore mobility because at some point in the naval campaign, the landing force is going to land. The Amphibious Combat Vehicle (ACV) is critical in the conduct of protected littoral maneuver and the projection of Marines from sea to land in permissive, uncertain, and hostile environments. Our planned investments are framed by our capstone service concept, Expeditionary Force 21 (EF-21). Working with our naval partners, we are aggressively exploring the feasibility of future and existing sea based platforms to enhance the connector capabilities of our LCACs and LCUs. We have a need to modify traditional employment methods and augment amphibious warships by adapting other vessels for sea-based littoral operations. Maritime Prepositioning Ship squadrons have one Maritime Landing Platform (MLP) that is effectively a "pier in the ocean." These ships can move pre-positioned war reserves into theater and serve as afloat staging bases to receive and transfer equipment and supplies as part of an integrated MAGTF or regionally oriented MEB. The end-state is a "family of systems" designed to enhance mobility, interoperability, survivability, and independent operational capabilities to further enhance sea basing and littoral maneuver capabilities well into the 21st Century. The Marine Corps will continue to work closely with the Navy to implement the 30-year ship building plan and to address the current readiness challenges of the amphibious fleet.

The continued development of Information Warfare and Command and Control capabilities are also required for the Marine Corps to operate against increasingly sophisticated adversaries. This

requires investments in interoperable combat operations centers. We are identifying and developing command and control systems and information technology architecture to support operations and ensure our ability to maneuver. Framed by service-level concepts like the Navy's Cooperative Strategy 21 (CS-21), we will collaborate with the Navy on a Naval Operating Concept revision in order to shape future naval campaigning and naval expeditionary operations. This concept will include a greater Marine Corps contribution to Sea Control operations through interoperability with the Navy Composite Warfare Commander (CWC) structure in order to disrupt, dismantle and defeat Anti-Access/Area Denial (A2/AD) threats and optimize the single naval battle success on and from the sea. Since Marines and Special Operations Forces (SOF) remain forward deployed, we must create true integration models to maximize the capabilities of the sea-based MAGTF, including command and control (C2), alongside our SOF partners. The end state is a fully integrated and ready Navy and Marine Corps team, trained and resourced to support our joint operating concept.

Modernization and Technology

History has not been kind to militaries that fail to evolve, and the change we see in the 21st Century is as rapid and dramatic as the world has ever known. That said the Marine Corps' modernization and technology initiatives must deliver future capabilities and sustainable readiness. Marines will continue working to do what we do today better, but equally important, must be willing to consider how these same tasks might be done "differently." The Marine Corps must continue to develop and evolve the MAGTF, ensuring it is able to operate in all warfighting domains. To do so Marines are invigorating experimentation of new concepts in order to advance our capabilities.

We will continue to develop our concepts to take advantage of the capabilities of the F-35 Joint Strike Fighter and all of our emerging aviation platforms, particularly in regard to sensor fusion and electronic warfare. Marines will continue to experiment with and exercise new ways to get the most out of the MV-22 and challenge previous paradigms in order to provide the most effective MAGTFs to our Combatant Commanders.

We will establish and define, in doctrine, our distributed operations capability in our MAGTFs by the end of FY16. With distributed capabilities, we must also ensure our forces are not constrained at the littoral seams between Combatant Commanders. You can also expect the Marine Corps to continue to pursue technologies that enhance our warfighting capabilities such as unmanned aerial

systems (UAS) and robotics, artificial intelligence, 3-D printing, and autonomous technologies that provide tactical and operational advantage.

The Marine Corps Warfighting Lab leads our experimentation effort to capitalize on existing and emerging technology and MAGTF level exercises. In conjunction with our coalition partners, the Navy and Marine Corps team has experimented with dispersed sea based SPMAGTFs, integrated MAGTFs in Anti-Access/Area Denial environments, incorporated emerging digital technologies with aviation platforms and our ground forces, and conducted naval integration with interoperable Special Operations Forces during Joint Exercises. We will continue to emphasize experimentation during our exercises as a way to inform the development of distributed doctrine and future operating concepts. Exercises serve as a test bed for experimentation as we search for faster, cheaper and smarter acquisition processes and programs.

The following equipment platforms and acquisition initiatives require special mention:

Amphibious Combat Vehicle (ACV)

The ACV is an advanced generation eight-wheeled, amphibious, armored personnel carrier that will support expeditionary maneuver warfare by enhancing tactical and operational mobility and survivability. The Marine Corps plans to procure 694 vehicles: 204 in the first increment and 490 in the second increment. Our plan is to have our first battalion initially capable in the 4th Quarter of FY20 and all battalions fully capable by the 4th Quarter of FY23. Your investment in this program provides the Marine Corps with an advanced ship to shore maneuver capability for the Joint Force.

Joint Strike Fighter (F-35)

The F-35 is a fifth generation fighter that will replace the Marine Corps' aging tactical aviation fleet of F/A-18 Hornets, AV-8B Harriers, and EA-6B Prowlers. The F-35 will have a transformational impact on Marine Corps doctrine as we work to both do what we're doing today better and "differently." The Marine Corps plans to procure 420 aircraft: 353 F-35Bs and 67 F-35Cs. The first F-35B squadron achieved initial operating capability in July 2015, and our second squadron will become operational in June 2016. The Marine Corps plans to complete its F-35 transition by 2031. We believe the Congressional support investment in this program will pay significant dividends for the capabilities of the Marine Corps and the Joint Force.

CH-53K

The Marine Corps' CH-53K "King Stallion" helicopter will fulfill the vertical lift requirement for amphibious and Joint Forcible Entry Operations. This CH-53 transition is critical to increasing the degraded readiness of the CH-53E community and decreasing the platform's operations and maintenance costs. The Marine Corps plans to procure 200 aircraft. The program achieved Milestone B in December 2005. The CH-53K's first flight occurred in October 2015 and our two aircraft have flown 25.8 hours.

Command, Control, Communications, Computers and Intelligence (C4I)

The modernization and technology effort of the Marine Corps requires an integrated network that is deployable, digitally interoperable, and supportive of rapid advancements in technology and the evolution of combat capabilities. The Marine Corps Enterprise Network (MCEN) establishes a comprehensive framework requiring the development of command and control architecture to simplify and enable operating forces to use services in a deployed environment. The priority is to provide worldwide access to MCEN services from any base, post, camp, station network, tactical network and approved remote access connection. Our goal is to provide an agile command and control capability with the right data, at the right place, at the right time.

Digital Interoperability (DI) is the effective integration of Marines, systems, and exchange of data, across all domains and networks throughout the MAGTF, Naval, Joint, and Coalition Forces, to include degraded or denied environments, in order to rapidly share information. This is a vital step in linking the MAGTF and the Joint Force to get the vast amount of information collected on all platforms into the hands of the warfighters that need it; in the air, on the ground and at sea.

The Marine Corps' goal is to retain our tactical advantage across the range of military operations with today's and tomorrow's systems. Our end state is to field and operationalize ongoing programs and continue to develop solutions that will enhance institutional capabilities and retain our tactical advantage across the ROMO.

Our Challenges

The character of the 21st Century is rapid evolution. Our potential adversaries have not stood still, and it is imperative that we keep pace with change. Two years ago, the 35th Commandant, came before Congress and testified that:

"...the 36th Commandant will reach a point, probably two years from now, where he's going to have to take a look at that readiness level and say, I'm going to have to lower that so that I can get back into these facilities that I can't ignore, my training ranges that I can't ignore, and the modernization that I'm going to have to do eventually. Otherwise we'll end up with an old Marine Corps that's out of date."[1]

This is where we find ourselves today. The Marine Corps is no longer in a position to generate current readiness and reset our equipment, while sustaining our facilities, and modernizing to ensure our future readiness. The efforts of the 114th Congress have provided sufficient resources to support the Marine Corps' near-term readiness and we thank the Congress for this fiscal stability. However, PB17 increasingly stretches the Nation's Ready Force. We are deploying combat ready-forces at a rate comparable to the height of our commitment to Operations IRAQI FREEDOM and ENDURING FREEDOM; we are facing future facilities challenges as we try to sustain our current installations; and we are struggling to keep pace as our potential adversaries rapidly modernize. This is not healthy for your Marine Corps or for the security of our Nation.

The Marine Corps is now on its way down to 182,000 Marines by the end of fiscal year 2016. Although our recruiting force continues to meet our recruiting goals we are challenged to retain certain occupational fields like infantry and aviation. The 21st Century demands capabilities in 5th Generation Fighter Aircraft (F-35), Cyber Warfare, Information Operations, Special Operations, Embassy Security Guards, and the Security Cooperation Group that advises and assists our allies and partner nations. The Marine Corps must continue to develop and retain these capabilities with quality Marines.

In last year's FY15 budget we were compelled, due to fiscal pressures, to limit and reduce training for our operating forces. In this year's FY16 budget our operation and maintenance funding was further reduced by 5.6%. This reduction has been carried forward into our FY17 budget. Two years of fiscally constrained operation and maintenance funds will force us to employ a prioritized readiness model for our deploying forces and prevents us from our desired readiness recovery, both in operational training and facilities sustainment. This means the Marine Corps will not have as deep and as ready a bench to draw from for a major contingency.

Modernization is future readiness. The recapitalization of our force is essential to our future readiness with investments in ground combat vehicles, aviation, command and control, and digitally

[1] Gen Amos. Posture of the United States Marine Corps. CMC, Mar 2014.

interoperable protected networks. We have important combat programs under development that need your continued support. The Amphibious Combat Vehicle (ACV) will replace our Amphibious Assault Vehicle (AAV), which is now over four decades old. The Joint Strike Fighter will not only replace three aging platforms, but provides transformational warfighting capabilities for the future. Our ground combat vehicles like the Light Armored Vehicle (LAV) have an average age of 33 years and our M1A1 tanks have an average age of 26 years. The Marine Corps is grateful for Congress' support of our wartime acquisition and reset efforts of the MRAP, HMMWV, and the contracting of the Joint Light Tactical Vehicle (JLTV). In summary, the increasingly lean budgets of FY16 and FY17 will provide increased readiness challenges and cause shortfalls in key areas. This reality will force tradeoffs.

Conclusion

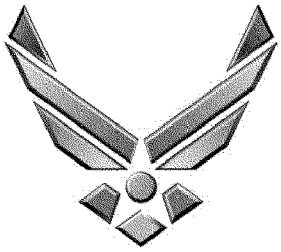
"*One fact is etched with clarity; the Marine Corps, because of its readiness to fight, will have a vital role in any future war.*"[2] Senator Mike Mansfield

Marines will continue to meet the high standards the American people have set for us. As responsible stewards of the Nation's resources, the Marine Corps remains committed to its auditability in order to provide the best Marine Corps the Nation can afford. We will therefore continue to produce highly trained Marines, formed into combat-ready forces, and provide the capabilities the Joint Force requires. The wisdom of the 82nd Congress as reaffirmed by the 114th Congress remains valid today - the vital need of a strong force-in-readiness. Marines are honored to serve in this role.

Marines are innovators and the history of the Marine Corps is replete with examples of innovation out of necessity. With the continued support of Congress, the Marine Corps will maintain ready forces today and modernize to generate readiness in the future because when the Nation calls, Marines answer and advance to contact.

[2] Hon. Mansfield. Fixing the Personnel Strength of the United States Marine Corps, Adding the Commandant of the Marine Corps as a Member of the Joint Chiefs of Staff. 82nd Congress, 1st Session, House of Representatives, HR 82-666, 30 Jun 1951.

United States Air Force



Presentation

Before the House Armed Services Committee

Air Force Posture

Witness Statement of
Honorable Deborah Lee James, Secretary of the Air Force
General Mark A. Welsh III, Chief of Staff of the Air Force

March 16, 2016

BIOGRAPHY

UNITED STATES AIR FORCE

DEBORAH LEE JAMES

Deborah Lee James is the Secretary of the Air Force, Washington, D.C. She is the 23rd Secretary of the Air Force and is responsible for the affairs of the Department of the Air Force, including the organizing, training, equipping and providing for the welfare of its nearly 664,000 active duty, Guard, Reserve and civilian Airmen and their families. She also oversees the Air Force's annual budget of more than $139 billion.

Ms. James has 30 years of senior homeland and national security experience in the federal government and the private sector. Prior to her current position, Ms. James served as President of Science Applications International Corporation's Technical and Engineering Sector, where she was responsible for 8,700 employees and more than $2 billion in revenue.

For nearly a decade, Ms. James held a variety of positions with SAIC to include Senior Vice President and Director of Homeland Security. From 2000 to 2001, she was Executive Vice President and Chief Operating Officer at Business Executives for National Security, and from 1998 to 2000 she was Vice President of International Operations and Marketing at United Technologies.

During the Clinton Administration, from 1993 to 1998, Ms. James served in the Pentagon as the Assistant Secretary of Defense for Reserve Affairs. In that position, she was the Secretary of Defense's senior advisor on all matters pertaining to the 1.8 million National Guard and Reserve personnel worldwide. In addition to working extensively with Congress, state governors, the business community, military associations, and international officials on National Guard and Reserve component issues, she oversaw a $10 billion budget and supervised a 100-plus-person staff. Prior to her Senate confirmation in 1993, she served as an assistant to the Assistant Secretary of Defense for Legislative Affairs.

From 1983 to 1993, she worked as a professional staff member on the House Armed Services Committee, where she served as a senior advisor to the Military Personnel and Compensation Subcommittee, the NATO Burden Sharing Panel, and the Chairman's Member Services team.

Ms. James earned a Bachelor of Arts degree in comparative area studies from Duke University and a master's degree in international affairs from Columbia University School of International and Public Affairs.

EDUCATION

1979 Bachelor of Arts degree in comparative area studies, Duke University, Durham, N.C.

1981 Master's degree in international affairs, Columbia University, N.Y.

CAREER CHRONOLOGY

1. 1983 - 1993, Professional Staff Member, Armed Services Committee, U.S. House of Representatives, Washington, D.C.
2. 1993 - 1998, Assistant Secretary of Defense for Reserve Affairs, Office of the Secretary of Defense, Washington, D.C.
3. 1999 - 2000, Vice President of International Operations and Marketing, United Technologies, Washington, D.C.
4. 2000 - 2001, Executive Vice President and Chief Operating Officer, Business Executives for National Security, Washington, D.C.
5. 2002 - 2013, Senior Vice President and Director for Homeland Security; Senior Vice President, C4IT Business Unit General Manager; Executive Vice President, Communications and Government Affairs; President, Technical and Engineering Sector, Science Applications International Corporation, McLean, Va.
6. 2013 - present, Secretary of the Air Force, Washington, D.C.

(Current as of June 2015)

BIOGRAPHY

UNITED STATES AIR FORCE

GENERAL MARK A. WELSH III

Gen. Mark A. Welsh III is Chief of Staff of the U.S. Air Force, Washington, D.C. As Chief, he serves as the senior uniformed Air Force officer responsible for the organization, training and equipping of 664,000 active-duty, Guard, Reserve and civilian forces serving in the United States and overseas. As a member of the Joint Chiefs of Staff, the general and other service chiefs function as military advisers to the Secretary of Defense, National Security Council and the President.

General Welsh was born in San Antonio, Texas. He entered the Air Force in June 1976 as a graduate of the U.S. Air Force Academy. He has been assigned to numerous operational, command and staff positions. Prior to his current position, he was Commander, U.S. Air Forces in Europe.

EDUCATION

1976 Bachelor of Science degree, U.S. Air Force Academy, Colorado Springs, Colo.
1984 Squadron Officer School, by correspondence
1986 Air Command and Staff College, by correspondence
1987 Master of Science degree in computer resource management, Webster University
1988 Army Command and General Staff College, Fort Leavenworth, Kan.
1990 Air War College, by correspondence
1993 National War College, Fort Lesley J. McNair, Washington, D.C.
1995 Fellow, Seminar XXI, Massachusetts Institute of Technology, Cambridge
1998 Fellow, National Security Studies Program, Syracuse University and Johns Hopkins University, Syracuse, N.Y.
1999 Fellow, Ukrainian Security Studies, John F. Kennedy School of Government, Harvard University, Cambridge, Mass.
2002 The General Manager Program, Harvard Business School, Harvard University, Cambridge, Mass.
2009 Fellow, Pinnacle Course, National Defense University, Fort Lesley J. McNair, Washington, D.C.
2009 Leadership at the Peak, Center for Creative Leadership, Colorado Springs, Colo.

ASSIGNMENTS

1. August 1976 - July 1977, Student, undergraduate pilot training, Williams Air Force Base, Ariz.
2. July 1977- January 1981, T-37 Instructor Pilot and Class Commander, Williams AFB, Ariz.
3. January 1981 - May 1981, Student, fighter lead-in training, Holloman AFB, N.M.
4. May 1981 - August 1981, Student, A-10 training, Davis-Monthan AFB, Ariz.
5. August 1981 - May 1984, Instructor pilot, Flight Commander and Wing Standardization and Evaluation Flight

Examiner, 78th Tactical Fighter Squadron and 81st Tactical Fighter Wing, Royal Air Force Woodbridge, England
6. May 1984 - June 1987, Commander, Cadet Squadron 5, later, Executive Officer to the Commandant of Cadets, U.S. Air Force Academy, Colorado Springs, Colo.
7. June 1987 - June 1988, Student, Army Command and General Staff College, Fort Leavenworth, Kan.
8. June 1988 - October 1988, Student, F-16 conversion training, Luke AFB, Ariz.
9. October 1988 - July 1992, Operations Officer, 34th Tactical Fighter Squadron, later, Commander, 4th Tactical Fighter Squadron, Hill AFB, Utah
10. July 1992 - June 1993, Student, National War College, Fort Lesley J. McNair, Washington, D.C.
11. June 1993 - June 1995, Chief, Defense and Space Operations Division, Operations Directorate (J3), Joint Staff, the Pentagon, Washington, D.C.
12. June 1995 - April 1997, Commander, 347th Operations Group, Moody AFB, Ga.
13. April 1997 - June 1998, Commander, 8th Fighter Wing, Kunsan Air Base, South Korea
14. June 1998 - June 1999, Commander, College of Aerospace Doctrine, Research and Education, Maxwell AFB, Ala.
15. June 1999 - September 2001, Commandant of Cadets and Commander, 34th Training Wing, U.S. Air Force Academy, Colorado Springs, Colo.
16. September 2001 - April 2003, Director of Plans and Programs, Headquarters U.S. Air Forces in Europe, Ramstein Air Base, Germany
17. April 2003 - June 2005, Director of Global Power Programs, Office of the Assistant Secretary of the Air Force for Acquisition, Headquarters U.S. Air Force, Washington, D.C.
18. June 2005 - June 2007, Deputy Commander, Joint Functional Component Command for Intelligence, Surveillance and Reconnaissance, U.S. Strategic Command, Bolling AFB, Washington, D.C.
19. July 2007 - August 2008, Vice Commander, Air Education and Training Command, Randolph AFB, Texas
20. August 2008 - December 2010, Associate Director of the Central Intelligence Agency for Military Support/Associate Director for Military Affairs, Central Intelligence Agency, Washington, D.C.
21. December 2010 - July 2012, Commander, U.S. Air Forces in Europe; Commander, Air Component Command, Ramstein Air Base, Germany; and Director, Joint Air Power Competency Center, Ramstein Air Base, Germany
22. August 2012 - present, Chief of Staff, Headquarters U.S. Air Force, Washington, D.C.

SUMMARY OF JOINT ASSIGNMENTS

1. June 1993 - June 1995, Chief, Defense and Space Operations Division, Operations Directorate (J3), Joint Staff, the Pentagon, Washington, D.C., as a lieutenant colonel and a colonel
2. June 2005 - June 2007, Deputy Commander, Joint Functional Component Command for Intelligence, Surveillance and Reconnaissance, U.S. Strategic Command, Bolling AFB, Washington, D.C., as a major general
3. August 2008 - December 2010, Associate Director for Military Affairs, Central Intelligence Agency, Washington, D.C., as a major general and a lieutenant general
4. December 2010 - July 2012, Commander, U.S. Air Forces in Europe; Commander, Air Component Command, Ramstein Air Base; and Director, Joint Air Power Competency Center, Ramstein Air Base, Germany, as a general

FLIGHT INFORMATION

Rating: command pilot
Flight hours: more than 3,300
Aircraft flown: F-16, A-10, T-37 and TG-7A

MAJOR AWARDS AND DECORATIONS

Defense Distinguished Service Medal with oak leaf cluster
Distinguished Service Medal with oak leaf cluster

Defense Superior Service Medal with oak leaf cluster
Legion of Merit with oak leaf cluster
Distinguished Flying Cross with oak leaf cluster
Meritorious Service Medal with two oak leaf clusters
Air Medal with oak leaf cluster
Aerial Achievement Medal
Joint Service Commendation Medal
Air Force Commendation Medal

EFFECTIVE DATES OF PROMOTION
Second Lieutenant June 2, 1976
First Lieutenant June 2, 1978
Captain June 2, 1980
Major May 1, 1985
Lieutenant Colonel June 1, 1989
Colonel Feb. 1, 1994
Brigadier General Aug. 1, 2000
Major General Aug. 1, 2003
Lieutenant General Dec. 9, 2008
General Dec. 13, 2010

(Current as of June 2015)

I. INTRODUCTION: THE WORLD'S GREATEST AIR FORCE

The United States Air Force remains the greatest air force on the planet. We are powered by Airmen with more talent and education than ever before. Our inventory, although aging, continues to be more capable across the enterprise than any Nation in the world. Together with our Joint and Coalition partners, Airmen provide around-the-clock *Global Vigilance*, *Global Reach*, and *Global Power* in defense of our Nation and our Allies. They are also vital to the most integrated Joint, Coalition and partner relationships in our history—even better than during the incredible combined success of Operation DESERT STORM 25 years ago.

However, we are experiencing a colossal shift in the geopolitical landscape. For the first time in a generation, adversaries are boldly challenging America's freedom of maneuver in air, space, and cyberspace in contested regions and near our Allies' borders. The era in which the United States could project military power without challenge has ended. Indeed, China has been increasing its military capability and is now expanding its grip on the Pacific. This compounds the risk of miscalculation or conflict in the region. Russia has attempted to annex Crimea and continues its aggression in Ukraine further pressuring the NATO alliance. At the same time, Russian and American Air Forces are both conducting offensive military operations in Syrian airspace. An unpredictable North Korea continues to conduct nuclear and ballistic missiles tests in the face of international condemnation. Syria and Iran have purchased one of the world's most capable air defense systems from their Russian ally while continuing to oppose our interests in the region. These challenges further complicate a relentless fight against Violent Extremist Organizations seeking to exploit weak governance and disrupt world order. The past two years are a reminder that stability is not the natural state of the international environment, that peace is not self-perpetuating, and that entire regions can suddenly descend into anarchy.

While the world's expectations of American airpower were shaped by Operation DESERT STORM, our near-peer adversaries responded to that victory by modernizing their forces with systems specifically designed to neutralize our strengths. Satellite-enabled precision, stealth, cruise missiles, and other military technology that debuted in DESERT STORM are now proliferating around the globe. Quite simply, our adversaries have gained unprecedented ground in just 25 years. In contrast, prior to 1992, the Air Force procured an average of 200 fighter aircraft per year. In the two and a half decades since, curtailed modernization has resulted in the procurement of less than an average of 25 fighters yearly. In short, the technology and capability gaps between America and our adversaries are closing dangerously fast. As our challengers employ increasingly sophisticated, capable, and lethal systems, your Air Force must modernize to deter, deny, and decisively defeat any actor that threatens the homeland and our

national interests. This modern force hinges upon the globe's finest Airmen. We will develop these Airmen through world-class education and training so they are prepared for 21st century combat.

The Fiscal Year 2017 President's Budget aims to build, train, and equip an Air Force capable of responding to today's and tomorrow's threats. It balances capacity, capability, and readiness in support of a resource-informed Service strategy that Takes Care of People, Strikes the Right Balance Between Readiness and Modernization, and Makes Every Dollar Count. *Congressional support for our budget, built in accordance with Air Force and National Strategy, will keep us on a path of disciplined modernization and begin to arrest the erosion of our competitive advantage while continuing to defend America's interests wherever they are challenged.*

II. GLOBAL VIGILANCE, REACH, AND POWER FOR AMERICA... DAILY

Our Joint Force's strength and depth is a coercive instrument deliberately designed to deter, and if necessary, compel, our adversaries. We provide a broad range of military options for America. However, phenomenal Airmen, combined with airpower's speed, agility, and flexibility, often make your Air Force a preferred employment option, for missions ranging from humanitarian relief to armed intervention.

Today, in our 25th consecutive year of combat operations, your Air Force provides the preponderance of combat force against Violent Extremist Organizations (VEOs) in the Middle East, North Africa, and Central Asia. We monitor these organizations with an unblinking eye and a 34,000-person intelligence, surveillance, and reconnaissance (ISR) enterprise dedicated to analyzing and disseminating intelligence to empower decision-makers, identify targets, enable air strikes, and protect Joint and Coalition forces. We have flown more than 30,000 sorties in Iraq and Syria since August 2014, including two-thirds of the 9,000 Coalition airstrikes and more than 90 percent of the 19,000 Coalition tanker sorties. In short, your Air Force is leading the campaign to degrade and destroy VEOs who seek to upend world order.

Additionally, when Russian forces challenged the security and territorial integrity of European nations on its periphery, American Airmen joined our fellow Soldiers, Sailors, and Marines to present a united stand against Russian aggression with our NATO allies. Deployed combat and mobility air forces, ISR and space platforms, and cyberspace assets spearheaded a persistent and dominant air, land, and sea presence in the region. While strengthening this vital alliance, we are also building non-NATO partner capability in support of the European Reassurance Initiative.

At the same time, we are projecting power in the Pacific because China's defense spending continues to grow at double-digit rates as they fund and field an impressive array of modern weapons supporting a more assertive regional strategy. Thus, as China attempts to expand its claims in the South China Sea and coerce our Pacific partners, your Airmen are projecting power through a continuous bomber presence and

by conducting reconnaissance operations in the region. We are preventing strategic surprise, bolstering freedom of maneuver and freedom of navigation for the Joint Force, and protecting the global commons.

Airmen around the globe protect American interests…daily. At U.S. Central Command's Combined Air Operations Center, Airmen lead Joint operations throughout the Middle East, Central Asia, and the Horn of Africa. We have nearly 20,000 Active Duty Airmen stationed in Japan and on the Korean Peninsula, where we fly regularly with our Pacific partners. More than 23,000 Total Force Airmen around the globe conduct operations in and through space and cyberspace supporting the Joint Force. Your Air Force supported 25 space missions, provided GPS, weather, communications, and Space Situational Awareness capabilities while tracking over 23,000 objects orbiting the Earth. We flew nearly 1.7 million hours in 2015, equal to 194 continuous years of flying. We moved nearly a million passengers, the equivalent of every man, woman, and child in Montana. Air Force aerial refuelers passed more than 1.2 billion pounds of fuel and our mobility aircraft airlifted 345,000 tons of cargo and evacuated more than 4,300 Joint patients—all in support of the Joint Force and our international partners.

There is no mission more critical than maintaining our Nation's nuclear capability. Your Airmen operate two of the three legs of our Nation's nuclear triad and continue to improve the nuclear enterprise, providing the deterrence that keeps America's most lethal threats at bay. The responsiveness of the intercontinental ballistic missile (ICBM) and the flexibility of the bomber underwrite U.S. national security. More than 35,000 Airmen protect our national interests and those of our Allies by ensuring a safe, secure, and reliable nuclear deterrent. Your nuclear forces ensure strategic stability with other nuclear powers and provide a wide range of options to deter strategic attacks and respond to emerging threats.

Lastly, programs like *Airmen Powered by Innovation* and *Every Dollar Counts* encourage Airmen to take ownership of day-to-day processes and improve our business practices. These campaigns have yielded billions of dollars in savings and cost avoidance over the last two years. These funds are then reinvested in readiness and modernization.

Today's Airmen—*your* Airmen—are dedicated to innovation, accomplishing their mission, and building a better Air Force for tomorrow… all while supporting and defending our Constitution and protecting our Nation.

III. A CRUCIAL MOMENT: THE DYNAMIC, COMPLEX FUTURE IS UPON US *NOW*

While our Airmen remain heavily engaged around the world, the average age of our aircraft is at an all-time high, and the size of our force and state of our full-spectrum readiness are at or near all-time lows. Non-stop combat since Operation DESERT STORM has placed a substantial burden on our Airmen and

their families while straining the readiness of our personnel and the systems they operate. Without question, the U.S. Air Force America remembers from 1991 is now shockingly smaller and older: 25 years ago, we had 134 combat-coded fighter squadrons while today we have 55; we had 946,000 Total Force military and civilian Airmen while today we have fewer than 660,000. If World War II's B-17 bomber had flown in DESERT STORM, it would have been younger than the B-52, KC-135 and the U-2 are today.

Despite America's inherent strategic advantages, challengers are quickly closing the capability and technology gaps between us. Tools that were unaffordable to most nations during the DESERT STORM era, such as computing power, nuclear weapons, cruise and theater ballistic missiles, and other precision guided munitions have decreased in cost and continue to proliferate. Sophisticated air defense systems are becoming the norm. Furthermore, the declining cost of defense is outpacing the rising cost of offense, challenging your Air Force's ability to present an effective conventional deterrent. The bold and deadly actions taken by revisionist powers in the last five years would have been unimaginable just a decade ago. Deteriorating military strength is an invitation for conflict as rising or unstable powers seek to gain from our eroding competitive advantage.

We must counter these challenges. This requires agile Airmen who we trained and equipped for all possible scenarios with modernized weapons systems and infrastructure where it counts the most. We remain grateful for recent budgetary relief from the Budget Control Act (BCA) caps in Fiscal Years 2016 and 2017, but Fiscal Year 2018 and beyond will return us to inadequate funding to carry out the National Military Strategy. Uncertain future budget toplines make it difficult to deliberately balance investments to modernize, recover readiness, right-size the force, and win today's fight.

Our rapidly shrinking advantage over competitors is the result of their increasing investment in areas designed to blunt our strengths combined with our limited funding and that of our Allies and partners. In fact, our forecasts from five years ago reflected we would have greater funding and fewer combat requirements than we are experiencing today. The combined strategic challenges of international financial turbulence, tenacious violence in the Middle East, and more ambitious great power actors have created a gap between the funding we need and the funding we receive.

Combat requirements since 2001 have created an imbalance due to a necessary focus on operations in relatively permissive environments. However, that does not relieve the Air Force from our obligation to be ready—*always*—to deter or defeat an adversary in a conflict where air superiority must be fought for and maintained instead of expected at the outset. Our Joint Force has enjoyed uninterrupted Air Superiority since April 1953—the result of realistic training and wise investments. Despite our

outstanding aviators, maintaining Air Superiority while flying 20th century aircraft against 21st century enemy air defenses represents a strategic mismatch. The Fiscal Year 2017 PB works to correct this, but in order to ensure we have the capacity for today's operations, we curtailed F-35 procurement and delayed some 4th generation modifications necessary to keep our aging fleet relevant against all foes. The longer we are forced to delay modernization, the more we jeopardize our ability to dominate full-spectrum conflicts. This is a risk we must not take. Although we provide world-class intelligence collection, rapid global mobility, air and space superiority, command and control, and global precision attack, your Air Force's future as a full-spectrum war-fighting force is in danger without substantial modernization.

IV. A CALL TO THE FUTURE

America is an air and space power nation. In an historic anomaly lasting 25 years, the U.S. has possessed unparalleled dominance in the air and in space, enabling a generation of Airmen to focus almost exclusively on operations against non-state threats in permissive air environments. However, dominance is not an American birthright, and air, space, and cyberspace superiority are not American entitlements. Without the ability to achieve national security objectives in air, space, and cyberspace—all under-written by a strong and reliable strategic nuclear deterrent—America's influence will diminish and the Joint Force will be forced to radically change how it goes to war. American lives may needlessly be put in danger and our leaders' options will be limited.

Air forces that fall behind the technology curve fail, and if the Air Force fails, the Joint Force fails. Your Air Force understands balancing combat capability, capacity, and full-spectrum readiness is a strategic imperative. While balancing today's combat requirements, maintaining readiness, and growing our endstrength, we must simultaneously modernize in order to halt the erosion of our technology and capability advantages. In the Fiscal Year 2017 PB, we made difficult choices to best achieve this needed balance. However, to successfully execute the PB, we need your help to ensure we have the appropriate funding, the flexibility to execute the choices we are presenting, and long-term budget stability. We also request the repeal of the BCA which increases the risk to the Nation and our Allies.

In order to create a consistent plan for our Service, we built a Strategic Framework that ensures our budgetary decisions are based on strategy. The core of this framework is a family of strategic documents describing the expected future environment, our Service core missions, how your Air Force will accomplish those missions 20 years from now, and what we need to focus on during this future years defense program (FYDP) to meet that strategy. The PB is built upon this resource-informed Strategic Framework, and it continues our efforts to "right the force" after Fiscal Year 2013's sequestration. This

Strategic Framework and our three priorities of Taking Care of People, Balancing Readiness and Modernization, and Making Every Dollar Count are the foundation of the Fiscal Year 2017 PB.

Our strategy-driven Fiscal Year 2017 PB is consistent with last year's PB and offers the best balance for America's current and future air, space, and cyberspace requirements at Bipartisan Budget Act (BBA)-level funding. It is designed to synchronize budget and acquisition decisions with strategy and provide a continuing advantage against competitors across the range of military operations despite the modernization slowdown necessary to continue current operations. It is credible, affordable, and executable—if we're allowed to execute where we have requested.

Despite a BBA that resulted in a lower-than-expected Fiscal Year 2017 PB, your Air Force will support the Nation's defense strategy and the most urgent Combatant Commander requests. The Fiscal Year 2017 PB is the result of difficult, purposeful, strategy-centric resourcing decisions made to meet obligations set in Defense Strategic Guidance. It aligns with Department of Defense and Air Force 30-year strategies and continues to gain ground in our ability to wage full-spectrum operations. It maximizes the contributions of the Total Force and reinforces investments in nuclear deterrence, space control, and cyberspace operations. It emphasizes global, long-range, and non-permissive capabilities and focuses on unique capabilities the Air Force provides to the Joint Force. It invests in our most precious resource—people—by growing our active force back to 317,000 Airmen by the end of Fiscal Year 2016. As part of our initiative to right-size our force, we also will right-shape our force by maximizing selective retention bonuses to address skilled manning shortages. We will take care of our incredible Airmen and protect our most important family programs by continuing to fully fund Military Tuition Assistance, Sexual Assault Prevention and Response programs, and Airmen Family Readiness Centers.

In addition to right-sizing our Service for today's demands, the Fiscal Year 2017 PB continues our efforts to balance readiness and modernization despite funding challenges. This PB includes a $6.5 billion investment in Nuclear Deterrence Operations, an increase of $4.3 billion over the FYDP compared to the Fiscal Year 2016 PB. This investment includes modernizing nuclear command and control, replacing outdated and unsupportable Minuteman III ICBM equipment, and building the Ground Based Strategic Deterrence program to begin replacing the aging Minuteman III in the late 2020s. We are also developing the Long-Range Standoff weapon which will provide the Joint Force with a survivable air-launched weapon capable of destroying otherwise inaccessible targets in any zone of conflict.

Additionally, we intend to delay the A-10 and EC-130 retirements to maintain capacity in support of today's operations. We will fund flying hours to their maximum executable level, invest in weapon system sustainment, and ensure combat exercises like Red Flag and Green Flag remain strong. We will

continue our top three recapitalization programs, though we have made the difficult decision to slow F-35 procurement. We will resource strategic assets such as the Space-Based Infrared System (SBIRS) to detect global missile launches. We will also invest in preferred munitions capacity and the Combat Rescue Helicopter recapitalization program while continuing to grow from 26 Cyber Mission Force Teams to 39. Lastly, we will fund improvements to Global Integrated ISR with a focus on the Remotely Piloted Aircraft (RPA) enterprise. These include increased benefits for aircrew, a program to train enlisted operators to fly the RQ-4 Global Hawk, a basing study to provide options to support flying RPAs on a schedule more conducive to steady-state operations, and other recommendations from our Culture and Process Improvement Program, a bottom-up review of issues impacting our RPA force.

The BBA has forced us to make sacrifices as we balance readiness and modernization. In this case, we must delay five F-35s and slow modernization of our 4th-generation aircraft. With increased funding, we would invest in these capabilities now to ensure they do not compete for funding with critical nuclear and space requirements in the out-years. Just as importantly, we must delay investment in aging critical infrastructure such as ranges, airfields, and taxiways, an action we have repeated annually since Fiscal Year 2013 sequestration. Every year we delay these repairs, operations are affected and the eventual cost of improvements grows substantially.

Importantly, this budget must mark the return of a committed investment to *Global Vigilance, Global Reach,* and *Global Power* for America. A return to BCA-level funding in Fiscal Year 2018 will undermine our readiness and modernization; it will require your Air Force to depart from a long-term, Strategic Framework in favor of a course of action that funds only things absolutely required in the short-term. It will abet our challengers' efforts to further erode our capability and technology advantages, and we will be forced to slow our modernization programs, delaying our planned readiness recovery. A return to BCA-level funding will limit our space, cyberspace, and nuclear improvements and further degrade Air Force-wide infrastructure and installation support. It is critical that the looming threat of sequestration ends. BCA-mandated across-the-board defense cuts will act as a straitjacket, preventing the department from reallocating funds to the most critical capabilities and investments at the very moment such flexibility is paramount. This will result in significant strategic risk and greater cost over the long run. Fiscal Year 2017 represents a critical point when the Air Force can continue to "right the force" in terms of size, capacity, readiness, and present/future capabilities. Alternatively, Fiscal Year 2017 could simply represent temporary relief before inadequate future BCA-level funding thwarts modernization and readiness initiatives. Make no mistake, BCA-level funding will result in longer timelines to meet Joint Force objectives; this could result in increased risk to mission and service members.

Our Nation requires bold leadership from the Congress. Your Air Force needs the authority and flexibility to execute our strategy through Congressional support of the Fiscal Year 2017 PB. We appreciate the BCA relief provided by the 2015 BBA, but responsibly sustaining and investing in U.S. security requires long-term budget stability and the repeal of BCA. Critically, even at BBA funding levels, the overall capability gap between us and our competitors will continue to narrow; we can preserve the advantages in some areas, but determined adversaries will close gaps in others. Accordingly, we are prioritizing the Joint Force requirements our Nation needs the most.

V. CONCLUSION: A CALL TO ACTION

Today's national security challenges come from a combination of strong states that are challenging world order, weak states that cannot preserve order, and poorly governed spaces that provide sanctuary to extremists who seek to destabilize the globe. The world needs a strong American Joint Force, and the Air Force is its first and most agile responder in times of crisis, contingency, and conflict. The Joint Force depends upon Air Force capabilities and requires airpower at the beginning, the middle, and the end of every Joint operation. As our Army and Marine Corps get smaller, they do not want less airlift; they want it to be more responsive. As Combatant Commanders look toward battlefields of the future, they do not want less ISR; they need *more* persistent, capable, and agile ISR. Should our Nation find itself in another conflict requiring boots on the ground, we have the responsibility to assure air superiority so American Soldiers and Marines may keep their eyes on their enemies on the ground rather than concern themselves with enemy airpower overhead. America's Air Force must be able to disrupt, degrade, or destroy any target in the world, quickly and precisely, with conventional or nuclear weapons, to deter and win our Nation's wars. Undoubtedly, decisive air, space, and cyberspace power—and the ability to command and control these forces—have become the oxygen the Joint Force breathes and are fundamental to American security and Joint operations. Whether in support of global counter-terror operations or great power deterrence, your Air Force remains constantly committed, as we have without respite for the past 25 years.

In the face of a dynamic, complex, and unpredictable future, your Airmen provide a strategic advantage over America's competitors. They are educated, innovative, and motivated. Their ability to see threats, reach threats, and strike threats is an effective but shrinking conventional deterrent against America's enemies. These courageous Airmen, when properly trained, effectively equipped, and instilled with the trust of their leadership, will ensure the Air Force continues to overmatch opponents in Joint and Coalition operations and defend the United States from any who would do us harm.

The Fiscal Year 2017 President's Budget—and the flexibility to execute it as we have recommended—is an investment in the Air Force our Nation needs. The global developments of the last five years have reminded us that America's Air Force must have the capability to engage anytime, anywhere, and across the full spectrum of conflict all while providing a reliable strategic nuclear deterrent. America expects it, Combatant Commanders require it, and with your support, our Airmen will deliver it.

WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING

MARCH 16, 2016

RESPONSE TO QUESTIONS SUBMITTED BY MR. FORBES

Secretary MABUS. Because of the long lead time needed for shipbuilding, it is not the job of one administration. It is not the job of one Congress. This Administration and Congress, in previous budgets, have guaranteed we will reach a Fleet of 300 ships by FY19 and 308 by FY21. With the strong support of Congress and close adherence to the long range shipbuilding plan over the period 2009—2016, the Navy is certain to reach a Battle Force of 308-ships in 2021 (the nominal year in which those ships procured by 2016 will have been delivered to the Navy). This twelve year span required to go from a Navy of 278 ships in 2009 to 308 ships in 2021 exemplifies why shipbuilding must remain a top priority for the Department of the Navy (DoN) if we are to continue to provide the measure of maritime security and power projection required of our naval forces in the decades ahead. The FY 2017 President's Budget and the corresponding FY 2017 to FY 2021 Future Years Defense Plan (FYDP) establish the shipbuilding trajectory that will shape our Battle Force and its underpinning industrial base in the years following FY 2021.

In the 2020s the strict requirement to replace SSBNs of the Ohio-class on a one-for-one basis as they retire, dictates that the Navy procure the lead OR SSBN ship in FY2021, the second ship of the class in FY2024, followed by funding one OR SSBN each year between FY2026 and FY2035. In developing our FY 2017 President's budget, the Office of Management and Budget increased the Navy's shipbuilding funds by about $2.3 billion in FY2021 specifically for the start of OR SSBN construction, allowing the Navy to better balance our resources across the entire Navy portfolio. Within the Navy's traditional Total Obligation Authority (TOA), and assuming that historic shipbuilding resources continue to be available, the OR SSBN and CVN funding requirements would consume about half of the shipbuilding funding available in a given year—and would do so for a period of over a decade. The significant drain on available shipbuilding resources would manifest in reduced procurement quantities in the remaining capital ship programs. Therefore, if additional funding is not available to support the shipbuilding procurement plan throughout this period, knowing that the OR SSBN will be built, the balance of the shipbuilding plan will be significantly impacted.

Ohio Replacement (OR) remains our top priority program. The Navy continues to need significant increases in our top-line beyond the FYDP, in order to afford their replacement. Absent top-line relief, OR SSBN construction will seriously impair construction of virtually all other battle force ships. Without additional funding, the resulting force composition and ship numbers will not only fail to meet the requirements of the Navy's Force Structure Assessment (FSA), but there will also be significant negative impacts to the shipbuilding industrial base. The Navy greatly appreciates Congressional support in overcoming the challenges posed by funding the OR Program, characterized by the establishment of the National Sea-Based Deterrent Fund (NSBDF) as an element of a funding strategy, and will work with Congress to maximize the benefits provided by Economic Order Quantity (EOQ), Advance Construction (AC), and Incremental Funding authorities. [See page 15.]

RESPONSES TO QUESTIONS SUBMITTED BY MR. ROGERS

Secretary JAMES. The programmed cost of current and planned mitigation measures to reduce vulnerability associated with the Intercontinental Ballistic Missile (ICBM) convoy support mission is $8.3M. These measures include the expansion of infrastructure and personnel capacity, fielding of aerial gunnery capability, installation of terrain avoidance systems, and establishment of multiple refueling locations throughout the missile fields. For ICBM emergency security response, the Air Force is unable to meet the full response requirement because of the UH–1N's speed, range, and payload limitations.

Should non-Air Force assets and personnel be employed to perform the emergency security response mission at the three ICBM wings, preliminary estimates indicate the Air Force would incur approximately $20M in up-front, one-time only infrastructure expenses (for hangars/clam shelters, ramps, lodging, and operations/maintenance/alert facilities). Additionally, approximately $40M in annual operating ex-

penses (for flight hours, per diem, and pay and allowance) would be incurred by the service providing the interim capability.

The infrastructure expenses would be non-recoupable, regardless of the timeline on which a replacement helicopter is fielded. However, it is possible that the Air Force could repurpose some portion of this infrastructure to support the operational requirements of a replacement platform. The annual operating expenses incurred by the service providing the interim capability would presumably cease once the Air Force helicopter replacement program attains full operational capability. [See page 20.]

Secretary JAMES. General Mitchell's study does say that the worldwide "launch capacity exceeds demand by a 3 to 1 ratio" and appears to be based on 2013 FAA Commercial Space Transportation Advisory Committee data. My assessment is that we have the opportunity to make the U.S. launch industry more competitive worldwide as encouraged by our National Space Transportation Policy. In fall 2014, the Air Force solicited feedback from industry via a Request for Information. Those responses and continuous engagement with industry provided evidence that a viable competitive launch market could exist if commercial companies are able to close their business case with a combination of commercial and government missions. This feedback supports government investment in industry and enables the Department of Defense, in accordance with National Space Transportation Policy, to provide assured access to space with at least two families of commercially viable launch vehicles that meet all National Security Space requirements. [See page 21.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 16, 2016

QUESTIONS SUBMITTED BY MR. LANGEVIN

Mr. LANGEVIN. I believe we must ensure that you and your counterparts here today have the flexibility and the agility needed to acquire and utilize off-the-shelf capabilities that can quickly transition to the warfighter. Can you describe how the services are promoting public-private partnerships and leveraging the capabilities of the private sector?

Mr. MURPHY and General MILLEY. The Army works with the private sector in a variety of ways. For example, we leverage the capabilities of the private sector through the use of Other Transaction Authorities (OTA). An OTA is a legally binding agreement that is not subject to the traditional Federal and Defense Acquisition Regulations (FAR), which apply to procurement contracts. Therefore, OTAs are more flexible agreements. The Army recognizes the value and benefit of using OTAs to bring new sources of technical innovation to the Department quickly and economically to remain competitive in the commercial marketplace and improve current capability. In Fiscal Year (FY) 2015, the Army had 240 OTAs valued at $634 million, double the amount in FY 2013 (117 totaling $316 million).

Another way the Army leverages the capabilities of the private sector is through the expertise resident in our labs and engineering centers. Thanks to our highly skilled workforce of over 11,000 scientists and engineers, the Army is able to quickly assess the ability for commercial solutions to meet the Warfighter needs (either with or without modifications) and/or identify developing capabilities that could address the immediate needs of the Warfighter. This is why it is critical to maintain a strong Science and Technology enterprise with a world class infrastructure and workforce.

Mr. LANGEVIN. I believe we must ensure that you and your counterparts here today have the flexibility and the agility needed to acquire and utilize off-the-shelf capabilities that can quickly transition to the warfighter. Can you describe how the services are promoting public-private partnerships and leveraging the capabilities of the private sector?

Secretary MABUS and Admiral RICHARDSON. The Department of Navy (DON) has multiple initiatives in place, particularly within the Naval Laboratories and Warfare Centers, where DON scientists and engineers routinely collaborate with their private sector peers to identify, evaluate and use off-the-shelf capabilities. Some examples include:

(1) Cooperative Research and Development Agreements (CRADAs): Joint research and development efforts allowing the sharing of facilities, knowledge, experience and/or intellectual property between industry and the DON. Provides data and intellectual property protection from the Freedom of Information Act for an established period of time.

(2) Small Business Innovative Research (SBIR) program: Promotes small businesses and is phased to permit technology feasibility and demonstration before full-scale development commercialization.

(3) Small Business Technology Transfer (STTR): Provides R&D funding directly to small companies working cooperatively with researchers at universities and other research institutions. STTR firms and the research partner agree to a division of intellectual property prior to the start of the STTR effort. As a result, each party retains the intellectual property rights to technologies they develop under the program.

(4) Memorandums of Understanding and/or Agreement (MOU/MOA): High level agreements documenting and identifying areas of potential collaboration and/or a strategy to do so.

(5) Patent License Agreement: Assigns the right to make, use or sell government intellectual property. License fees and/or royalties may be involved.

(6) Partnership Intermediary Agreements (PIAs): Allows DON activities to partner with semi-private institutions to develop potential interactions with State and local business entities.

(7) Other Transactions (10 U.S.C. 2371): "Research projects: transactions other than contracts and grants," allows for basic, advanced, and applied research to be acquired through transactions other than contracts, cooperative agreements, and

grants. These agreements stimulate new sources that have not historically dealt with the Government.

(8) Educational Partnership Agreements (10 U.S.C 2194): Authorizes the director of each defense laboratory to enter into one or more education partnership agreements with educational institutions for the purpose of encouraging and enhancing study in scientific disciplines at all levels of education by loaning equipment, providing personnel to assist in course development, and providing academic credit for participation in research.

Mr. LANGEVIN. I believe we must ensure that you and your counterparts here today have the flexibility and the agility needed to acquire and utilize off-the-shelf capabilities that can quickly transition to the warfighter. Can you describe how the services are promoting public-private partnerships and leveraging the capabilities of the private sector?

General NELLER. **1. Acquisition of Commercial Items.** The current acquisition process requires lengthy procurement action lead times (PALT) and processes in order to award requirements that support our Marines. For commercial off-the-shelf capabilities the Government can utilize FAR Subpart 12.1, Acquisition of Commercial Items that provides an expedited acquisition process.

Some of the other acquisition expediting tools that are utilized by the Marine Corps are as follows:

a. **External Contracting Waiver (ECW) Determination and Finding (D&F) Process.**

Marine Corps Systems Command and supported program executive offices (PEOs) utilize the ECW D&F, enabling program managers to send funding to other DOD components or civilian agencies to make awards under existing contracts competitively awarded by the servicing agency. This enables the Marine Corps to quickly obligate funds in order to receive the necessary warfighting capabilities and technology solutions without repeating the lengthy PALT times encountered by the servicing agency.

b. **Unsolicited Proposals.** Private Sector firms can submit "Unsolicited Proposals" for innovative concepts and technologies. The Government has stated interest in receiving unsolicited proposals that contain new ideas and innovative concepts pertaining to our military capability requirements.

An "unsolicited proposal," as defined in FAR 2.101, is a written proposal for a new or innovative idea that is submitted to an agency on the initiative of the offering company (i.e., private sector firm) for the purpose of obtaining a contract with the government, and that is not in response to an RFP, broad agency announcement, or any other government-initiated solicitation or program. For an unsolicited proposal to comply with FAR 15.603(c), it must be: innovative and unique, independently originated, and developed by the offering company. The unsolicited proposal:

(1) Must be prepared without government supervision, endorsement, direction or direct government involvement.

(2) Must provide sufficient detail to show that government support could be worthwhile, and that the proposed work could benefit the agency's research and development (or other mission responsibilities).

(3) Cannot be an advanced proposal for a contract requirement that the offering company knows the agency will need and that could be acquired by competitive methods.

c. Broad Agency Announcements (BAA). The Office of Naval Research (ONR) utilizes BAAs under FAR Subpart 35.016, for the acquisition of basic and applied research and that part of development not related to the development of a specific system or hardware procurement. BAA's are used by the Navy and Marine Corps through ONR to fulfill requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. ONR:

(1) Constantly seeks innovative scientific and technological solutions to address current and future Navy and Marine Corps requirements.

(2) Actively wants to do business with educational institutions, nonprofit and for-profit small and other than small businesses with ground-breaking ideas, pioneering scientific research and novel technology developments.

d. Federally Funded Research and Development Centers (FFRDC). Additionally, FAR Subpart 35.017, the provision for FFRDCs, enables the Marine Corps to meet special long-term research or development needs which cannot be met as effectively by existing in-house or contractor resources. FFRDCs:

- Enable government agencies to use private sector resources to accomplish tasks that are integral to the mission and operation of the sponsoring agency.

- Are provided access, beyond that which is common to the normal contractual relationship, to Government and supplier data, including sensitive and proprietary data, and to employees and installations equipment and real property.
- Are required to conduct business in a manner befitting the special relationship with the Government,
  - To operate in the public interest with objectivity and independence,
  - To be free from organizational conflicts of interest, and
  - To have full disclosure of their affairs to the sponsoring agency.
- Are operated, managed, and/or administered by a university or consortium of universities, other not-for-profit or nonprofit organization, or an industrial firm, as an autonomous organization or as an identifiable separate operating unit of a parent organization

It is not the Government's intent that an FFRDC use its privileged information or access to installations equipment and real property to compete with the private sector. However, an FFRDC may perform work for other than the sponsoring agency under the Economy Act, or other applicable legislation, when the work is not otherwise available from the private sector.

e. Marine Enhancement Program. The Marine Enhancement Program provides an opportunity for Marines, industry, and the public to nominate commercial off the shelf items focused on the infantry community for funding, testing, procurement, and fielding in a 9–24 month timeframe. The program utilizes a web based submission process http://www.marines.mil/mep for nominations that anyone can submit. All nominated items are reviewed and feedback provided to the submitter. Outreach events and advertising are used to inform Marines and industry about the program as recently as Marine South at Camp Lejeune NC on 6–7 April 2016. The program provides an opportunity for anyone with an innovative idea for a commercial item that provides added value to the Marines to have their idea heard and reviewed.

f. Modern Day Marine "Integration with Industry" Workshop. The Integration with Industry workshop provides a venue for industry to bring their product into the Marine Corps Systems Command's rifle squad integration team for a collaborative integration workshop. The products can range from prototype items to fully completed items ready for sale. The integration team provides engineering and human systems integration expertise coupled with all the rifle squad equipment and weapons to enable a full system solution. The integration team provides the tools and resources to conduct the workshop. Active duty Marines provide feedback to the vendor on the usability and utility of the completed integration solution. This event supports small business ventures that may not have access to Marine Corps equipment in order to optimize the integration of their product. This workshop has been offered to industry during the annual Modern Day Marine event held in late September at Quantico, VA.

2. Technology Transition

a. The Marine Corps Warfighting Lab provides for the experimentation that enables adapting off-the-shelf capabilities. Technology experimentation seeks to put prototypes into the hands of end users, in relevant environments, to collect feedback on how well those prototypes meet the users' needs. Technology must not only work well in the laboratory but accomplish its mission when exposed to an operational environment. MCWL works closely with ONR on Future Naval Capabilities (FNC). FNC is an S&T program designed to develop and transition cutting-edge technology products to acquisition managers within three to five years. The program aims to deliver mature products for integration into platforms, weapons, sensors or specifications that improve Navy and Marine Corps warfighting and support capabilities. MCWL and ONR facilitate informed Technology Transition Agreements with program managers, which can tap into and rapidly adapt private sector off-the-shelf solutions.

b. PEO Land Systems Marine Corps has published its Advanced Technology Investment Plan (ATIP) 2016, the seventh edition of this key document. The ATIP provides a thorough understanding of the S&T challenges facing PEO LS programs and how proposed solutions/technologies can meet those challenges. The document is accessible on the Defense Innovation Marketplace (DIM), a web-based forum managed by the Assistant Secretary of Defense for Research and Engineering. The DIM provides industry with improved insight into the R&E investment priorities of the DOD. The Independent Research and Development program is a contractor's own investment in basic and applied R&D for which DOD may reimburse the company.

c. Naval Warfare Centers and Labs can be a means for private sector participation when they award contracts for work not required to be performed by govern-

ment personnel. So too can Army organizations, such as Tank-automotive and Armaments Command, and Aberdeen Test Center.

d. Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR). The Marine Corps utilizes the SBIR and STTR programs established by Congress to strengthen the role of innovative small business concerns (SBCs) in Federally-funded research (Federal R) or research and development (R&D). Specific program purposes are to:

(1) Stimulate technological innovation;

(2) Use small business to meet Federal R/R&D needs;

(3) Foster and encourage participation by socially and economically disadvantaged SBCs in working in technological innovation; and

(4) Increase private sector commercialization of innovations derived from Federal R/R&D, thereby increasing competition, productivity and economic growth.

SBIR has the advantage of tapping into a broad array of otherwise innovative companies that may be marginally or infrequently engaged with the Defense Department. It also is a relatively low-risk approach with distinct stages of technology development and incremental levels of investment. This provides off ramps if a technology is not panning out—or allows the opportunity to elevate quickly a promising technology to the next level of development.

e. Rapid Innovation Fund (RIF). The RIF provides opportunities for agencies to award directly to companies who have demonstrated a capability in response to DON requests for "White Papers" to meet an innovative technology or need. MCSC is utilizing the Rapid Innovation Fund program to transition innovative technologies (primarily from small businesses) that can be rapidly inserted into acquisition programs to meet specific defense needs. RIF efforts often build on SBIR projects to transition mature technologies to programs of record. In less than two years, a technology can go from mature to ready for transition into a program for fielding. The deliberate planning and use of these and many other science and technology tools enable program managers to develop long-term strategies to modernize their programs.

Mr. LANGEVIN. As we work to manage cybersecurity at an enterprise level and evaluate the state of much-needed programs, such as OCX, it is critical that the services understand the cybersecurity requirements laid before them. Can you tell us how much was spent defending space systems against cyber vulnerabilities last year, and how the Air Force is working to incorporate cybertechnologies into requirements sooner? Do you believe that other legacy systems may be vulnerable to cyberthreats, and if so, to what extent?

Secretary JAMES and General WELSH. Spending for the mitigation of cyber vulnerabilities on space systems is included in developmental/operational testing and information assurance (IA) efforts required for Authority to Operate. These activities do not have discreet funding lines and differ significantly from program to program.

The Air Force considers cybersecurity throughout cradle to grave lifecycle, and is working to incorporate cyber technologies into requirements sooner. Cyber technologies are incorporated into the requirements process at Pre-Milestone A when the draft Capability Development Document is written.

For space systems, Communications Squadron Next pathfinders will examine standing up operations centers with manpower and tools to actively defend "blue" networks, including the space control ground networks. In addition, Headquarters Air Force, Air Force Space Command, and 24th Air Force are analyzing the cost to employ cybersecurity technologies in defending both the ground and space segments.

For other legacy systems, the Air Force has a Cyber Campaign Plan (CPP) that will examine how to incorporate cyber resiliency technologies into requirements earlier in the process. Specifically, one planned line of action would integrate cyber system security engineering into Air Force systems engineering. This effort specifically would "bake-in" cyber resiliency to future warfighting systems.

On a regular and recurring basis, the Air Force completes IA (level 1 and level 2) cyber threat assessments on legacy systems. These assessments have indicated that cyber vulnerabilities do exist in our legacy systems at a low level of risk; however, no definitive cyber threat evidence has been found. Lines of action in the CPP examine the possibility of using intelligence collection to validate cyber threats. In addition, the CCP would also assess mission threads across the Air Force and system-by-system vulnerabilities as well as demonstrating mitigations.

Mr. LANGEVIN. I believe we must ensure that you and your counterparts here today have the flexibility and the agility needed to acquire and utilize off-the-shelf capabilities that can quickly transition to the warfighter. Can you describe how the services are promoting public-private partnerships and leveraging the capabilities of the private sector?

Secretary JAMES and General WELSH. The Air Force promotes public-private partnerships and leverages the capabilities of the private sector this through multiple venues. For example, the Defense Innovation Marketplace contains DOD research and development (R&D) strategic documents, solicitations, and news/events on warfighter requirements that can be fulfilled by leveraging commercial off-the-shelf capabilities.

A second example of public-private partnership is the Air Force's Small Business Innovation Research and Small Business Technology Transfer program. The program stimulates technological innovation by using small businesses to meet the Air Force's R&D needs. It also offers frequent opportunities for small businesses to compete for federal funding, build partnerships with program offices and industry leaders, and to commercialize technological innovations. The Air Force also uses Industry Days, Broad Area Announcements, Requests for Information, and technology workshops to promote collaboration between the Government, Federally Funded Research and Development Centers, and the private sector to exchange information on off-the-shelf capabilities that may quickly transition to fulfill warfighter needs.

A third example of an innovative public-private partnership is the Other Transaction Authority (OTA) Agreements for the Rocket Propulsion System Prototype Investment. These OTAs facilitate a competitive, flexible selection process allowing the shared investment of a commercially viable product with four industry partners supporting the Air Force strategy to transition from the RD–180 engine.

Lastly, the Air Force also leverages the newly formed DOD-wide initiative Defense Innovation Unit—Experimental. This initiative is designed to create a hub for facilitating increased communication, knowledge exchange, and access to innovating, high-tech start-up companies and their leading edge technologies. By connecting the Air Force with non-traditional companies developing inventive technological solutions, this initiative enables the Air Force to learn how to identify and leverage leading-edge technologies, business practices, and ideas.

QUESTIONS SUBMITTED BY MR. SHUSTER

Mr. SHUSTER. As you know, Patriot Missile Battalions are some of the most deployed units in the Army, and crucial to our military efforts around the world. Given this high operations tempo, how comfortable are you with the level of readiness of Patriot Battalions?

General MILLEY. The Army Air and Missile Defense (AMD) force continues to meet mission readiness requirements despite an unprecedented rotation rate. AMD units are a key strategic enabler of choice that provide a ready, reliable, credible, and non-provocative deterrent force demonstrating U.S. resolve. We are constantly working on initiatives to increase not only the readiness of our short range air defense and Patriot batteries, but their availability and strategic flexibility as well. These initiatives to reduce stress on the Patriot force will improve operations tempo and personnel tempo challenges, which may have a positive effect on readiness. We will assess the progress of these initiatives and adjust as necessary.

Mr. SHUSTER. Do you believe that if Kim Jong-Un started marching on Seoul tomorrow, we would have adequate Patriot resources available on the Korean Peninsula?

General MILLEY. The Army, as part of the Combined and Joint force, has enough Patriot resources to meet the requirements of the Combatant Commander.

Mr. SHUSTER. Our industrial base is critical to supporting readiness across the Armed Forces and particularly in the Army. In my district I have seen firsthand the highly technical and extremely important work being done at Letterkenny Depot, and I believe we must continue fully support our nationwide depot network. My question is this: Do you believe we have enough depot capacity to support the Army's worldwide commitments? Do you specifically believe we have enough depot capacity to meet the needs of Patriot recap and recertification?

General MILLEY. Yes, we have sufficient capacity at the five maintenance depots to sustain readiness and to support the Army's worldwide sustainment maintenance requirements. Specifically, the Army has sufficient capacity to modernize (recap) Patriot ground support equipment and meet missile recertification requirements for the Patriot Advanced Capability-2 missile at Letterkenny Army Depot. Additionally, actions are underway to establish a capability for support to the Patriot Missile Segment Enhancement

QUESTIONS SUBMITTED BY MR. CONAWAY

Mr. CONAWAY. Who at DOD is charged with overseeing the Farm-to-Fleet initiative?

Secretary MABUS and Admiral RICHARDSON. DOD oversight for all operational energy initiatives is conducted at the Deputy Assistant Secretary of Defense (Operational Energy), which reports to the Office of the Assistant Secretary of Defense (Energy, Installations, and Environment).

Farm-to-Fleet is a Department of Navy (DON) partnership with the US Department of Agriculture (USDA). DON participation in the partnership is overseen by the Office of the Deputy Assistant Secretary of the Navy (Energy), which reports to the Assistant Secretary of the Navy (Energy, Installations, and Environment).

USDA, not the DoN, administers Commodity Credit Corporation funding and makes payments to eligible alternative fuels producers.

Mr. CONAWAY. The National Defense Reauthorization Act for Fiscal Year 2016 restricted the Department of Defense from making bulk purchases of drop-in biofuels unless the price is at cost parity with conventional fuels. Were CCC funds used by the DOD to bring biofuels into cost parity with conventional fuels?

Secretary MABUS and Admiral RICHARDSON. Defense Logistics Agency (DLA) Energy's September 2015 alternative fuel contract award fully complied with applicable law, including the Fiscal Year (FY) 2015 National Defense Authorization Act (NDAA). While the FY 2016 NDAA was not signed into law until November 25, 2015, DLA Energy's award was also compliant with its requirements.

The law requires that the fully burdened cost of alternative fuel purchased for operational purposes be cost competitive with the fully burdened cost of traditional fuel. That determination of cost competitiveness is made by DLA, not by the Department of the Navy or the U.S. Department of Agriculture (USDA).

DLA Energy's April 2015 Rocky Mountain West Coast (RMWC) bulk fuel solicitation stipulated that alternative fuel producers who used U.S. agricultural feedstocks might be eligible for up to $0.25 per gallon in USDA Commodity Credit Corporation (CCC) funding.

In September 2015, DLA issued a contract award to AltAir to supply a total of 77.6 million gallons of F–76 containing a blend of 10 percent alternative fuel and 90 percent traditional fuel. The amount paid by the Department of Defense for the AltAir fuel blend is approximately $2.04 ($2.00 per gallon to AltAir for the fuel blend plus $0.04 per gallon for transportation of the fuel). AltAir qualified for just under $0.16 per gallon in USDA CCC funding.

To determine cost-competitiveness, DLA compared the alternative fuel blend offered by AltAir with traditional fuel offers for both the 2015 and 2014 RMWC solicitations. AltAir's offer was not reduced or otherwise lowered by the amount that would be paid with CCC funds. Rather, DLA's cost competitiveness analysis considered the full $0.16 per gallon in CCC funding.

Mr. CONAWAY. Under what authority did DOD use USDA Commodity Credit Corporation (CCC) funds to buy down the cost of biofuels?

Secretary MABUS and Admiral RICHARDSON. Pursuant to the Commodity Credit Corporation (CCC) Charter Act, 15 U.S.C. § 714(c) et seq., alternative fuels producers who use U.S. agricultural feedstocks are eligible for payments from CCC funding. The Department of Agriculture (USDA) administers USDA CCC funding and makes payments directly to eligible alternative fuels producers. This is consistent with the 2011 Memorandum of Understanding between the DoN, USDA, and the Department of Energy.

As explained in the response to Question 14, the law requires that the fully burdened cost of alternative fuel purchased for operational purposes be cost competitive with the fully burdened cost of traditional fuel. That determination of cost competitiveness is made by DLA. In DLA's assessment of cost competitiveness for the 2015 Rocky Mountain West Cost solicitation, DLA did not "buy down" or reduce the cost of the alternative fuel from AltAir by the amount that would be paid with CCC funds.

Mr. CONAWAY. Provide an accounting of all CCC funds expended by the DOD under the Farm-to-Fleet initiative.

Secretary MABUS and Admiral RICHARDSON. The Department of Agriculture (USDA), not the Department of the Navy (DON) nor the Defense Logistics Agency (DLA), administers USDA CCC funding and makes payments directly to eligible alternative fuels producers.

Mr. CONAWAY. What is the current difference in dollars/gallon between conventional fuels and biofuels that DOD is paying using CCC funds?

Secretary MABUS and Admiral RICHARDSON. The price paid by the Department of Defense (DOD) for the drop-in alternative fuel blend supplied pursuant to the 2015

Rocky Mountain West Coast bulk fuel award is equal to the price DOD would have paid for 100 percent traditional fuel. In accordance with the terms of the solicitation, the alternative fuels vendor qualified for $0.16 per gallon in Department of Agriculture (USDA) Commodity Credit Corporation (CCC) funding. USDA, not DOD, administers the CCC funding and makes payments to the alternative fuels vendor.

Mr. CONAWAY. Are there other service programs that expend money on their behalf that was appropriated to other Federal Departments?

Secretary MABUS and Admiral RICHARDSON. Farm-to-Fleet is a Department of Navy (DON) partnership with the U.S. Department of Agriculture. The other military Services are not involved in Farm-to-Fleet. DON cannot speak to programs that the other Services may have with other Federal Departments.

QUESTIONS SUBMITTED BY MR. LAMBORN

Mr. LAMBORN. There has been a lot of talk on the need for Goldwater-Nichols reform and our colleagues in the Senate have undertaken a hearing series on the topic. a. What is the problem that such reform is trying to solve? Is there a problem we need to solve? b. How can we best prioritize the "do no harm" principle as we consider potential major reform? c. How is the communication between the defense committees and the OSD and Joint Staff working groups that are also examining the same issues?

Mr. MURPHY and General MILLEY. Although the Goldwater-Nichols Reorganization Act of 1986 successfully restructured our national security establishment, consideration of possible reforms is appropriate and timely. The current global situation has changed dramatically since the Cold War. There are opportunities worth exploring. Potential consolidations within the military departments could help make us a more agile institution, and better position us to respond to and shape the future.

For specific answers to your questions, the Army defers to the Office of the Secretary of Defense on this issue. OSD is the lead for examining Goldwater-Nichols reform.

Mr. LAMBORN. Can you each outline your top cyber challenges in terms of manning, resourcing and authorities? Are you properly resourced to handle these challenges?

Mr. MURPHY and General MILLEY. Manning: Recruiting and retaining the Army's cyber workforce, both military and civilian, remains a challenge; one that arises from having to develop work role requirements and competing opportunities in the private sector. On September 1, 2014, the Army established a cyber branch and continues to closely monitor its progress. Current manning will not prevent our ability to respond to a cyber attack and support the Joint force.

Resourcing: The Army's number one priority is readiness. Current funding levels require the Army to prioritize the advancement of cyber capabilities and capacity. In accordance with the DOD Cyber Strategy, the Army is building the capability and capacity to support our cyber mission in an ever increasing operational tempo. The Army is continuously trying to balance between readiness, end strength, and modernization; a balance that takes years of stable funding levels and flexibility in execution of resources to achieve. There are some major initiatives still under review, such as Army Cyber Resiliency, that will have resourcing implications; the full impact of these initiatives on the Army's resources is unknown at this time.

Authorities: The Army is providing its portion of the Cyber Mission Force in coordination with USCYBERCOM, operating under its current authorities. Within the Army, we assess our current authorities as sufficient to meet our mission.

Mr. LAMBORN. There has been a lot of talk on the need for Goldwater-Nichols reform and our colleagues in the Senate have undertaken a hearing series on the topic. a. What is the problem that such reform is trying to solve? Is there a problem we need to solve? b. How can we best prioritize the "do no harm" principle as we consider potential major reform? c. How is the communication between the defense committees and the OSD and Joint Staff working groups that are also examining the same issues?

Secretary MABUS and Admiral RICHARDSON. a. The Goldwater-Nichols Department of Defense Reorganization Act of 1986 was the last major legislative initiative which sought to improve DOD efficiency and effectiveness. In the 30 years since Goldwater-Nichols, evolving threats and the emerging strategic environment compel us to identify and evaluate potential reforms to ensure the Department of the Navy is optimally organized to support Joint Warfighting in current and future national security challenges.

b. During this period of military reform, our priority must be to protect U.S. forces involved in military operations today and to maintain those policies and structure that enable agile and effective military responsiveness in the future.

c. The Office of the Secretary of Defense and the Joint Staff have kept the Services and Military Departments informed of the working level dialog.

Mr. LAMBORN. Can you each outline your top cyber challenges in terms of manning, resourcing and authorities? Are you properly resourced to handle these challenges?

Secretary MABUS and Admiral RICHARDSON. Manning Current manning meets Department of the Navy (DON) requirements, but it is an area of concern, because we must compete with industry and the other Services for cyber talent. DON and Joint mission demands are increasing, and with the added need to support the Cyber Mission Force (CMF), cyber manning will continue to be a challenge. Besides the fact that we cannot compete directly with the salaries that our commercial competitors can pay, we are further hampered by such impediments as the slow, complicated Federal hiring process.

Authorities The DON has the necessary authority to execute its cyber missions, however additional hiring flexibility will assist the Navy in recruiting and retaining skilled cyber professionals (i.e., authorities similar to Title 10 Chapter 83 for cyber workforce).

Resourcing We are finding it increasingly difficult to address steadily growing cyber requirements without jeopardizing mission accomplishment elsewhere. For instance, beginning with its President's Budget for 2015 submission, the Navy reprioritized hundreds of millions for Command, Control, Communications, Computers and Intelligence (C4I) security. When a budget is already as lean as that the Navy was working with, it is a nearly impossible feat to repurpose such significant sums without creating unacceptable risk somewhere else.

For the Navy and Marine Corps to do what they need to do to secure their information and data, without jeopardizing operational success elsewhere, considerable new investment will be required.

Training A shortcoming in the deployment of the CMF is a persistent training capability. Request Congress' support in funding this training capability that will prepare the CMF to conduct offensive and defensive cyber operations.

Mr. LAMBORN. There has been a lot of talk on the need for Goldwater-Nichols reform and our colleagues in the Senate have undertaken a hearing series on the topic. a. What is the problem that such reform is trying to solve? Is there a problem we need to solve? b. How can we best prioritize the "do no harm" principle as we consider potential major reform? c. How is the communication between the defense committees and the OSD and Joint Staff working groups that are also examining the same issues?

General NELLER. *a. What is the problem such reform is trying to solve? Is there a problem we need to solve?* Over the last 30 years since the enactment of the Goldwater-Nichols Act, the Department of Defense and the Marine Corps have adapted to the end of the Cold War and have fought major conflicts in the Middle East. In the meantime, the overall global situation has changed and both our and our adversaries' military capabilities have changed. We need to take a critical look inward to ensure that we are properly structured and that we have the correct processes in place in order to make the most effective and efficient use of the resources provided by the congress. The "problems" driving reform efforts are less about structures and processes that are broken, but that were designed for previous threats and an earlier global environment and have had to be adapted to the present and to the future. These include the combatant command structure that is regionally focused where our current and evolving threats stretch transregionally, and if you include the cyber and space aspect, globally. Our acquisition system has been built to accommodate an older pace of technology development, where the government was in the lead, and where numerous regulations have been added over time. Many of these regulations were legislated for good reasons. However, the result has been an unwieldy system that is not responsive and doesn't allow service chiefs to exercise the responsibility and authority which goes hand in hand with their accountability for equipping the force.

b. How can we best prioritize the "do no harm" principle as we consider potential major reform? The original Goldwater-Nichols Act and other defense legislation mandated specific actions, but also provided a great deal of flexibility to the Department. Flexibility in direction has allowed us to evolve and adapt, to make corrections, without recourse for new legislation. In order to maintain this positive environment that supports growth and flexibility, we will take a conservative approach to recommending actual changes in legislation, and prioritize making changes within the authority already existing under current laws. We will take the approach of

focusing on the outcomes we want, which allows for flexibility in the "hows", vice trying to dictate very specific processes and structures that are difficult to undo.

c. How is the communication between the defense committees and the OSD and Joint Staff working groups that are also examining the same issues? The Marine Corps has been participating in the OSD and Joint Staff-led reform efforts and, from our perspective, have seen no issues with their communication with legislative defense committees. However, I would defer an answer to this question to the responsible OSD and Joint Staff leadership.

Mr. LAMBORN. Can you each outline your top cyber challenges in terms of manning, resourcing and authorities? Are you properly resourced to handle these challenges?

General NELLER. We project MARFORCYBER's manpower models to be sufficient to present forces to USCYBERCOM as planned in the Cyber Mission Force build. While we anticipate achieving the hiring goals required for MARFORCYBER teams to reach FOC, we will continue to face challenges recruiting top-tier talent for critical, niche billets such as tool developers. The demand for cyber-related military occupational specialties has out-paced our ability to fill them, particularly in the staff-noncommissioned officer ranks. In the near-term, we are strengthening our manpower posture by employing manpower tools such as re-enlistment bonuses and lateral movement career opportunities. Our long-term solution will require a large-scale force modernization effort of the communications/cyber occupational field. While we are making strong progress towards building capacity and achieving operational outcomes with our current resource baseline, maintaining a credible force will remain a resource intense challenge beyond the initial build due to the constantly changing cyber environment. Equipping cyber teams with effective cyber incident response tools and acquiring cyber tools to obtain real time awareness of network activity and defend our networks, are our top priorities. We continue to refine our requirements in response to the rapidly evolving threat environment, leveraging industry and government resources where appropriate. We continue to be challenged by the lack of a rapid acquisition authority responsive enough to meet the demands of a dynamic, rapidly changing operating environment. While we are working within the service to refine our existing procedures, we continue to accept risk by using acquisition procedures that favor efficiency over effectiveness. Similarly, we remain challenged by the need to build and maintain a specially trained, highly skilled workforce of contract civilians to provide capabilities complimentary to those of the uniformed force. Sourcing solutions constrained to lowest cost vendors are unlikely to satisfy this requirement.

Mr. LAMBORN. There has been a lot of talk on the need for Goldwater-Nichols reform and our colleagues in the Senate have undertaken a hearing series on the topic. a. What is the problem that such reform is trying to solve? Is there a problem we need to solve? b. How can we best prioritize the "do no harm" principle as we consider potential major reform? c. How is the communication between the defense committees and the OSD and Joint Staff working groups that are also examining the same issues?

Secretary JAMES and General WELSH. The Goldwater-Nichols Act has been hugely successful in achieving joint levels of operation that we did not have 30 years ago when the Act was passed. After 30 years of experience operating under the Goldwater Nichols Act, a review can help identify needed improvements. The trans-regional, multi-functional and multi-domain integration required to engage in today's security environment is quite different from 30 years ago. It is the right time to assess roles and responsibilities to effectively plan and react to threats; identify opportunities to ensure we continue to provide the best military judgement and advice across the Joint Chiefs of Staff to the President, Secretary of Defense and Service Secretaries; and continue to find areas where we should eliminate duplication in structure and staffs to put resources towards operational capability versus management overhead.

As we consider potential major reform the "do no harm" principle is very important. We suggest first consideration to the changes developed and presented from the ongoing DOD Organization and Responsibilities Review. Where there are more ambitious proposals for reform being considered by defense committees from those proposed by the Department, we should ensure they have been adequately studied and there has been thoughtful discussion between defense committees and Department leadership (to include Service Secretaries and Joint Chiefs) before those proposals are legislated and acted upon.

Regarding communications between the defense committees and the OSD and Joint Staff working groups the insights we have indicate they have been helpful, but more discussion is needed as the Department recommendations for reform and those proposed by defense committees become more mature.

Mr. LAMBORN. Can you each outline your top cyber challenges in terms of manning, resourcing and authorities? Are you properly resourced to handle these challenges?

Secretary JAMES and General WELSH. To date, the Air Force has fielded 26 Cyber Mission Force (CMF) teams at initial operating capability or better and the remaining 13 teams are tracking toward initial operating capability by the end of 2017. All 39 teams are projected to be at full operating capability in 2018. Within the current fiscal constraints, there are manning and resource challenges in meeting these target dates:

The Air Force's top resourcing challenges are (1) establishing Squadron support staffs and (2) creating adequate training capacity. The resourced CMF billets (1,715 Air Force) did not include classroom instructors, on-net trainers, polygraphers, and unit support staff. To meet these requirements, the Air Force moved manpower authorizations, hired additional personnel and organized support staffs within an already strained force structure and budget. Further, the increased training capacity requires an increase in physical space and some modifications to existing structures to include: constructing a new schoolhouse at Joint Base San Antonio; renovating the schoolhouse at Hurlburt Field, Florida; and accrediting classrooms as Sensitive Compartmented Information Facilities (SCIFs) at the existing Keesler AFB schoolhouses.

With respect to authorities, there are no challenges. USCYBERCOM possesses and has delegated the required authorities to subordinate commands to accomplish their assigned missions.

To meet these challenges, the Air Force is partnering closely with USCYBERCOM and the other services in the fielding of the cyber mission force. Within the Air Force, we are continually monitoring and adjusting personnel and training policies and processes to speed the fielding of the cyber mission force, while building a sustainable Air Force cyber enterprise.

QUESTIONS SUBMITTED BY MR. COFFMAN

Mr. COFFMAN. Since 2009, the Army has separated at least 22,000 combat veterans who had been diagnosed with mental health disabilities or traumatic brain injury for misconduct. These discharges have significant impact on those veterans' eligibility for benefits and services from the Department of Veterans Affairs, including mental health services. The Department has instituted several changes to its discharge process to prevent the improper separation of servicemembers suffering from PTSD, but I believe many are still falling through the cracks, and thousands more were discharged prior to the Department's changes. I also believe that this situation applies to all of the Armed Services, not just to the Army. Do any of you believe that your services' discharge review boards should be more friendly to veterans appealing their discharge on account of PTSD diagnosis? And if so, do you have any specific proposals?

Mr. MURPHY. Yes, the Army Review Boards Agency (ARBA) is committed to providing Army Veterans due consideration for each application. Since June 2015, ARBA has taken a more aggressive approach in requesting medical reviews of all cases involving claims of Post-Traumatic Stress Disorder (PTSD) or Other Behavioral Health (OBH) issues. As of November 2015, ARBA has a full-time civilian Clinical Psychologist on staff specifically to review those types of cases. In the near future, ARBA will add another civilian Clinical Psychologist, a uniformed Clinical Psychologist and a civilian Psychiatrist.

If a previous applicant reapplies for a discharge upgrade and claims PTSD, given the new guidance, ARBA will consider it as a new case. As we review the Army process, we will identify any required additional authorities and work them through the Department of Defense accordingly

Mr. COFFMAN. Currently, veterans of the National Guard and Reserve forces are disproportionally denied on their VA claims for service-connected disabilities. I believe a major reason for this is the fact that the services can decline to provide them separation physicals, which are actually mandatory for active duty members. Do any of you believe that end-of-service physicals should be permitted for National Guard members and Reservists if they'd like a physical to document any service-related injuries or disabilities? How do you ensure that Guard and Reserve members' service-connected injuries are documented?

Mr. MURPHY. In accordance with current policy, any Army Soldier, whether Active or Reserve Component, may request a Separation Health and Physical Exam (SHPE) even if one is not required. The Army believes that every Soldier with a validated service connected injury should receive treatment at a DOD military treat-

ment facility, DOD TRICARE network, or Department of Veteran Affairs (VA) facility. The Army supports this by ensuring that all eligible Soldiers complete a SHPE prior to separation in accordance with Headquarters, Department of the Army (HQDA), Execute Order (EXORD) 162–15. There is a pending Department of Defense Instruction (DODI) that will supersede this guidance and apply to all Services. The Separation Physical and Health Exam requirement applies to members of the Reserve Components on contingency orders for greater than 30 days or active duty orders other than training for 180 days or more.

Service-connected injuries, illnesses, or exposures for Reserve Component Soldiers are documented and adjudicated using the Line of Duty (LOD) determination process in accordance with AR 600–8–4. All clinical documentation relating to the injury is captured in the Health Readiness Record (HRR). Any Reserve Component Soldiers with an "in line of duty, yes" (service-connected) determination are eligible for treatment at a military treatment facility or through the Military Medical Support Office (MMSO). If the Soldier does not reside in in the general area of a military treatment facility, the Soldiers and his unit, coordinates through MMSO for civilian provider care, which is then paid through TRICARE. Soldiers may be eligible for loss-of-income payments via the Incapacitation Pay (INCAP) program or Reserve Components Managed Care (RCMC). Detection and discovery of service-connected injuries can result from information transfer at the time of injury, from PHA medical surveillance events, or from Soldier disclosure. It is the Soldier's unit's responsibility to initiate an LOD investigation as appropriate upon discovery. All clinical medical documentation compiled over the career of the Soldier will be electronically transferred to the VA via the Healthcare Artifacts and Images Management Solution (HAIMS) interface upon request, or within 45 days of Soldier discharge, for use in determining disability.

Mr. COFFMAN. Please outline your plans for operationalizing the Guard and Reserve forces? Where might the Air Force's model could be applicable as a guide? What do you need from Congress to assist you in working toward an operationally-ready Guard and Reserve Force?

General MILLEY. We are committed to operationalizing the Army National Guard (ARNG) and Army Reserve in support of Army requirements. This begins with increasing the number of ARNG Combat Training Center rotations from two to four per year and increasing the number of Army Reserve forces' annual training days. We also plan to increase ARNG and Army Reserve Component deployments to Europe, the Middle East, and Asia, reinforcing our commitment to the Army Total Force Policy. The U.S. Air Force's associated unit model has proven instructive as we examine additional ways to integrate Active and Reserve Component formations in support of operational missions. The Army just announced the Associated Units Program to associate ARNG units with Active Component formations and vice versa to deepen ties and increase the readiness of both components. Going forward, we request Congress fully support the Department's Overseas Contingency Operations and Base funding request for 12304(b) authorizations—roughly 3,000 man-years—so that the Army can resource its Total Force Policy and operationalize ARNG and Army Reserve forces.

Mr. COFFMAN. Since 2009, the Army has separated at least 22,000 combat veterans who had been diagnosed with mental health disabilities or traumatic brain injury for misconduct. These discharges have significant impact on those veterans' eligibility for benefits and services from the Department of Veterans Affairs, including mental health services. The Department has instituted several changes to its discharge process to prevent the improper separation of servicemembers suffering from PTSD, but I believe many are still falling through the cracks, and thousands more were discharged prior to the Department's changes. I also believe that this situation applies to all of the Armed Services, not just to the Army. Do any of you believe that your services' discharge review boards should be more friendly to veterans appealing their discharge on account of PTSD diagnosis? And if so, do you have any specific proposals?

Secretary MABUS. [The information was not available at the time of printing.]

Mr. COFFMAN. Currently, veterans of the National Guard and Reserve forces are disproportionally denied on their VA claims for service-connected disabilities. I believe a major reason for this is the fact that the services can decline to provide them separation physicals, which are actually mandatory for active duty members. Do any of you believe that end-of-service physicals should be permitted for National Guard members and Reservists if they'd like a physical to document any service-related injuries or disabilities? How do you ensure that Guard and Reserve members' service-connected injuries are documented?

Secretary MABUS. All members of the Department of Navy (DON) preparing for release from active duty are required to take a comprehensive Separation History

and Physical Examination (SHPE) prior to their scheduled date of release. This also applies to Reserve Component (RC) members in an active duty status for 180 days or more or RC members serving on active duty for a period of more than 30 days in support of contingency operations.

Additionally, if at any time an RC member incurs or aggravates an illness or injury while on active duty for 31–179 days, their current health status will be documented on DD Form 2697, Report of Health Assessment, before completing their scheduled tour of duty.

Service members separating from Selected Reserves not otherwise required to receive a SHPE may request a SHPE within 6 months before the scheduled date of separation.

All medical documentation from the SHPE is filed into the Service member's Service Treatment Record. All Service members are required to provide complete and accurate information for the documentation of the history and symptoms of illnesses or injuries in the Service Treatment Record. This includes documentation of care received from civilian sources.

Mr. COFFMAN. Since 2009, the Army has separated at least 22,000 combat veterans who had been diagnosed with mental health disabilities or traumatic brain injury for misconduct. These discharges have significant impact on those veterans' eligibility for benefits and services from the Department of Veterans Affairs, including mental health services. The Department has instituted several changes to its discharge process to prevent the improper separation of servicemembers suffering from PTSD, but I believe many are still falling through the cracks, and thousands more were discharged prior to the Department's changes. I also believe that this situation applies to all of the Armed Services, not just to the Army. Do any of you believe that your services' discharge review boards should be more friendly to veterans appealing their discharge on account of PTSD diagnosis? And if so, do you have any specific proposals?

Secretary JAMES. The Air Force Discharge Review Board (AFDRB) adjudicates cases with a focus on fairness, equity and due process for all who appear before the Board. While cases that entail a PTSD diagnosis are a small subset of the total cases reviewed by the AFDRB, the Board does provide close scrutiny for these cases, regardless of the service characterization, and carefully addresses the unique conditions related to a PTSD diagnosis and a corresponding administrative discharge.

Prior to administrative separation from service, processes are in place to ensure that mental health conditions are considered. All Airmen subject to administrative separation are afforded a medical evaluation. Members identified with PTSD or other potentially disqualifying mental health conditions receive evidence-based treatment and have their progress tracked by the installation Deployment Availability Working Group (DAWG), which makes recommendations for the appropriate disposition for members with conditions that may render them unfit or unsuited for military service. Service members who have served in an imminent danger pay area and have an unsuiting mental health diagnosis as the basis for an administrative separation recommendation have a secondary review of their case by an additional mental health professional, the Air Force Surgeon General or their Flag Officer designee. Additionally, if an Airman is being discharged for reasons other than mental health, providers must consult with the DAWG if the Airman reasonably alleges PTSD or traumatic brain injury (TBI) affected their behavior or the conditions that led to their pending discharge.

Through the AFDRB, mental health conditions of veteran's are again considered. When a veteran's case reaches the AFDRB, all applications receive review by a medical professional for any mental health diagnosis (including PTSD and TBI). Applications with a mental health diagnosis are referred to a Mental Health specialist (psychiatrist or clinical psychologist) for thorough review. The Mental Health specialist is also a voting member of the AFDRB for applications with a mental health diagnosis.

These procedures ensure any behavior associated with the PTSD diagnosis is addressed during the AFDRB proceedings and explained to all AFDRB members. Additionally, the AFDRB offers the following Personal Appearance options: personal appearances before the Board may be made in the DC area (Joint Base Andrews, MD) and via regional video teleconference (VTC) for other AF installations. Regional VTCs are scheduled on a quarterly basis in Georgia, Texas, and California. The Board is exploring the possibility of expanding the VTC option for applicants to use other Federal Agencies (not limited to AF installations). The Board is also reviewing options to include Skype™ or Face Time® related applications—including how to handle the pre-hearing records review with the applicant. These options allow all applicants an opportunity to present their case, including those with a PTSD diagnosis who may have travel restrictions.

Mr. COFFMAN. Currently, veterans of the National Guard and Reserve forces are disproportionally denied on their VA claims for service-connected disabilities. I believe a major reason for this is the fact that the services can decline to provide them separation physicals, which are actually mandatory for active duty members. Do any of you believe that end-of-service physicals should be permitted for National Guard members and Reservists if they'd like a physical to document any service-related injuries or disabilities? How do you ensure that Guard and Reserve members' service-connected injuries are documented?

Secretary JAMES. Yes, in fact Guard and Reserve members currently have multiple avenues to report service-related injuries or disabilities in a timely manner throughout their career. These include:

a) Members complete the mandatory AF Web Health Assessment (self-reporting health status tool) annually IAW AFI 44–170, Preventive Health Assessment.

b) AFI(s) 10–203, Duty Limiting Conditions and 48–123, Medical Examinations and Standards, directs members to notify commander and medical unit of any change in health status.

c) AFI 36–2910, Line of Duty (LOD) Determination, Medical Continuation (MEDCON) and Incapacitation (INCAP) Pay directs members who incur or aggravate an injury, illness or disease while in a duty status to report within 24 hours to the member's commander and servicing medical facility/unit. For Air Reserve Component (ARC) members, when not in a duty status, report ideally within 72 hours or less. This instruction also provides guidance for case managing to ensure ARC members receive the proper treatment, evaluation, benefit counseling, and referral services.

d) DOD requires a total of five Deployment Related Health Assessments (DRHAs) [DRHA #1–DD Form 2795, DRHA #2–DD Form 2796, DRHA #3–DD Form 2900, DRHA #4–DD Form 2978, and DRHA #5–DD Form 2978]. DRHAs assist with the early identification and management of deployment-related health concerns and conditions that may surface in the months before or the months to years after deployment.

e) AFI 48–145, Occupational and Environmental Health Program, ensures all occupational and environmental illnesses reported are investigated, initiated in Air Force Safety Automated System (AFSAS), and closed within 30 days IAW requirements in AFI 91–204, Safety Investigation and Reports.

f) The Separation History and Physical Examination which occurs after being on orders for named contingencies 30 continuous days or greater, or on orders of 180 days or longer, DOD Instruction 6040.46.

Mr. COFFMAN. There have been recent discussions about eliminating the use of the Atlas V launch vehicle. Please explain about how this might increase costs or create scheduling delays for our national security space program? Are there other risks or implications?

Secretary JAMES and General WELSH. A majority of launches performed by United Launch Alliance (ULA) use the Atlas V launch family. As a result, not as many Delta IVs are produced and ULA has not maximized the throughput for the Delta IV family. It will take time to increase this capability, resulting in launch delays until ULA's manufacturing capability catches up. This will lead to increased satellite storage costs and increased costs to fund any obsolescence costs associated with the Delta IV. Tory Bruno, CEO of ULA, publicly stated at the HASC Strategic Forces subcommittee hearing on 26 Jun 15 that it costs 35% more to build a Delta IV launch vehicle than an Atlas V. Since the Delta IV is not commercially competitive, ULA currently plans to end single core Delta IV production after Phase 1 launches are completed in FY 2019.

ULA has committed to producing the Delta IV Heavy Launch Vehicle to meet National Security Space (NSS) requirements for as long as the DOD requires, funds, and/or until the ULA Vulcan or another New Entrant is certified to meet those Heavy Spacelift requirements. At this time, the pre-decisional Air Force estimate projects a cost increase in excess of $1.5B to shift from executing Phase 2 with a mix of Falcon, Atlas V, and Delta IV Heavy launches to a Delta IV/Falcon split buy. In testimony Secretary James provided a range of $1.5 billion to $5 billion in potential extra costs for responsibly transitioning our space launch from reliance on the RD–180 rocket engine. The $5 billion estimate represents Air Force projections considering a worst case scenario of an immediate loss of RD–180s. Such a scenario assumed planned launches would be re-manifested, a lack of competition until 2022, and infrastructure for Delta IV rockets would be maintained.

Mr. COFFMAN. On the subject of space access and launch, can you explain the Air Force's position on the necessity to optimize the launch vehicle with the first stage engine?

Secretary JAMES. As Dr. LaPlante, former Assistant Secretary of the Air Force for Acquisition, testified during last year's Space Launch Hearing, we know from our prior experience in developing rockets throughout the past several decades that a rocket engine and its associated launch vehicle must be designed concurrently. In essence, we build the rocket around the engine. In cases where launch vehicle families had new engines installed, the launch vehicles were either significantly redesigned or the overall system was operated with limitations that provided less capability than would have been possible if the launch vehicle were redesigned. Technical challenges that must be addressed include vibrations from the engine that ripple throughout the vehicle during its travel, potentially damaging the satellite; ensuring the launch vehicle structure can withstand these ripples and loads without breaking; optimizing fuel storage and flow for the engine's performance characteristics; and one of the greatest challenges, combustion stability of a high-performance engine.

QUESTIONS SUBMITTED BY MR. BROOKS

Mr. BROOKS. Secretary Murphy, Congress has demonstrated their desire for the Department of Defense to use Tubular LED (TLED) lights to replace fluorescent lights through many legislative means in the recent past. Congress has also encouraged the DOD to change the Unified Facilities Criteria (UFC) to allow greater usage of TLEDs on military bases. I was surprised to see that on 3 March 2016, the UFC was changed to prohibit the Army from using TLEDs. Can you please explain why a proven technology, which can save the Army over $50 million in energy cost each year, is being banned in the face of Congressional will and in contradiction to the Navy allowing TLEDs?

Mr. MURPHY. The Unified Facilities Criteria (UFC) prohibited Tubular LEDs (TLEDs) in Army lighting projects due to safety concerns over several TLED manufacturer recalls, as well as a lack of consistency in vendor products. The Army has been following the progression of the technology. TLED products have matured, and there is now more consistency in the products, allowing minimum requirements to be established. As a result, the Army has made the decision to allow TLEDs in retrofit projects. Waivers to the UFC are being allowed while the UFC 3–530–01 is being modified to allow TLEDs for the Army. The change will be published by June 1, 2016. The lighting Unified Facilities Guide Specification that identifies the minimum TLED requirements will be published by May 15, 2016. These modified criteria documents will give the Army an additional tool to reduce energy consumption, while providing a safe solution for meeting our energy goals.

Mr. BROOKS. Secretary Mabus, Congress has demonstrated their desire for the Department of Defense to use Tubular LED (TLED) lights to replace fluorescent lights through many legislative means in the recent past. Congress has also encouraged the DOD to change the Unified Facilities Criteria (UFC) to allow greater usage of TLEDs on military bases. Mr. Secretary, with your continued efforts to both introduce innovation and to increase energy efficient technologies, I was surprised to see that on 3 March 2016, the UFC was changed to restrict the use of direct wire TLED on Navy facilities. I was pleased when the Navy brought the new, safe direct wire TLED technology to the Fleet with great energy and manpower savings. Can you please explain why a proven technology, which can save the Navy more than $50 million annually in energy cost for the fleet, is being banned in the face of your efforts to provide a Navy that is on the cutting edge of innovation?

Secretary MABUS. [The information was not available at the time of printing.]

Mr. BROOKS. Secretary James, Congress has demonstrated their desire for the Department of Defense to use Tubular LED (TLED) lights to replace fluorescent lights through many legislative means in the recent past. Congress has also encouraged the DOD to change the Unified Facilities Criteria to allow greater usage of TLEDs on military bases. I was surprised to see that on 3 March 2016, the UFC was changed to prohibit the Air Force from using TLEDs. Can you please explain why a proven technology, which can save the Air Force over $40 million in energy cost year, is being banned in the face of Congressional will and in contradiction to the Navy allowing TLEDs?

Secretary JAMES. Over the last few months, the Air Force has been meeting with experts from private industry, the other Services, and the Department of Energy to ensure it understands the performance and safety issues surrounding TLEDs. As the requirements for each Service differ, the Air Force wanted to ensure the switch to permitting TLEDs would not jeopardize the health and safety of its Airmen. Based on the analysis conducted, the Air Force drafted a policy to remove the prohibition of TLED lamps found in UFC 3–530–01, Interior and Exterior Lighting Sys-

tems and Controls. This policy, which is currently in coordination, had not been finalized in time to be incorporated into the last UFC revision.

QUESTIONS SUBMITTED BY MR. BRIDENSTINE

Mr. BRIDENSTINE. The recent rise in nuclear threats from countries like North Korea and Iran and non-state actors such as ISIS, who are making serious and dangerous attempts to obtain nuclear material to create a "dirty bomb," puts our troops at increased risk for exposure to dangerous levels of radiation. Given this nuclear threat, what is the Army's acquisition plan to field a modern dosimeter system capable of detecting radiation on the battlefield that is not susceptible to being incapacitated by electromagnetic pulse?

Additionally, the United States Government has paid billions of dollars to individuals who were exposed to radiation through their participation in the nation's defense efforts. Modern dosimetry technology allows the Government an equitable means to justly compensate claims in a timely manner. What steps is the Army now taking to ensure any fielded dosimeter system is capable of providing a legal dose of record which can be maintained in a soldier's medical record for the duration of their military career?

Mr. MURPHY and General MILLEY. The Army's acquisition plan is to field a modern dosimeter system capable of detecting radiation on the battlefield that is not susceptible to being incapacitated by electromagnetic pulses (EMP). This plan includes continuing to field and use the current DT–236 series dosimeters and future fielding of the Joint Personnel Dosimeter—Individual (JPD–I). The JPD–I will also not be incapacitated by EMPs.

Dosimeters are designed to record and indicate the absorbed dose of radiation received by Soldiers. The Army is ensuring that the dosimeter system being used by warfighters correctly records the legal dose of radiation in Soldier's medical records for the duration of their service. The current system being fielded in the DT series, the DT–236A and the JPD–I, are both able to provide this legal dose of record.

The Army plans to begin fielding the JPD–I to the Active and Reserve Component in Fiscal Year 2020.

QUESTIONS SUBMITTED BY MS. STEFANIK

Ms. STEFANIK. Through the posture hearings of the past few months we have heard about evolving strategic threats from a resurgent Russia, destabilizing threats from both state and non-state actors in the Middle East, and increasingly provocative activity coming out of the Pacific region. I want to focus on readiness, but in the context of emerging threats, and maintaining the edge on a 21st century battlefield:

1) ISIL was able to establish a presence online that allowed them to rapidly recruit and radicalize through social media at unprecedented levels even in ungoverned space. What is the DOD capacity moving forward to counter this capability through both digital technology and messaging strategy?

2) We've seen cyber play a more significant role in our emerging strategic challenges—how confident are you moving forward that our cyber capabilities are robust enough to take on the threats of the future? What level of risk are we assuming with our cyber community, and what do you consider an acceptable level of risk when it comes to our cyber capabilities?

General MILLEY. 1) With regard to countering ISIL capability through digital technology, the Joint Force Headquarters Cyber has prepared and continues to prepare forces to respond, in support of Combatant Commanders, across the continuum of threats. DOD directed the creation of 133 Cyber Mission Force Teams of which the Army is responsible for creating 41 teams (37 Initial Operating Capability and 11 Full Operating Capability). A portion of these teams are actively supporting U.S. Central Command operations. With regard to messaging strategy, Army Service Component Commands support the appropriate Combatant Command with synchronized messages and actions.

2) The Army is building our cyber capabilities to neutralize and defeat the threats of the future. The Army's cyber initiatives are synchronized with the Department of Defense. The Army is on track to build our portion of the Joint Cyber Mission Force. We have developed the Army Cyberspace Strategy that address our challenges and way forward from building the cyber force to industrial outreach. When assessing our risk to meet Combatant Commander and Departmental requirements, to date, the Army has met the demands for cyber forces and is meeting the Department's cyber goals. However, the Army is concerned about the development of near-

peer cyber threats and the Army's capability to be resilient to those attacks and negate the threats. In response to this concern, the Army developed a Cyber Strong Resiliency plan and continues to monitor its impact.

QUESTIONS SUBMITTED BY DR. FLEMING

Dr. FLEMING. General Milley stated before the committee: "Less than one-third of Army forces are at acceptable readiness levels to conduct sustained ground combat in a full spectrum environment against a highly lethal hybrid threat or near-peer adversary." He also testified before the committee stating that increased end strength would buy Army the time needed to mitigate its readiness shortfalls and alleviate the strain on the force due to the high OPSTEMPO.

Is Army's readiness adequate and its OPSTEMPO sustainable for meeting current and emerging requirements and how specifically would an increase in Army's end strength mitigate the strain on the force and build the readiness over time needed to challenge a near-peer adversary like Russia?

Mr. MURPHY and General MILLEY. The Army provides ready forces to meet Combatant Command requirements however, this comes at the expense of building core readiness required for future emergent and contingency demands. Current operations tempo, growing global instability, and lack of consistent and predictable funding over time will challenge the Army's ability to regain and sustain the combined arms proficiency needed for future contingencies.

An Army at 980,000 is at high military risk of being unable to meet Defense Planning Guidance requirements to defeat an adversary in one major combat operation while simultaneously denying the objectives of an adversary in a second theater.

Dr. FLEMING. General Milley stated before the committee: "Less than one-third of Army forces are at acceptable readiness levels to conduct sustained ground combat in a full spectrum environment against a highly lethal hybrid threat or near-peer adversary." He also testified before the committee stating that increased end strength would buy Army the time needed to mitigate its readiness shortfalls and alleviate the strain on the force due to the high OPSTEMPO.

Dr. FLEMING. General Dunford recently testified that: "the Joint Force will be stressed to execute a major contingency operation," and that a "response to aggression by another adversary at the same time would be further limited." Please explain your assessment for how the Army in particular will be "stressed" and "limited" in these scenarios. In light of the ongoing changes in the strategic environment as it relates to ISIS, Russia, China, and North Korea, would Army recommend that the Department revisit its current force sizing construct for the Army?

Mr. MURPHY and General MILLEY. If asked to respond to a single, major contingency operation involving high-intensity ground combat against a modernized adversary, the Army will be stressed. Given current global operational tempo, such a contingency may require use of unready forces, delayed timelines, excessive casualties, and the inability to achieve objectives. These risks are compounded for a second adversary, and the Army may be limited in how it is able to respond.

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