

**DEPARTMENT OF DEFENSE APPROPRIATIONS  
FOR FISCAL YEAR 2021**

**WEDNESDAY, MARCH 11, 2020**

U.S. SENATE,  
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,  
*Washington, DC.*

The subcommittee met at 10 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Richard Shelby (chairman) presiding.

Present: Senators Shelby, Collins, Murkowski, Hoeven, Durbin, Murray, Reed, and Baldwin.

**DEPARTMENT OF DEFENSE**

**DEPARTMENT OF THE NAVY**

**OFFICE OF THE SECRETARY**

**STATEMENT OF HON. THOMAS B. MODLY, ACTING SECRETARY**

**OPENING STATEMENT OF SENATOR RICHARD C. SHELBY**

Senator SHELBY. The subcommittee will come to order. I am pleased to welcome our distinguished panel to consider the president's fiscal year 2021 budget request for the Navy and Marine Corps.

Today the committee will hear from the honorable Thomas Modly, the Acting Secretary of the Navy, Admiral Michael Gilday, the Chief of Naval Operations, and General David Berger, the Commandant of the Marine Corps. Gentlemen, thank you for appearing before the committee today, and thank you, most of all, for your service. The Defense Department's budget request for fiscal year 2021 is \$705.4 billion and complies with the Bipartisan Budget Act of 2019.

The request continues its focus on the National Defense Strategy by prioritizing resources to ensure that our military can compete, deter, and win in the 21st century against near peer adversaries such as Russia and China, if called upon. Subsequent to the president's budget submission, the Department of Defense delivered additional funding requests for unfunded requirements totaling nearly \$20 billion, funding requirements not included in the 2020 budget request. For the Navy and Marine Corps, these unfunded requirements amount to \$6 billion. In reviewing the base budget request, along with the requests to fund additional requirements, the committee is interested in hearing how these proposals build on previous investments, Mr. Secretary, in modernization and lethality.

We also want to hear how the exclusion of these additional requirements impacts your ability to prepare, plan, and execute your mission requirements. With only a modest increase in the fiscal year 2021 budget, the appropriations committee and Congress have a difficult task ahead. We will have to prioritize resources and make difficult tradeoffs as we work to ensure that our national security needs, including those resourced outside the Department of Defense, will be met.

We appreciate your input as we weigh these.  
[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD C. SHELBY

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Gentlemen, thank you for appearing before the Committee today, and thank you for your service.

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We will have to prioritize resources and make difficult tradeoffs as we work to ensure that our national security needs—including those resourced outside the Department of Defense—are met.

We appreciate your input as we weigh these funding decisions.

Now, I turn to Vice Chairman Durbin for any opening remarks he wishes to make. Thank you.

Senator SHELBY. Senator Durbin is not here. I hear he is on his way.

[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD J. DURBIN

Mr. Chairman, I am pleased to join you in welcoming today's witnesses, here to discuss the fiscal year 2021 Department of the Navy budget request.

It is the first time that each of the witnesses—Secretary Modly, Admiral Gilday, and General Berger—have appeared before this Subcommittee, and I look forward to working with you to address the best interests of the sailors and Marines who proudly serve our country.

BUDGETS AND REPROGRAMMINGS

As we begin our review of the 2021 budget request for the Department of Defense, the good news is that we have a budget deal already in place that should allow us to proceed with the work of the Appropriations Committee.

The bad news is that many of the understandings of how the Pentagon and Congress have worked together for generations are now unraveling.

Just 1 month ago, the Trump Administration diverted \$3.8 billion in military funds to the border wall without the approval of Congress—even though more than \$9 billion of previously transferred funds remain unspent.

The Navy and Marine Corps were among the biggest losers in that diversion of funds. Almost \$1.5 billion in funding was diverted from these two Services—funding that this Committee, and our counterpart in the House, decided was necessary to address shortfalls in ships and aircraft.

#### OCO ABUSE

On top of that, the Administration has included another gimmick in its defense request. Out of the \$69 billion in OCO funding requested for the cost of wars overseas, \$15 billion is for items that even the Pentagon agrees does not belong in the OCO accounts!

Of this amount, the Navy has \$4.3 billion in OCO funds at risk in this gimmick. In fact, every single dollar that the Navy budgeted for operations of its ships, no matter where in the world they are deployed, is requested in OCO.

The abuse of OCO needs to end—from the failure to keep war costs and routine operations separate, to the diversion of \$1.6 billion in OCO funds to the wall. The ability for the Department of Defense to work with Congress is at stake.

#### REFORM EFFORTS

While these very serious issues need to be dealt with, I would also like to hear from our witnesses today about the reform efforts they are working on.

For example, Secretary Modly, you have announced a “Stem to Stern” review of the Navy seeking to save \$40 billion over the next 5 years.

General Berger, I understand you have been doing an in-depth review of the future of the Marine Corps.

Admiral Gilday, I know that you have been working to balance the major challenges in shipbuilding, which relates directly to procurement reform and many challenges in our industrial base.

#### CONCLUSION

I look forward to a thorough discussion of these issues, and I thank our witnesses for your testimony.

Senator SHELBY. Anybody else have an opening statement? Do you have opening statement?

Senator REED. No, Mr. Chairman.

Senator SHELBY. Mr. Secretary, we appreciate you, and Admiral, General, for being here today. Your written statement will be made part of the record in its entirety. You proceed as you wish.

#### SUMMARY STATEMENT OF HON. THOMAS B. MODLY

Secretary MODLY. Thank you, Chairman Shelby and Vice Chairman Durbin when he gets here, Senator Reed, Senator Hoeven, other distinguished members of this committee. Thank you for your bipartisan efforts on behalf of the sailors, Marines, and civilians in the Department of the Navy. It is an honor to be here today with Admiral Gilday and General Berger, both of whom have demonstrated great commitment to each other and to each other’s respective Naval service as they have worked collaboratively to lead our integrated American Naval Force.

Consistent with that spirit, we have taken a different approach to the written testimony this year. As you will see, we have submitted one unified document instead of three separate statements. Staying ahead in today’s rapidly changing global and strategic environment demands that our Naval forces commit to unified planning, clear-eyed assessments, and sometimes some very, very hard choices. In this process, we must harmonize competing priorities, sustain our critical industrial base, and not allow our maritime

competitive advantage to erode relative to global competitors, and more accurately stated, some very aggressive adversaries who wish to hasten our decline as a global force, for liberty and for decency.

In the end, this budget submission is a manifestation of the hard choices we had to make this year, but it is centrally about the safety, security, and well-being of our sailors, Marines, and their families. Ultimately, I ask that you recognize that in this submission we could not make trades that put our sailors and Marines on platforms and with equipment that are not ready for a fight, if a fight is what is required of them. While this budget slows our trajectory to a Force of 355 or more ships, it does not arrest that trajectory.

You have my personal assurance that we are still deeply committed to building that larger, more capable, and more distributed Naval Force within the strategically relevant timeframe of no more than 10 years. I look forward to working with this committee and the entire Congress in the coming months as we develop realistic plans to do that. Our budget also demonstrates a clear commitment to the education of our people as we implement the recommendations of the education for sea power study that I led as the undersecretary of the Navy over the last couple years.

We are establishing a Naval Community College for our enlisted personnel as part of a bold and unified Naval education strategy that recognizes the intellectual and ethical development of our people and is critical to our success as a Naval Force. We are also stepping up our efforts to meet our solemn commitment to our military families through significantly more engaged oversight and accountability of our public-private venture housing program.

Finally, I would like the committee to understand that as leaders of the Department of the Navy, we are both vocal and united in our determination to prevent sexual assault and sexual harassment throughout our Force. Every sailor, every Marine, and the Department of the Navy civilian deserves individual respect, dignity, and protection from this great Naval institution.

We have some work to do in this regard, but you have my personal commitment that we take it very, very seriously and we are working hard at it every single day. We are grateful to the entire Congress for passing this year's Defense Appropriations Bill, which enables many of the priorities identified within this document. In passing this legislation, you have sent a strong signal of support to our people and a very, very stern warning to our adversaries.

We also appreciate the funding stability and predictability of the past several years. This has saved money for the American taxpayer and given our Force the agility and flexibility to address emerging threats while investing in our future integrated Naval Force. We urge the committee to do what it can to continue the stability so that we can continue to implement the reforms and investments required to meet great power challenges, protect the maritime commons, and defend the United States of America. Thank you for your time, and we look forward to your questions.

Senator SHELBY. Admiral.  
Admiral Gilday.

**STATEMENT OF ADMIRAL MIKE GILDAY, CHIEF OF NAVAL OPERATIONS**

Admiral GILDAY. Chairman Shelby, Vice Chairman Durbin, distinguished members of the committee, thank you for the opportunity to appear before you today with Secretary Modly and General Berger. I am also joined today by my wife Linda and our son Brian. We are thankful for your enduring support of the Navy and Marine Corps team. Three carrier strike groups and two amphibious ready groups along with nearly 40 percent of our Fleet are deployed around the globe today.

Your Navy and Marine Corps team needs no permission to operate at sea and their power does not rest in any one location but rather in their ability to maneuver anytime, anywhere the seas reach, operating across the spectrum of Military operations. Without question, our sailors remain our most important asset.

We have taken a hard look at what they need to be successful, the equipment and the training that they need to fight and win, as well as the support required to take care of them and their families. Over the past 8 months, we have engaged in a deep examination of these issues. Our balanced approach in our budget submission provides a Navy ready to fight today while committing to the training, maintenance, and the modernization to provide a Navy ready to fight tomorrow.

Naval power is critical to implementing the National Defense Strategy, and decisive Naval power requires having a ready, capable, and lethal Fleet sized to deter, and if necessary, fight and win. Our number one priority is the *Columbia*-class ballistic missile submarine. This request also heavily invests in our readiness accounts such as ship and aircraft depot maintenance and modernization, manpower, live virtual constructive training, steaming days in flying hours, and invests in new systems to make our Fleet more lethal, including increasing our weapons inventory, bolstering the range and the speed of those weapons, exploring directed energy weapons, and incorporating new technologies like hypersonics.

This request grows our Fleet in size, generating sustainable, capable capacity. Importantly, Naval power is not just determined by what we fight and operate with, but how we operate and fight. We are pursuing an integrated approach with General Berger and our Marine Corps Shipmates and Fleet operations and exercises in war games in an experimentation. The net result, we believe, is integrated American Naval power.

I could not ask for a better partner in this endeavor than our Commandant, General Berger. Thank you all for your support, which has allowed us to make significant gains in readiness and lethality already. It allows us to answer to the Nation's call every day. On behalf of your active duty reserve and civilian sailors and their families who serve our Nation, I thank you and I look forward to your questions.

Senator SHELBY. General Berger. Welcome.

**STATEMENT OF GENERAL DAVID H. BERGER, COMMANDANT, U.S. MARINE CORPS**

General BERGER. Chairman Shelby, Vice Chairman Durbin, distinguished members of the committee, I appreciate the opportunity

to testify on the posture of your Marine Corps and our priorities for the future. I will start by echoing Secretary Modly and Admiral Gilday's thanks for the timely funding as well as your enduring commitment to Marine. Sailors, and their families through efforts like last year when the hurricane recovery, which you responded, helped us all the way through revisions to the private-public venture housing program. Your bipartisan support, critical to ensure that we continue to prioritize people, as the CNO (Chief of Naval Operations) mentioned, is our greatest resource.

Thanks to predictable funding over the past few years, the Marine Corps has made significant progress restoring both availability and readiness. We are now at an inflection point. We have to pivot now toward modernization while sustaining the readiness that this committee has resourced. This pivot cannot wait, in my opinion, until next year or the following. We must move now or risk overmatch in the future by an adversary. And that is a risk we will not take.

As the National Defense Strategy directs and Secretary Modly recently emphasized in his first vector to all hands, we must pursue urgent change at a significant scale. Marines have always, since when it is time, moved out smartly. We don't hesitate. This is that time. Realizing the bold direction of our strategic guidance requires acknowledging fundamental change in the operating environment, and how we must organize, train, and equip the Force.

I believe most leaders recognize that significant changes are required, yet the scope and pace of necessary change is seemingly at odds with some historical resource allocations and some of our major acquisition programs, which predate the National Defense Strategy. This budget submission marks the beginning of a focused effort to better align resources that you provide with our strategic objectives.

Our future budget submissions will build on these investment decisions with informed recommendations for Force Design modifications and adjustments to our programs of record. Together, in partnership with my teammate, Admiral Gilday and under the direction of Secretary Modly, we are committed to delivering the integrated Naval and Fleet Marine Forces our Nation requires.

As always, I welcome the opportunity to discuss our findings along the way and keep you and your staffs informed as we progress. We will be frugal with the resources we are given. We will ask for no more than we need. With Congress's commitment and support, we will ensure that your Marines continue to have every advantage when we send them into harm's way. I look forward to your questions, sir.

[The statement follows:]

PREPARED STATEMENT OF HON. THOMAS B. MODLY, ADMIRAL MICHAEL M. GILDAY,  
AND GENERAL DAVID H. BERGER

Chairman Shelby, Vice Chairman Durbin, distinguished Members of the Subcommittee, thank you for your bipartisan efforts to build the strength and readiness of our integrated naval force. As the nation's forward-deployed, global maneuverable team, the entire Department of the Navy (DON)—Sailors, Marines and Civilians—must be ready to respond as a single unit wherever and whenever there is need. We must deliver the personnel, platforms, and operational capability necessary to secure vital sea lanes, stand by our allies, and protect the American people.

Accomplishing this in today's global strategic environment demands planning, clear-eyed assessments, and hard choices. We must design a future integrated naval force structure, advance our intellectual capacity and ethical excellence, and accelerate the digital modernization of our force. That's why this budget prioritizes a strategy-driven, balanced approach to investment, informed by relentless examination of our present capabilities and realities. It builds on prior investments while adjusting fire where necessary to deliver greater efficiency and effectiveness. It sustains the industrial base, and maintains our competitive advantage. Overall, this budget will deliver a more integrated, survivable, and affordable future force.

Our testimony details the combined perspectives of the DON civilian and military leadership. We begin with the challenges we face, followed by our overall strategic vision, then the specific priorities of the Navy and Marine Corps to meet the requirements of this vision and execute the National Defense Strategy (NDS), which remains the guidepost for all of our decisions. The Department of the Navy sustains progress along each of the NDS lines of effort through adequate and timely funding from our partners in Congress. We are proud to work in partnership with this Committee in defense of our Nation, and look forward to that work continuing.

#### The Global Challenge

The reemergence of long-term great power competition, the evolving character of that competition, and the accelerating advancements in technology are spurring a period of transformation in the strategic environment, requiring us to adapt our integrated naval force design and operating concepts to new realities. As the National Defense Strategy states, "there can be no complacency—we must make difficult choices and prioritize what is most important."

Thus far this century, terrorist groups and rogue states have dominated our perception of the threat environment. These threats were lethal, but did not pose an existential threat to our national security. China and Russia present a different challenge, as each continues to develop sophisticated military capabilities backed by sizable economies. Their investments in surface, air, and undersea platforms have significantly increased the potential for kinetic conflict, while the leadership of both nations demonstrate increasing contempt for international law and the rules-based order that ensures the prosperity and security of all nations.

China's battle fleet has grown from 262 to 335 surface ships over the last decade, and China's commercial shipbuilding grew over 60 percent year over year from 2007–2017. It continues to take coercive actions against its neighbors and violate international law in the South China Sea.

Russia's irresponsible aggression continues on NATO's eastern and northern flanks as well as the Black Sea, the Arabian Gulf, and the broader Indo-Pacific. China also invests heavily in submarines with advanced stealth capabilities and the platforms and infrastructure needed to dominate the emerging Arctic.

Meanwhile, warfare has evolved to new battlefields including cyberspace. China and other dangerous actors like Iran brazenly target the command, control, and communications (C3) systems and logistics networks on which our integrated naval force depends. China's nefarious activity also includes widespread cyber theft of intellectual property and sensitive information targeting our entire government, our allies, and our industry partners throughout the acquisition and supply chain.

As we prepare for the maturing threat of great power competition, we must remain on high alert for the actions of malign regimes such as Iran, and the continual asymmetric threat to our people, allies, and interests posed by non-state actors such as ISIS. In a recent example highlighting the impact of our integrated naval force, 5th Fleet and CTF-51/5 responded to crisis earlier this year by securing the U.S. Embassy in Baghdad with the Special Purpose Marine Air-Ground Task Force—Crisis Response—Central Command (SPMAGTF-CR-CC) and simultaneously coordinated additional naval support in theater. We stand ever-prepared to respond with every part of our integrated force to instability, terrorist threats, and rogue states throughout the world.

Our integrated naval force also has a critical role in preserving the infrastructure and access that powers the increasingly interconnected and interdependent United States and global economies. Our Nation's continued prosperity and economic growth increasingly depend on open and secure access to the sea lanes. Maritime traffic has increased four-fold over the last two decades, with 90 percent of all global goods transiting shipping lanes, including new trade routes opening through the Arctic. Meanwhile, the undersea cables that power the digital economy and the global communications framework represent an overlooked but critical point of vulnerability for American interests at home and abroad. Overall, the maritime system is more heavily used, more stressed, and more contested than ever before—and it has never been more important.

A dominant naval force is central to the effective execution of the National Defense Strategy in a changing world. But as we address these external concerns, we must also confront our business process challenges. These include a shrinking industrial base and vulnerable supply chain, inefficiencies due to legacy business operations, and antiquated acquisition processes which together result in increased costs and delays for both new development and overall maintenance. And despite the best efforts of this Committee, we must also continually prepare for the challenge posed by funding uncertainty.

Most importantly, we must never forget that our greatest resource is the men and women who wear the uniform, who comprise our civilian workforce, and the families that serve alongside them. We are committed to ensuring our Sailors, Marines, and Civilians are trained and equipped to execute the mission and return home safely, and that their families are provided with the housing, medical attention, and education they need.

As detailed in the following pages, our integrated naval force has made significant strides in addressing the external and internal challenges we face. But we can never be satisfied, and will always press forward with a sense of urgency to deliver the people, the platforms, and the capabilities necessary to protect the American people and our interests around the world.

#### MEETING THE CHALLENGE WITH AN AGILE INTEGRATED NAVAL FORCE

To meet these challenges, the NDS requires a dominant, agile, accountable, and globally positioned integrated naval force. We will plan, resource, and execute the NDS with specific focus on the following:

##### *Integration*

We must transform from our present two-service model into one true expeditionary force in readiness, with the Navy and Marine Corps operating together with integrated planning, design, training, and execution at every echelon and in every domain. This priority has been emphasized in messages to the fleet and planning documents by each member of DON leadership and is a guiding principle for every aspect of our planning and resourcing.

##### *Velocity*

Our integrated naval force must maintain the readiness and lethality to respond anywhere at any time. We will achieve this through a global operating model that ensures the continual posture, presence, and readiness of our personnel and platforms. We will dominate the fight to get to the fight, with forward basing, distributed maritime capability, fully integrated logistics, and continual aviation readiness. We also must increase the speed at which we do everything across the Department to match the rapid changes and unpredictability of the future environment.

##### *Collaboration*

A primary line of effort in the NDS is to build and maintain a robust constellation of allies and partners. Our integrated naval force is committed to training, operating, and learning alongside our allies and partners in every part of the world through every day interaction and regular operational exercises such as Trident Juncture, Talisman Saber and Rim of the Pacific (RIMPAC). Afloat and ashore, our allies and partners are crucial force multipliers and enablers of our global reach, particularly in evolving regions such as the Indo-Pacific and the Arctic. We must also break down organizational silos across our own Department and build more collaborative relationships with the other Military Departments and the Interagency to support whole of government approaches to security that will become more prominent in the future.

##### *Visibility*

While cutting edge ISR, cyber, aviation, and undersea assets ensure our global reach and awareness, there is no substitute for sustained presence and engagement. Through frequent port visits, stand-in forces, and Freedom of Navigation Operations (FONOPS), we will continue to demonstrate our enduring commitment to the defense of our people and interests, as well as our readiness and will to stand alongside our allies and partners. We will also focus on increasing transparency and information sharing in order to facilitate more rapid, and informed decisions.

##### *Innovation*

We will transform the strategic space to our advantage through next generation research and development, industry partnerships, and naval education. We are embracing the challenge of next generation technology and determined to dominate the design, development and effective deployment of major technological breakthroughs

such as hypersonic weapons. We are making the key investments and forging the key partnerships to own the next “Sputnik Moment.” We will become more comfortable with trying new ways of doing business, and more forgiving of incremental failures made in support of change and progress.

#### *Adaptability*

Where we cannot change the strategic environment through innovation, we will adapt to it quickly and efficiently through agile thinking and nimble platforms. This will allow us to protect our people and interests through unpredictable shifting security environments, and ensure the broadest range of options are available to the Commander in Chief and the Secretary of Defense. We will invest in an adaptable force structure, foster adaptable approaches to problems, and nurture the development of adaptable people comfortable with uncertainty and unpredictability.

#### *Humility*

We will address our challenges with a sense of humility, taking full account of the deficiencies we have, but with confidence that they can be corrected. We will be realistic in our planning and budgeting to assure we do not trade growth for readiness. We will not allow ourselves to build a hollow force, but we will be honest with the Congress and the American people about what we see the areas in which we need their full support in order to build the integrated naval force that is required to maintain the Nation’s security.

### GRAY HULLS: BUILDING AND MAINTAINING THE RIGHT CAPABILITIES

In order to meet the many demands of the global strategic environment and ensure our warriors are always prepared to dominate the fight, we must design a future integrated naval force structure aligned to the threats we face, both today and in the future. This budget prioritizes the readiness of those platforms and systems that will enable the United States to maintain and expand its competitive edge over all adversaries while we examine ways to grow the fleet in a reasonable timeframe, all while remaining responsible stewards of American taxpayer dollars.

#### *Divesting from 20th Century Legacy Systems*

In keeping with the DoD-wide priority to modernize from low-value legacy systems to fund combat-overmatch lethality tuned to the challenge of great power competition, this budget divests from multiple legacy or surge-based capabilities that do not align with the requirements of the NDS. It shifts capabilities from a counter-insurgency focus to systems that enable our personnel to exploit positional advantage and defend key maritime terrain for persistent forward sea control and denial operations. This budget also aligns with Secretary Esper’s commitment to become more of a “fast follower” of commercial technology, and to dominate the future development and employment of artificial intelligence (AI) and hypersonics funding.

#### *Building to a 355 Navy*

Thanks to the bipartisan efforts of this committee, the goal of a 355 ship Navy is now the law of the land. We will be working with the Office of the Secretary of Defense to develop a consensus perspective on this future force structure through robust analysis and wargaming and the inclusion of expertise from our academic institutions (Naval War College, Naval Postgraduate School, Marine Corps University) and independent naval experts. This process will be iterative and continuous. In order to meet the Nation’s national security needs and remain within budget constraints, we must consider how to shift costs away from high-end platforms to a larger number of smaller, but still highly capable ships. Such a shift will allow broader presence, reduced manning, and longer reach through a significant increase in hypersonic weapons, greater stealth, and advanced anti-ISR capabilities.

We are also considering how unmanned surface and subsurface platforms should figure into our force mix. These platforms will not only allow us to distribute and conceal lethality, but to do so at a reduced cost and greater integration and interdependency with the Joint Force. While some perspectives vary on the ultimate composition of this future force mix, there is clear agreement that certain new classes of ships that currently do not exist today must be designed and built rapidly in the next 10 years. The exact mix will be the subject of continuous evaluation and analysis, but it will not impede our immediate investment in the development and initial production of these new vessels.

#### *Fielding a Ready, Relevant, Responsive Integrated Naval Expeditionary Force*

A key aspect of our transformation will be a shift to greater naval expeditionary force capabilities and a restoration of the Fleet Marine Force. The potential for rapid change in the global environment, particularly in the Indo-Pacific, demands

a rebalance from the current Marine Corps force land and surge based posture to a more distributed, rapidly deployable and fully integrated force. This budget continues investment in key Marine Corps development programs such as the Ground Based Anti-Ship Missile, Ground Based Air Defense, CH-53K helicopter, and F-35B Joint Strike Fighter, supporting Marine Corps efforts to enhance Long Range/Precision Fires, Protected Mobility/Enhanced Maneuver, and Air Defense.

*Generating Readiness and Sustainability*

This budget optimizes Marine Corps readiness to achieve 80 percent serviceability of reportable expeditionary equipment, and implements the Commandant's Infrastructure Reset Strategy so our warriors are always prepared and present to defend our people, our interests, and our allies. It sustains the shipyards and supporting industrial base to maximize repair and modernization capacity and minimize turnaround and downtime. To provide continual presence and readiness for the fleet, this budget funds 58 days underway while deployed and 24 days underway while non-deployed per quarter, with an increase of 6.5 percent over last year for ship operations funding.

Leveraging private sector best practices through the Naval Sustainment Strategy, this budget continues to invest in Aircraft Depot Maintenance to achieve the goal of 80 percent mission capable rates for strike fighter aircraft. This budget also increases the Flying Hour program by 5.8 percent and aligns the funding for air operations to the mission capable rates to ensure that all squadrons deploy combat-ready.

*Producing Next Generation Superiority*

The *COLUMBIA*-class submarine program enters the first year of incremental procurement funding for the lead ship, and this budget resources the program for on-track delivery to meet the first deployment in 2031, with a second ballistic missile submarine starting in fiscal year 2024 and serial production begins in fiscal year 2026, furthering the recapitalization of our Strategic Nuclear Deterrent.

Additionally, we continue to resource the development of the Fast Frigate, and Future Large Surface Combatant, both of which will greatly enhance our distributed capabilities and forward deployed lethality. This budget also continues advanced capabilities in the F-35B and F-35C Joint Strike Fighter for both the Navy and Marine Corps. We also maintain investment in weapons development to provide for longer range and hypersonic weapons, with increasing investments in areas like Conventional Prompt Strike and our Standard Missile family. Finally, we will look to Congress for support in our effort to expand training and testing opportunities through range expansion aboard Naval Air Station Fallon in order to fully develop and train with these lethal capabilities.

GRAY ZONES: WINNING THE FIGHT BEFORE THE FIGHT

The future battlespace extends well beyond the field of kinetic action. Ensuring our warriors are the best equipped and prepared in the world starts with accelerating our digital modernization across the force, streamlining our business processes and maintaining the highest level of efficiency. Agile and accountable naval forces are impossible without agile and accountable business processes that support them. With the support of this budget submission, the following are just a few of the reforms we are implementing throughout our integrated naval force to dominate the future fight, from the E-Ring to the front lines.

*Executing the Business Operations Plan*

The President's Budget Submission will allow us to accelerate our business process modernization across the naval enterprise through the use of advanced digital tools and technologies to substantially improve performance, speed, accuracy, and security. The DON Business Operations Plan (BOP) details the steps we are taking to transform our business operations in alignment with the NDS, with six, twelve, eighteen, and twenty-four month milestones to provide DON leadership the ability to better manage and monitor progress on the path to a more agile and accountable business enterprise. The plan provides clear direction for military and civilian leaders throughout the DON to maximize investments and effort in alignment with the NDS. It also provides greater transparency and oversight opportunities for our partners on this Committee as well as the American people.

*Transforming the Digital Enterprise*

Information management is a core strategic function of the DoN. Cyber security, data strategy and analytics, AI, and quantum computing have all combined to create massive opportunities—as well as vulnerabilities—across our entire enterprise.

A critical element of mission readiness is the ability of our personnel to have access to relevant, reliable, and secure global communications and information, at every echelon and in every domain. In fiscal year 2019 we consolidated information management functions in a restructured Office of the Chief Information Officer (CIO), driving transformation and operational capability through the following lines of effort:

- Modernize DON infrastructure from its current state of fragmented, non-performant, outdated, and indefensible architectures to a unified, logical, modern infrastructure capable of delivering an information advantage.
- Innovate operational capabilities through technologies like 5th Generation (5G) wireless and AI, and accelerate software development through Digital Innovation Centers, leveraging private sector and industry best practices to fuel our digital transformation.
- Defend networks and assets through continuous active monitoring across the enterprise to increase cyber situational awareness. We will institute a security culture where a personal commitment to cybersecurity is required to gain access to the network. We will transform from a compliance-centered culture to one of constant readiness, and we will work with our industry partners to secure naval information wherever it resides.

#### *Managing Finance and Operationalizing the Audit*

We have completed the second full scope financial audit of the entire DoN, revealing more opportunities to improve our financial management and business processes as well as many other aspects of our enterprise. The financial audit is the lynchpin to both monitoring and catalyzing improved business operations performance. Our senior leadership has repeatedly emphasized to all personnel that active participation in the audit process is not just a financial exercise, but a management tool that must involve the combined effort of all of our personnel in order to identify ways to improve our organization's effectiveness and accountability.

We are on track within the next 2 years to achieve qualified financial audit opinion for the Marine Corps, with an unqualified opinion the following year. This will make the Marine Corps the first military service in the Defense Department to receive such an opinion in the history of the United States. Achieving this for the Navy will be more challenging, but we continue to see improvements year to year. The DON has also conducted a Zero-Based Budget review designed to ensure alignment of goals and resources, achieve full value for every taxpayer dollar, and increase transparency in our resource allocation process. Finally, we have implemented Performance-to-Plan reviews that provided a fleet-focused and data-driven approach, accelerating readiness.

#### *Modernizing Naval Supply Chain and Logistics*

Our integrated naval force requires unified logistics operations and secure, reliable supply chains in order to maintain the distributed, forward maneuverable force demanded by the global strategic environment. Through the audit and other reform efforts, we have identified multiple areas where our supply chain and logistics processes are disjointed and divided, with areas of poor visibility and accountability that impact our forward inventory and readiness.

These efforts have also revealed areas where greater integration between the services is needed and where our multiple supply chains require consolidation and optimization. We are developing a long-term strategy to address these deficiencies, beginning with a new modern vision for future integrated naval logistics and supply chain management, and will proceed with executing reforms consistent with this vision this year.

#### GRAY MATTER: DEVELOPING OUR PEOPLE

We cannot solely define American seapower by ship counts and high-end systems. In the end, our core strength will always reside in the gray matter between the ears of our people as much as it does in the gray hulls out in our fleet. Recruiting, retaining, educating and caring for the best military and civilian force possible has always been and will always be our greatest edge against all competitors. We will meet this challenge through transformative investments in education, greater connections with partners and allies, a competitive human capital strategy, a recommitment to high quality housing for our naval families, and a determination to eliminate the scourge of sexual harassment and assault throughout our total force.

#### *Prioritizing Learning as a Strategic Advantage*

As stated in the 2018 Education for Seapower (E4S) report, the intellectual capability of our Navy and Marine Corps team and our ability to operate as a continuous

learning organization will serve as the enduring foundation of our credible deterrent to war. In the year since the E4S report was completed, we have established the office of the Chief Learning Officer (CLO) and moved quickly to introduce sweeping changes in the structure, integration, and prioritization of naval education. These changes include:

- U.S. Naval Community College—Our highest priority is to create a new United States Naval Community College (USNCC) that offers advanced, online technical and analytic education to our enlisted force in critical areas like IT, cyber, and data science. Free for every Sailor and Marine, the USNCC will fill a long-neglected gap in our educational continuum and provide a recruiting and retention incentive through degree-granting relationships with major four-year public and private universities across the nation.
- Naval Education Strategy 2020—Our recently released Naval Education Strategy 2020 is the first ever comprehensive education strategy for our integrated naval force. The strategy will lay out a clear road map to develop a lifelong learning continuum for our entire force, reform our personnel systems to better recognize and reward the value of education, and invest in our schools and education programs.
- Strategic Education Requirement for Flag and General Officers—The opportunity to wargame future scenarios and technologies, study naval strategy and debate alongside peers is vital experience for the leaders who will guide our integrated force through the future strategic landscape. That is why we are now requiring in-residence strategic studies graduate education for promotion to Flag or General Officer rank.

#### *Recruiting, Curating and Retaining the Best Talent*

This budget provides the resources to fuel a new human capital strategy to better access and curate best-in-class talent for our Navy, Marine Corps, and civilian work force. We developed this strategy leveraging leading private sector business practices designed for the new economy. Initial pilot programs in support of this strategy will begin this year. The Navy's Sailor 2025 initiative and comparable initiatives in the Marine Corps have contributed to successful recruiting and retention in what should be a very challenging market. Through a combination of non-monetary, quality of life, and customer service programs, we are increasing our responsiveness to the needs of the individual warfighter and their family, making continued service a viable and attractive option. And we are increasing avenues for civilians with prior service through the Targeted Reentry Program, and expanding opportunities to serve in meaningful civilian capacities. We are also increasing opportunities for our personnel to learn, operate, and innovate alongside partners in the private sector, across the joint force, and alongside our partners and allies.

#### *Setting Our People Up for Success*

Through USMC Global Force Management, we will continue to field an elite Active and Reserve Marine force, maintaining a 1:2 deployment to dwell ratio while working towards a necessary 1:3 ratio to preserve constant readiness and availability of personnel while also reserving time for training, refitting and family support. This budget increases funding and training for Marine Forces Pacific in support of the Commandant's Planning Guidance and the NDS. The DON has also implemented over 100 of the recommendations from the Readiness Reform and Oversight Council (RROC) in order to maximize opportunities for our personnel to succeed. Among many other changes, we have increased opportunities for shipboard certification and skills enhancement, while adjusting manning schedules to maximize safety and improve quality of life and professional effectiveness for our personnel while underway.

#### *Standing Up for Our Military Families*

Our people must be confident that their leadership will look out for their interests and advocate tirelessly for their safety and well-being. Unfortunately, as Congress correctly identified last year, we have not always lived up to that responsibility, particularly with respect to our administration and oversight of the Military Privatized Housing Initiative (MPHI) program. We are committed to making sure we assess, monitor, and remediate issues of concern quickly and effectively through active and engaged leadership and reinforced Department-level oversight to restore the trust of our residents. Over the past year, Navy and Marine Corps leaders reached out to all of our Sailors, Marines, and their families to inquire about on-base housing concerns and offered home visits to better understand those concerns. We are also leveraging technologies such as an app for residents to report issues and track their resolution and an Electronic Data Warehouse that allows leaders at every level the opportunity to spot trends and issues quickly and effectively. This budget also pro-

vides resources for additional personnel to advocate for resident needs. In total, the Navy and Marine Corps housing programs are hiring 277 more housing management specialists, housing inspectors, quality assurance specialists, and project and business managers.

#### *Combating Sexual Assault and Sexual Harassment*

We are each determined to eliminate the scourges of sexual assault and sexual harassment from every part of our force. These behaviors stand as a betrayal of those who have stepped forward to serve and of every person who wears the uniform, military and civilian. Our Sexual Assault Prevention and Response Office (SAPRO) is coordinating education, outreach, care and prevention efforts across the force. We have reached out to university presidents and other civilian education leaders through our first annual symposium held at the U.S. Naval Academy in April 2019, as well as regional discussions in New York City in September 2019 and in Albuquerque, New Mexico in early February 2020. We are examining new prevention and education efforts including a renewed focus on junior enlisted leaders and the role of alcohol in sexual assault and harassment. We will continue to work with this Committee to pursue and share the best practices and ideas, relentlessly pursuing a future where no Sailor, Marine, or civilian teammate ever has to fear for their own safety while protecting us all.

#### *Building a Robust Constellation of Partners and Allies*

As extraordinary as the people of our integrated naval force are, we recognize that we cannot meet the global challenge alone. The strategic maritime defense partnerships we maintain with our partners and allies around the world extend the reach and power of our force, but more importantly they underscore the importance of cooperation and coordination in maintaining the rules-based international order that enables so much of our global prosperity and security. Our personnel regularly train and operate alongside their foreign counterparts, test the interoperability of our systems, and build our collective readiness. Operational exercises, international port calls, joint Marine force training, aviation training and other interactions all build the personal contact that generates understanding and respect across national and functional lines. Our personnel know that through their service they are front-line diplomats for our Nation, promoting through their professionalism and dedication the connections that strengthen our collective security and cultivate shared ideals that send the message that the United States is a partner worth having.

#### U.S. NAVY PRIORITIES

The President's fiscal year 2021 budget request seeks nearly \$160 billion for the U.S. Navy, an investment that will continue the momentum built since the release of the National Defense Strategy (NDS). The competition articulated in the NDS will continue for the foreseeable future and demands purposeful action over a long time horizon. As a result, consistent, sustained, and predictable funding is critical to ensure that taxpayer investments already made in the Navy are fully realized. We are grateful for the predictable funding we have received in recent years.

We are proud of our intensely collaborative effort to deliver Integrated American Naval Power to the people we are sworn to defend. This integration will sustain the naval forces that our Nation demands and our Joint Force expects. This integration will also place the United States in the best position to compete and win against the pacing threats we face.

The guiding principle of the Navy's portion of this budget request is to deliver decisive naval power, blending readiness, lethality, and capacity together to create a naval force that is agile and ready to fight today while also committing to the training, maintenance, and modernization to ensure the Navy can fight and win tomorrow. This budget submission materially advances the efforts that fall under these three objectives.

#### *Readiness*

The CNO's initial guidance to the Navy stated, "Mission One for every Sailor is a ready Navy...a Navy ready to fight today." The Navy must be able to conduct prompt and sustained combat at sea, but current readiness also supports the indispensable roles the Navy performs on a daily basis: securing American commerce, which is more heavily entwined with the seas than ever; telegraphing resolve; and deterring conflict. These roles are enduring and timeless, but they are also deeply connected to the priorities articulated in the NDS.

It is important to consider the historical context for this intense focus on readiness. The readiness landscape today differs significantly from twenty years ago. In 2000, the Navy had 318 battle force ships. Today, we have 293 after growing from

a recent minimum of 271 battle force ships a few years ago. However, the number of deployed ships across the timespan from 2000 to today remained roughly constant. Today, we have 68 battle force ships deployed around the world. Sustaining this level requires many more than that number to deploy each year.

These demands for naval forces have led us to forward deploy a greater proportion of the force and significantly increase the length of rotational deployments. The extended deployment of the *ABRAHAM LINCOLN* is an example of this trend: her 294-day deployment was the longest for an aircraft carrier since the mid-1970s. While her extension was the best decision we could offer to support the demand for forces, it does not come without consequences. When ships, aircraft, and submarines are deployed longer, they require more maintenance to return to sea as ready as they were before. Moreover, our statistics show that this relationship is sometimes non-linear: “surge” deployments and heavier operational use can exponentially increase the time and cost required to recapitalize these valuable assets.

Our approach to implementing the NDS has already led us to guard readiness more carefully by ruthlessly prioritizing requests for forces. The growth of the Navy over the past several years has also increased the denominator in the readiness equation, relieving some pressure on the force.

Yet there is much more to do, and we are committed to finding and closing readiness gaps. The American taxpayer and the Congress have generously funded ships, submarines, and aircraft, and we owe it to the people we are sworn to protect and defend to be good stewards of those investments.

We are committed to funding readiness at the maximum executable level. PB-21 makes a strong commitment to current readiness, acknowledging the sustained effort required to mitigate the effects of decades of intensive use of our ships, aircraft, and submarines. The funding requested for individual accounts such as Ship Depot Maintenance and Aircraft Depot Maintenance have increased over fiscal year 20 enacted levels, reflecting purposeful choices about what we need to be ready today.

The Navy is already moving aggressively to ensure these funds are well spent. No reform is too small. Our relentless pursuit of reform has already paid dividends: our achievement of 80 percent mission-capable tactical aircraft this past year is one example. Acknowledging the challenges in depot-level maintenance and modernization, the CNO has directed Navy leaders to find the key levers of productivity that will allow us to deliver depot-level availabilities on time and in full. Although there is much to do, we are encouraged by the trends we are beginning to see. Our public shipyard workload has led us to increase hiring, increasing public shipyard end strength by 16 percent from 2013. We are working aggressively to improve estimates of the length of time our platforms need to be in maintenance, level-load depot-level maintenance across our network of industrial partners, better integrate different maintenance organizations within the Navy, and utilize predictive analytics. In concert with continued discipline in guarding readiness, we believe that we can deliver our platforms in maintenance on time and in full. We are also grateful for the strong support we received from Congress in our enacted 2020 budget for a pilot program for private contractor shipyard maintenance in the Pacific, and request that this pilot continue. We value our close partnership with industry and recognize that predictability on our part will help incentivize our partners to grow, providing critical capacity to complement the work in our public shipyards.

PB-21 robustly funds ship and aircraft operations, another essential element of readiness. As previously mentioned, it provides for 58 underway days per quarter per ship and bolsters flying hours for our aircraft. This directly contributes to readiness by allowing our Sailors to train to complex, high-end naval warfare scenarios at sea and creating the maritime expertise our Nation expects. While there is no replacement for operating at sea, the Navy is working rapidly to integrate Live, Virtual, and Constructive (LVC) training into the mix. LVC training allows units at all stages of force generation to maximize training for high-end warfare, and prevents the degradation of key warfighting competencies when platforms are undergoing maintenance.

This budget request also recognizes the truth that we cannot neglect our shore infrastructure in favor of future force structure or other priorities without an impact to readiness. This year’s budget requests the largest amount of funds for Navy shore infrastructure in the past 4 years, allowing us to create readiness at sea through increased readiness ashore. Congressional support for this request will also help the Navy meet its obligations to Sailors and their families, increasing the quality of public-private venture housing through increased oversight funded by approximately \$35 million each year of the FYDP, addressing perfluoroalkyl substances (PFAS) contamination with \$44 million requested for clean-up programs, and rebuilding Navy facilities in the wake of recent natural disasters.

Readiness at sea also depends land-based training ranges, especially for aviators and special warfare operators. These include the Navy's training center in Fallon, Nevada. Expansion of this range is critical to maintaining our readiness today as newer weapons, released from distances much greater than those of just a few years ago, require a larger safety zone around target areas. Expanding this range will allow us to send our Sailors into combat fully prepared, providing realistic training and the skills they will need to win. We are committed to work with Federal, State, tribal, and local partners to do so in a way that addresses the concerns of all.

Finally, a ready Navy depends on our true asymmetric advantage: our people. PB-21 increases active-duty manning to keep our human capital synchronized with our force structure, raising our end strength by 7,300 Sailors. This reduces gaps and shortfalls at sea, directly contributing to readiness. Manning ships, aircraft, and submarines at sea remains a top priority, and we will continue to operate effectively and sustainably over time as the battle fleet grows. The budget also sustains the suite of efforts under the Sailor 2025 initiative and continues to transform our Manpower, Personnel, Training and Education (MPT&E) system to provide auditable, responsive services to our Sailors and responsibly reduce costs. It funds expanded educational efforts to obtain warfighting advantage. Recognizing our ethical obligation to create a strong, positive environment for our Sailors, as well as the positive effect such an environment has on recruiting and retaining talent, we are committed to eliminating destructive behaviors such as sexual assault. We are focused on creating and sustaining a Culture of Excellence, where our Sailors do not merely avoid doing what is wrong, but actively pursue what is right. The Culture of Excellence program also leverages predictive analytics to intervene before destructive behaviors occur, breaking the cycle of simply responding to events.

We are witnessing very good trends in recruiting and retention. This has enabled us to fill gapped billets at sea, reducing them from 6,500 in December 2018 to 4,900 in December 2019. We met our retention goals for all zones in 2019, retaining 76 percent of the force. We're reforming our recruiting efforts, saving millions of dollars by processing forms for new accessions using biometric signatures. And our recruiters are exceeding their goals: 2019 saw the Navy sign the second-largest number of active-duty contracts, 40,756 new accessions, in the last 15 years. In an environment with low unemployment levels, these statistics are encouraging and demonstrate the America's young people see great value in joining the Navy team.

#### *Lethality*

Deterring our competitors from malign activity requires fielding a forward-deployed, lethal naval force. Our competitors are heavily investing in technologies aimed at our naval forces. Across the Navy's Total Obligation Authority (TOA), the capability investments directly enhancing current and future lethality comprise approximately 21 percent of the Navy's annual budget. This investment can be further sub-divided into future capability (11 percent) and modernization (10 percent). Relative to the entire Navy budget, the value proposition of our modernization investments are often overlooked when compared with resources applied to major ship and aircraft procurement accounts. Each dollar is thoughtfully applied to specific key capabilities based upon a rigorous analysis of iterative wargames, exercises, and experimentation. Offensive and defensive modernization efforts enable our ships and aircraft to operate in the face of today's advanced anti-ship and anti-aircraft systems.

In particular, we increased our investments in directed energy and hypersonic weapons. In terms of directed energy, we request to apply \$170.3 million in fiscal year 2021 to our directed energy programs, which will rapidly advance our ship's defensive capabilities. In terms of hypersonics, we request to increase our investments from \$642 million in fiscal year 2020 to \$1.4 billion. PB-21 continues our focus on developing long-range, offensive fires launched from ships, submarines, and aircraft, including: Conventional Prompt Strike, the Maritime Strike Tomahawk, Joint Standoff Weapon Extended Range (JSOW-ER), the Long-Range Anti-Ship Missile (LRASM), and the Standard Missile- (SM-) 6. We are moving quickly to extend the range of the carrier air wing with the rapid development of the MQ-25, the Navy's first unmanned carrier based aircraft. MQ-25 does more than extending our reach; it lays the foundation for integrating unmanned air power into our carrier fleet. The combined effects of these modernization efforts extends the lethal strike range of the CVW into denied areas while enabling the CVN to operate outside the threat ranges of adversary anti-ship missile threats.

The fiscal year 2021 budget builds on the progress made in fiscal year 2020 to pursue a networked fleet by investing \$82 million (\$395 million across the FYDP) in artificial intelligence and machine learning technologies that improve decision quality and speed in combat. This networked fleet requires a resilient operational

architecture to integrate our command and control, sensors, shooters, and weapons. To accomplish this, we will leverage our work on the Navy Tactical Grid to build the Joint All Domain Command and Control (JADC2) alongside our Joint teammates. Protecting our networked forces requires building cyber resilience and security into our platforms from the beginning. To meet this need, the Navy will fund \$4.17 billion across the FYDP to protect our operations, equipment, and industrial base from intrusions and ensure we have the means to fight through and recover from cyber-attacks. Meanwhile, we will integrate our cyber forces more closely with fleet operations to deliver catastrophic cyber effects as part of an integrated all-domain naval force.

These investments all support a highly maneuverable fleet that controls the high-end fight. Nuclear powered aircraft carriers remain crucial to this effort and the Carrier Strike Group remains the cornerstone of the Navy's forward presence, sea control, and power projection capabilities. The nuclear-powered aircraft carrier (CVN), associated air wing (CVW), surface combatants, and sub-surface combatants represent the most survivable and lethal maritime fighting force in the world, providing long-range kinetic and non-kinetic effects from distributed mobile platforms at sea without the need for foreign basing rights. The CVN and embarked CVW are vital to the Distributed Maritime Operations (DMO) operating concept, providing the flexibility and endurance to hold large swaths of land or sea at risk for extended periods of time. *GERALD R. FORD* (CVN 78) represents a generational leap in the aircraft carrier's capacity to project power on a global scale. *FORD*-class carriers are designed to generate a 30 percent higher sortie rate with a 20 percent smaller crew than a *NIMITZ* class carrier. This translates to \$4 billion savings over the life of the program generating more decisive naval power. With the successful completion of CVN 78's Post Shakedown Availability and subsequent Independent Steaming Events, finishing our work and delivering this capability to the fleet as quickly and effectively as possible is one of DON's highest priorities. The Navy has learned with each test and is consistently bringing each of the innovative systems online. *FORD* is currently undergoing final air compatibility testing, bringing the entire carrier air wing onboard and progressing towards her maiden deployment. We will continue to learn, iterate and improve, driving down cost on each subsequent ship of her class. We are grateful for the Committee's support of the program with the historic two-carrier award for CVN 80 and CVN 81 and are confident that the *FORD* class will provide the foundation for highly maneuverable and lethal combat power projection well into the second half of this century.

Our naval logistics enterprise undergirds the effective employment of our forces in a dispersed, forward-deployed manner across the spectrum of conflict from daily operations into sustained major combat operations. Our logistics forces must provide forward-deployed repair and resupply as well as combat medical services to revive our forces on station. In addition, we will begin designing two new vessels, the Next Generation Medium Amphibious Ship and the Next Generation Medium Logistics Ship that will support our expeditionary forces operating in contested maritime spaces.

#### *Capacity*

To increase America's naval power, we will continue to build more ships, submarines, and aircraft. There has been a long-standing consensus across the government that the Navy needs to grow. We are focused on responsible growth, a rate of growth that ensures our ability to effectively maintain the fleet and to properly man, train, and equip that fleet.

We appreciate the strong support from Congress for naval shipbuilding, funding last year's request for 12 ships. We reaffirm our commitment to reach the 355-ship goal in a reasonable and strategically relevant timeline, and to augment a future 355-ship Navy with developmental and unmanned vessels. The pace of growth will depend on both our ability to find savings within our own topline. While this budget request slows the growth to 355 slightly to ensure we properly maintain the fleet we have, we are seeking ways to support increased rates of growth in the coming years. The challenges extend beyond the shipbuilding accounts, as we must also consider what increases in operations and maintenance accounts will be required to continue the momentum we have built in regaining readiness. We cannot, and will not build a hollow force simply to reach the 355 ship number. Because of the rate of change in technology, we will continue to refine the required number of ships in an iterative fashion, in coordination with the Secretary of Defense, and as informed by wargaming and experimentation.

The fiscal year 2021 budget requests \$21 billion in ship construction for 8 battle force ships and plans to build 44 battle force ships (plus 17 unmanned ships) over the FYDP. This procurement includes one *COLUMBIA* and one *VIRGINIA* class

submarine each, two *ARLEIGH BURKE* Flight III destroyer, one Guided Missile Frigate, one LPD Flight II, and two Towing, Salvage, and Rescue ships.

Deterring a nuclear attack on the homeland remains the Navy's most sacred duty and our number one acquisition priority. PB-21 fully funds the first year of construction of the lead ship of the *COLUMBIA* class ballistic missile submarine. Over the FYDP, we plan to start construction on the second ship of the class in fiscal year 2024 and, beyond the FYDP, to begin serial production in fiscal year 2026. The *COLUMBIA* class guarantees the most survivable leg of the nuclear triad remains on patrol into the 2080s, ensuring the secure second-strike capability that is the foundation of strategic deterrence.

This budget request also supports one additional *VIRGINIA* Class submarine in fiscal year 21, continuing the Block V multiyear contract awarded in December 2019, which will then procure two per year from fiscal year 2022 through the FYDP. Additionally, the Guided Missile Frigate [FFG(X)] program is proceeding well, and will provide the fleet with a lethal small surface combatant that is optimized towards distributed maritime operations. The Navy plans to award the lead ship of the class in July 2020 and the second ship of the class in fiscal year 2021.

We are committed to experimenting with unmanned systems, moving them beyond their current conceptual stage, and continuously assessing how they should be counted within the battle force. While we do not count unmanned ships at present, we will continue to procure our large unmanned surface vessel, buying 10 over the FYDP. These ships are envisioned to host both sensors and weapons. This procurement will transition to SCN funding by fiscal year 23. We will also procure 6 extra-large unmanned undersea vehicles in the FYDP which will help provide solutions for specific fleet needs.

This budget also procures 277 fixed and rotary wing aircraft (including 121 F-35C) and 25 unmanned aircraft across the FYDP. We are completing the acquisition of several type/model/series aircraft and continuing to purchase essential capabilities, such as the advanced early warning provided by the E-2D Advanced Hawkeye and a new, flexible logistics capability in the CMV-22 Osprey.

We in the Navy are honored to defend American prosperity and American values around the world every day. We are excited to be working closely with the Marine Corps to deliver Integrated American Naval Power to perform these critical and timeless roles. We are conscious that every tax dollar spent to increase readiness, lethality, and capacity represents more than buying power, but the trust and confidence of the American people. We do not take that trust lightly and will seek every means to spend those dollars in a deliberate, methodical, and responsible fashion, maximizing naval power to the fullest extent that those funds enable. Thank you for your strong support and continued partnership in providing and maintaining a Navy.

#### U.S. MARINE CORPS PRIORITIES

Mr. Chairman, Ranking Member and distinguished members of the Committee, this statement is my first report to Congress and represents my assessment of the current state of the Marine Corps and priorities for the future.

The future operating environment will place heavy demands on our Nation's Naval Services, demands that the Marine Corps is not currently organized, trained, equipped, or postured to meet. Modernizing the Marine Corps for the era of great power competition will require significant adjustments to long-term Service investments, new integrated naval warfighting organizations and concepts of employment, and better training and education for Marines; changes that only Congress can help us realize. The fiscal year 2021 budget puts the Marine Corps on the path toward modernization, supports irreversible implementation of the National Defense Strategy (NDS), and sustains and builds our readiness to deter, fight, and win.

My top priority as Commandant is to build the Marine Corps that will define integrated American naval power in 2030, even as it must remain ready to confront the challenges of today. I seek no additional resources for this effort. It is attainable with a stable budget and sustained by the leadership and oversight of Congress. Service modernization will require several years of dedicated analysis, wargaming, and experimentation on a level that we have not experienced in recent memory. We are committed to this effort and have already begun charting a new course. The Marine Corps is grateful to the Congress for its leadership and support during previous periods of modernization and seeks its continued support today.

Before addressing the issues of force design, readiness, resourcing, and the latest fiscal year 2021 budget submission, it is important that I start with a few comments on our individual Marines and the health of the Corps. I strongly believe that everything we do begins and ends with the individual Marine—the heart and soul of our

institution. On any given day, the vast majority of your 225,000 Marines, representing every State and territory, serve honorably and perform their duties at home and abroad in an exemplary manner. I am extremely proud to serve alongside them, and based on my discussions with members of this committee, I know that my pride in them is shared. Regrettably, as several high profile incidents have revealed over the past several years, not all within your Marine Corps consistently adhere to our rigid standards, satisfy my expectations for professional behavior, or fulfill their obligations as Marines. Addressing the corrosive effects of misconduct and criminality by this small yet destructive minority is a top priority, and I offer the following observations:

The presence of the malignant individuals and sub-cultures within the institution produces a well-known and well-documented pattern of misogyny. A 2018 publicized report commissioned by my predecessor clearly supports these observations as facts. I have begun the process of exposing and eliminating these malignant subcultures from our ranks and will seek Congress' continued assistance to that end.

Eradicating sexual harassment and sexual assault remains a challenge across the military and the Marine Corps. I acknowledge what many of you already suspect or know—after many years of trying, and despite our best efforts and intentions, remedial actions taken to date have not caused the desired outcomes. I seek to address this problem head on.

There are some within our ranks who remain hesitant to accept gender-integrated training at our enlisted recruit depots. I would remind those Marines that the Corps has conducted gender integrated training at Officer Candidates School for more than two decades, with outstanding results. I have every reason to believe that we can replicate that model in our enlisted recruit depots, and have already begun moving forward expeditiously, with the continued support of Congress. I understand the direction and the effort the Marine Corps must take to comply with the specified timelines for both MCRD Parris Island and MCRD San Diego in the 2020 NDAA that will meet the intent of Congress and the needs of the Marine Corps.

The Marine Corps is a warfighting organization. We exist for that one purpose; to fight and to win. All that we do is standards-based in order to produce a premier expeditionary warfighting force for the Nation. In some occupational specialties within our Corps, there are legitimate operationally-derived physical requirements that every Marine must meet. Marines who meet these standards, regardless of biological sex or gender, will face no artificial barriers to their service or advancement.

Appropriately addressing all of these issues becomes even more paramount as we design a future Marine Corps that is optimized to meet the challenges of 2030 and beyond. As we consider the skills, education, and capabilities required of the next generation of Marines, we must be able to recruit and sustain a force that draws from 100 percent of our Nation's collective reservoir of talent, innovation, creativity, and patriotism. I take it as a personal responsibility to do everything within my authority to ensure that the Marine Corps does not create any artificial barriers to service or advancement.

Force Design is my top priority as stated in my Commandant's Planning Guidance. Over the next three to 5 months, we will continue to refine and deepen the analytical depth of our initial planning through an iterative process of wargaming, analysis, and experimentation. That work will directly support the redesign of our Corps. Our collective Fleet Marine Forces, as well as our HQMC organization and many of its processes, to include the existing Planning, Programming, Budgeting, and Execution (PPBE) process, require a comprehensive overhaul to create the necessary level of naval integration across the Department. Naval integration with the CNO's Staff, with the fleets, and within the Department remains a top priority for me, the CNO, and the Secretary.

Thanks to your continued support, your Marine Corps remains the Nation's most ready force. We have made forces available for deployment to meet Combatant Commander requests around the globe, often on short notice. Those deployed Marine Units reinforce our commitment to U.S. allies and partners and serve to uphold the international rules-based order. Wherever deployed globally, your naval expeditionary forces facilitate conventional deterrence, prevent fait accompli scenarios from developing, and successfully compete against malign maritime gray zone activities to assure our allies and partners of our continued commitment. This will not change.

With your support, over the previous 2 years we have been able to satisfy increased global force management demands, including those made on our legacy fixed-wing aircraft squadrons. However, we should be careful not to confuse availability with operational suitability. Readiness must be more than a mere measure of availability. True readiness, which we define as the readiness of a unit to be employed against a peer threat to achieve decisive tactical and operational outcomes,

requires investment in modern capabilities commensurate with those of the threat. This will require a significant shift from our most recent fiscal year 2021 budget submission. I would also respectfully submit that it may require a reassessment of our existing processes and metrics for assessing unit readiness—true readiness as described above. Within the Marine Corps, I am sustaining and reinforcing initiatives started by my predecessors that will increase the realism of pre-deployment training to more closely align with scenarios identified in the NDS. In addition, following a path that I readily acknowledge has been charted over the course of decades by the Army, we have added an extensive program of force-on-force training to our long-standing live-fire combined arms training exercise program.

With these goals in mind, over the coming months, we will make significant changes to the organization of our Training and Education Command, which will require the support and consent of civilian leadership for full implementation. Additionally, it is not lost upon me that our desert training facilities, superbly adapted as they have been to preparing for the challenges of the last three decades, are less than ideal for the kind of integrated naval training and experimentation that we need to prepare for great power competition in contested littoral environments. Identifying and developing first class littoral training areas will be one of my priorities going forward, for which I will ask your guidance and support.

Regarding this fiscal year 2021 budget submission, I am well aware that our budget requests since the release of the NDS 2 years ago have changed only marginally year-to-year. While the cumulative impact of those marginal changes is in some cases substantial, many were budgetary actions that merely shifted funding within existing programs. This is not the kind of substantive change now needed, nor will it result in the premier naval expeditionary force required to implement the NDS and realize our evolving naval and joint concepts. In fact, our major programs of record prior to the formulation and release of the NDS—F-35, CH-53K, MV-22, ACV, and JLTV—have actually grown. As I stated in my Commandant's Planning Guidance, these and other programs—all of which were constructed to support a long-standing but now obsolescent conception of large-scale amphibious forcible entry—require a critical review. I expect that review will likely recommend major revisions and reductions to some of our major programs. We must then reinvest those resources into capabilities more relevant to the future security and warfighting environment, many of which we are developing but have yet to procure.

This necessary divestment and subsequent reinvestment process is a complex effort, and one that prudence dictates be conducted in the most thoughtful and analytically defensible manner possible. While it may be shocking to some for a Service Chief to openly criticize existing programs and priorities, our shift to the future is in no way an indictment of previous decisions or conclusions of those who once sat at this table or of any who provided oversight in the past. The simple fact that the strategic environment has changed significantly and that we are now in an era of great power competition, mandates that we must make the necessary adjustments to our naval warfighting concepts and accompanying investment plans to create true readiness—operationally relevant and available naval forces that create overmatch over anticipated adversaries. I understand there are both structural impediments to change as well as strong interests resisting change; however, as I stated during my confirmation—I will always provide my best military advice and ultimately defer to and support the decisions of the civilian leadership within the Department and Congress.

The timing of this fiscal year 2021 budget submission coincides with an inflection point for the Marine Corps. Subsequent annual submissions will reflect that significant change in focus, and indeed I anticipate there will be opportunities even during the execution of the fiscal year 20 budget to make in-stride adjustments with the consent and support of Congress. Simply put, with peer competitors striving to supplant the role of U.S. military forces regionally and globally, we cannot afford to delay modernization when we see opportunities to make prudent adjustments from prior plans. If we are to avoid being outpaced, agility in reprogramming becomes an essential tool to apply where it makes sense to do so.

This budget also supports our assertion that Marine forces—operating as part of an integrated naval force—must seamlessly integrate into and play a complementary role within a larger joint force. Over the next few years, we must strive to reduce duplication of warfighting capabilities to only those areas that make sense tactically and operationally. Marine Corps contributions should largely be unique, complementary, and tailorable to the joint mission.

Beyond the issues germane to my role as Commandant of the Marine Corps—to organize, train, and equip Marine Corps forces in support of the Fleets and Combatant Commanders—I offer the following observations as a senior naval officer and member of the Joint Chiefs of Staff.

Today's environment of renewed great power competition demands a truly integrated naval force; we no longer enjoy the luxuries of internal Service focus and inefficiency that the "unipolar moment" allowed. The imperative now to accelerate naval integration is driven not by historical example nor traditional bonds between our naval Services—it is driven by the global environment described in the National Security Strategy and National Defense Strategy. Our ability to operate as an integrated naval expeditionary force within contested areas provides the joint force with an asymmetric advantage, an edge that we must preserve and strengthen in this era of great power competition.

We need adequate numbers of naval platforms and surface combatants with the lethality to contribute to sea control and sea denial and appropriate defensive capabilities and sensors to operate in a distributed manner without imposing undue burdens on other platforms. Those platforms must also be affordable from both a procurement and sustainment perspective, as well as generate the kind of availability needed to meet future force generation requirements. Included in that future fleet must be adequate numbers of traditional amphibious ships as well as next generation amphibious ships that will enable the Fleet Commanders to employ the naval expeditionary force throughout a contested littoral area in a more distributed, lethal, and defensible manner.

While our aspirations and expectations are great, I am certain that Congress expects nothing less from the Marine Corps. With your continued leadership and support, we will achieve our shared goals and modernize our warfighting capabilities and culture to best support the Navy, the Joint Force, and the Nation.

#### CLOSING STATEMENT

On behalf of our entire integrated naval force and every Sailor, Marine and civilian in the Department of the Navy, the three of us would like to once again thank the leadership and membership of this Committee for your attention, interest, and ongoing support of our men and women in uniform. We are also grateful to the Committee for the recent passage of the fiscal year 2020 Defense Appropriation. By passing this legislation you have enabled many of the priorities identified within this document, and you've sent a strong signal of support to our people—and a stern warning to our adversaries.

We also appreciate the funding stability and predictability of the past several years. This has given our force the agility and flexibility necessary to address emerging threats and the needs of our integrated naval force, while shifting away from less beneficial and relevant spending. This stability has saved money for the American taxpayer. We owe it to them to ensure that every single dollar is invested in the most effective manner possible to fulfill our sacred oath.

We urge the Committee to do everything possible to ensure continued funding stability so that we may implement the needed reforms and spending priorities discussed in this document to meet the great power challenge, protect the maritime commons, and stand in defense of the United States of America. On behalf of the world's finest Marines and Sailors, we thank you for your time and ongoing efforts, and we look forward to your questions.

#### NAVAL BUDGET REQUEST AND FORCE STRUCTURE

Senator SHELBY. Thank you. Mr. Secretary, let's start with you, if I could. The fiscal year 2021 budget request for new ships is \$4 billion below the 2020 enacted level. We also understand that the Navy is only planning to buy seven ships in 2021.

You currently have, to my understanding, have a Fleet of 290 ships. In 2016, the Navy conducted a Force structure assessment that shows a requirement of 355 ships. And while Congress has not received an updated assessment, the budget request suggests, perhaps, that the Navy is reducing the number of ships it needs. Is that accurate?

Secretary MODLY. Senator, thanks for the question. It has been a big topic in various hearings that we have had so far.

Senator SHELBY. It is important to the existence of the Navy.

Secretary MODLY. Yes it is, and I will say that we are not coming off our commitment to a larger Navy. We need a larger Navy. And so we are focused on how we can make that happen. Right now

that Force structure assessment from 2016, which pegged it at 355, is the Force mix. We are currently looking at that. We have been through the process.

Both General Berger and Admiral Gilday conducted something called the Integrated Naval Force Structure Assessment over the last several months. Those conclusions came to me. I forwarded them to the Secretary of Defense. He is reviewing those right now and wants to do a deeper dive. I will say, whatever comes out of that deeper dive, I believe, is going to be more than 355 ships. It will be somewhere north of that number when we consider some of the new types of platforms that we need. The challenge we have is a flat budget environment.

Senator SHELBY. We have that challenge with you, and you know—

Secretary MODLY. Yes, sir. I understand. We are trying to figure out how we can dig within our own budget to free up resources to fund this program. But at the end of the day, it is going to require more top-line to get to that number.

#### SHIPBUILDING INDUSTRIAL BASE

Senator SHELBY. Mr. Secretary, Navy leaders here before this subcommittee have repeatedly told Congress that stability and predictability are key to successfully managing the shipbuilding industrial base and ensuring that ships are delivering on cost and schedule. What is the impact of your shipbuilding plans on the industrial base, which a lot of us believe is so important to the future?

Secretary MODLY. Well, it is absolutely critical, sir, because we cannot—we have to have a stable industrial base in order to not only ramp up for the future but also to sustain the employment and the skill levels that we have. We have invested a lot over the last several years in building up skills in the various shipyards, particularly in the nuclear enterprise. We have to be able to sustain that.

And I have said to the teams before, you can't just turn that on and off like a faucet. We have to have more stability in that program, but we have to understand where we are headed as well. And that is the process that we are going through right now is to determine.

#### NAVAL FLEET MODERNIZATION

Senator SHELBY. Mr. Secretary, I will address this to you and to Admiral Gilday. Any discussion about the acquisition of new ships, I think, would be incomplete without a discussion about maintaining and modernizing our current Fleet. The Navy has faced persistent challenges in maintaining this Fleet by underestimating, we think, its maintenance needs and the time and resources required to address them. You want to pick that up, tell us where we are and what the problem is there?

Secretary MODLY. Yes, Senator. Thanks for the question. So in this particular budget request, the \$5 billion decrement in procurement is actually being pivoted towards manpower, \$2 billion for readiness, maintenance, and modernization, and then another \$1 billion for R&D and technologies like hypersonics. On the maintenance and modernization piece, readiness is our number one pri-

ority. And so as I said in my opening statement, we need a ready, capable, lethal Fleet today.

And so in terms of maintenance and where we are going, we have seen in almost the past year an increase of 60 percent in terms of the numbers of ships we are getting out of the shipyard on time. 60 percent—actually 35 to 40 percent.

So instead of getting 35 percent of our ships out of the shipyard on time, right now we are getting above 60 percent and we expect that to go to 80 percent by the end of the year. Our goal is zero delays by the end of fiscal year 2021.

Senator SHELBY. But a lot of that depends on maintaining an industrial base doesn't it?

Secretary MOLDY. It does, and we look very closely at that, sir, in terms of both our public and our private shipyards.

#### MARINE CORPS FORCE STRUCTURE REALIGNMENT

Senator SHELBY. General Berger, shortly after you took over as the 38th Commandant of the Marine Corps, you issued planning guidance that calls for a significant redesign of the Marine Corps to ensure alignment with the National Defense Strategy part of it.

What progress have you made in identifying the changes to the Marine Corps Force structure in view of the needs today, and what adjustments do you plan to make that you can talk about here?

General BERGER. So we took the last 7 months to project out what we thought the Nation's Marine Corps would look like in 2030. We are done with that first portion of the homework.

And at this stage, I have explained what our results were to Secretary Modly and the Secretary of Defense and I am now having a dialogue with the senior leadership in the House and the Senate to make sure that they understand the assumptions that went into it and what the conclusions were. So in terms of where we are with that, the first step is done.

Now, I need to explain to the leadership what the outcomes were, take their advice on the best way forward, and move. And this last part, sir, we will—this is not a one-time thing because we have an adversary that is moving. We have technology that is moving. So, we will need to continually look at how we are built for the future.

Senator SHELBY. You have to keep up with it, don't you?

General BERGER. We have to stay in front of it, sir. Yes, sir.

Senator SHELBY. Thank you.

Senator Durbin.

Senator DURBIN. Thanks, Mr. Chairman. General Berger, you and I had a conversation in my office with your colleagues about the fact that the first man I ever worked for in the United States Senate was Paul Douglas, Senator from Illinois. Proud Marine. Served in World War II. And that when he was elected to the Senate in 1948, a few years after that, there was a national debate about whether we needed a Marine Corps and whether there would be a future for the Marine Corps. He, of course, was on the side of the Marine Corps and fought successfully to preserve the Marine Corps after World War II.

He took great pride in that, probably as much as anything achieved in public life. I sense, from your testimony today, that as you say, the Marine Corps is at another inflection point, a pivot,

and the language which you said in your testimony about modernizing the Marine Corps for an era of great power competition will require significant adjustments to long term service investments, new integrated naval war fighting organizations.

In concepts of employment, better training and education for Marines. Changes that only Congress can help us realize. You go on to say something of great significance to an appropriations committee. You say, I seek no additional resources for this effort.

#### MARINE CORPS MODERNIZATION

Explain this to me, how can you make a significant change in the mission of the Marine Corps as you have described it here? What is the future of amphibious assault? Has it been redefined or understood today in different terms? And how can you achieve the significant change without additional resources?

General BERGER. There comes a time, I think in the military or in the corporate world, in civilian private sector, where the periodic, are we doing the right things, are we built right for the competition, it is clear that minor adjustments on the edges are not going to do. That is where we are. That is where we are as a service, as an institution. We are built okay for today. We are clearly not built for where we think we will need to be 6, 7, 8, 9 years into the future.

That means we need to make some assumptions about where our pacing threat would be in 2030, some assumptions about technology, and some assumptions about the fiscal resources that we would have to work with. So our assumption on the fiscal side, sir, to get to your point. We assume we would have no growth fiscally. Because if we are constrained, self constrained by that, then we are going to build the best Force we can based on the budget we have today. Now that may be a different picture 10 years from now but our assumption going in is it is not going to grow.

So how do we do that? We need to get rid of, we need to divest of capabilities that have served us well in Korea and Vietnam and the Persian Gulf, but are not a great fit for what the Nation needs us to do in the future.

#### THE UNIQUE MISSION OF THE MARINE CORPS

Senator DURBIN. If I can ask you, and perhaps you can answer this perhaps you can't, tell me what unique mission the Marine Corps has that cannot be served by another branch of our Armed Forces in your vision statement.

General BERGER. Against a peer adversary—I think against a smaller adversary, you can take a different approach. But if you believe in great power competition, I do, and it is going to be enduring for a while, then what you don't want to do is in all cases match up symmetrically against that adversary. In other words, blunt force against blunt force.

So you have to understand, where are the areas where we have a unique advantage as a Joint Force, where does the Naval Force have a unique advantage, where does the Marine Corps fit into that picture? To your point, sir, we have an advantage in that we have been doing expeditionary amphibious operations for 70 years and have a huge head start on the rest of the world. We need to

maintain that margin of asymmetrical advantage. It will not be landing two brigades over a beach against a foe, an adversary that has built up defenses and ready for—

Senator DURBIN. A classic Pacific World War II.

General BERGER. We are not going to do that. That is correct. So now, we need to fight as a distributed maritime Force across a much greater area. Smaller forces, more capable, more lethal, not land two brigades across a beach.

Senator DURBIN. I am running out of time here but I wanted to ask the Secretary, I am concerned about the report that there is a 40 percent chance that the *Columbia*-class submarine, which is one of your highest priorities, will not meet cost objectives. And we have reduced the request in this next year from two *Virginia*-class submarines to one. That does not seem—those two statements do not seem consistent with the stated goals of expanding the size of the Fleet, especially on the submarine side. Could you address it?

Secretary MODLY. Sir, the question about the *Virginia*-class, I mean that is a sub that came out of our plan at the end game decisions made above our levels. We wanted to keep the sub in but there were some trades that had to be made at the Secretary of Defense level. It is at the top of our unfunded priorities list for that reason.

With respect to the *Columbia*, right now I have not seen that report in terms of the odds of it coming in over budget. I do—what I have seen on it is that there is very little margin in that program right now and so we have to maintain the industrial base, we have to maintain the throughput into that program to ensure that we don't have those types of cost overruns.

Senator DURBIN. Thank you, sir. Thanks, Mr. Chairman.

Senator SHELBY. Senator Hoeven.

Senator HOEVEN. Thank you, Mr. Chairman. Secretary Modly, are you still committed to growing the MQ-4C Fleet, the Triton?

Secretary MODLY. Yes, we are still committed to that program, sir.

#### USE OF MANNED AND UNMANNED ISR

Senator HOEVEN. And talk about your use of, and Admiral certainly you can jump in here as well, but the use of the unmanned as well as your manned ISR (Intelligence, Surveillance, Reconnaissance).

Secretary MODLY. Well, I will start and then I will turn it over to the CNO as well. But unmanned is going to be a huge part of our future. It is the types of things that General Berger was talking about. How do we distribute our Force more? How do we put ISRs out there where we don't have people at risk? How do we do it at a lower cost? So unmanned is a critical element, not just unmanned aerial vehicles but unmanned ships as well. We are looking at all those scenarios for the future.

Admiral GILDAY. Senator, in terms of MQ-4, we have just accelerated the deployment of our first two out to Guam, and so they are on station and on mission right now in the Western Pacific. The capabilities that the MQ-4 brings to the Fleet are game changing in terms of long range ISR at altitude with sensors that we haven't had supporting the Fleet before. We are also developing the

MQ-25, which is an unmanned platform aboard aircraft carriers. They both refuel while it is in the air, as well as providing SR sensing capability as well.

Senator HOEVEN. How about survivability?

Admiral GILDAY. Survivability of both of those air frames?

Senator HOEVEN. Yes.

Admiral GILDAY. Yes, sir. I think it depends—it is totally dependent upon the threat. And so we certainly wouldn't put those assets in a position where they would be shot down or they would be undefended.

Senator HOEVEN. What about survivability? This is one of the things the Air Force has brought up because they are not buying more of the RQ-4, one of the issues being concerns about survivability flying over countries with advanced air defense systems.

Admiral GILDAY. Yes, sir. So the intention in using those systems wouldn't be to put them in a position where they would be subjected to, you know, high casualty rates and a heavy anti-air environment. So we would use those ISR assets further back. But based on the sense that they have, they do have an extended range.

Senator HOEVEN. So describe when you use manned ISR and unmanned, and the relative benefits of each and how you deploy them together in a way that, you know, provides the maximum benefit.

Admiral GILDAY. So a lot of it is dictated by the threat environment. And so the environment you are going to operate in and then how you are going to use those assets, let's say, on multiple vectors, and you are going to do it in conjunction with other assets in the Joint Force, whether they be terrestrial base Army or whether they be air-based Air Force asset.

So it will be a mix, so it is difficult to give you, and I don't mean to be evasive, but it is difficult to give you a precise answer. It would be based on the threat. It would be based on all the tools that would be available from the Joint Force.

Senator HOEVEN. But it is important, in your opinion, to maintain, enhance, develop, and continue that unmanned ISR as well as the manned. You can't go simply back to the manned.

Admiral GILDAY. Absolutely. Unmanned is the future, sir.

Senator HOEVEN. Alright. General Berger, same question from Marine Corps and your use of the unmanned ISR assets.

General BERGER. It will become even more important. It does augment, complement the F-35 not augment but complement the manned ISR platforms like an F-35, which is a flying sensor platform. Especially critical for the forward force, sir.

In other words, the Marine Corps expedition, the Navy and Marine Corps expeditionary team that is up forward as a stand-in forward force. That is your eyes and ears. The Joint Force has to have a picture of what is in front of them. So I would expect 4 or 5 years from now much more unmanned ISR, and 10 years, exponentially more than that. This is how you sense. This is how you understand the picture in front of you.

Senator HOEVEN. And small, medium, large drones. Your comments there.

General BERGER. We need a family of all. At the small unit leader—now, we have the means for a Sergeant to launch, recover, control, a handheld unmanned platform and he needs that informa-

tion. But he also has to be linked into medium and high altitude longer endurance as well, either kinetically to engage something to target or just to collect information.

Senator HOEVEN. So even with unmanned ISR and satellite, you still feel the needs therefore the unmanned Fleet?

General BERGER. We assume that a threat is going to come after all those sensors, including our command and control network that stitches it all together. We need redundancy and we need resiliency both, yes, sir.

Senator HOEVEN. Thank you.

Senator SHELBY. Senator Reed. I was just—before calling on you, I was looking at the Secretary of the Navy, the Commandant, and the Admiral, and I was thinking, you as a West Point graduate and former Army officer bring a little committee equilibrium here. Thank you. Senator Reed.

[Laughter.]

Senator REED. Mr. Chairman, I am doing my best to be polite today.

Senator SHELBY. And you are outnumbered.

Senator REED. I am completely outnumbered. I can't go any further because that will revive—

[Laughter.]

#### VIRGINIA-CLASS SUBMARINES

Senator REED. Thank you, Mr. Chairman, and I have a great deal of respect from the Navy and the Marine Corps and these gentlemen in particular. Let me go back to the *Virginia*-class submarine. Block 5 acquisition, nine ships in a 5-year period, 2019 through 2023, with an option for one more. The option was in the Navy budget until the very last moment, as the Secretary has said.

I am concerned though that the window for exercising this option will be lost if we don't move quickly. In fact, the number one priority, unfunded priority of the CNO is the *Virginia*-class submarine. So, Mr. Secretary or Admiral Gilday, if the Congress does not fund this second ship today, will it be unlikely we will ever get it because of pressures going forward in the next 5 years?

Secretary MODLY. Sir, I would hope that is not the case. I would hope there would still be an opportunity to recover that at some point in the future, but it will be much more difficult if we don't get it this year.

Senator REED. And that is your view too—

Admiral GILDAY. Senator, I think if it is not in the next budget, I think it becomes increasingly difficult just because of the shear capacity at the shipyard, particularly with *Columbia* coming online. So in my view, it is a capacity issue and now is the time to go after it if we can get it.

Senator REED. And let me also say, I think everyone recognizes that the growing threat on the sea is significant, both from the Chinese and the Russians. Technologically from the Russians, but also geographically in terms of their extended cruises makes these submarines much more valuable than they were, and they are probably the most valuable asset we have but I am not objective when it comes to this topic. If we do fund a second *Virginia*-class boat,

are you in a position to award the option this year, can you do that?

Secretary MODLY. In discussions I have had with Secretary Geurts who looks at this program very deeply, he feels confident that the schedule—and it had been lagging a little bit on the *Virginia*-class. It was behind by about 6 to 8 months. He feels like they are back on track and that we could actually execute if it were done.

#### COLUMBIA-CLASS SUBMARINE

Senator REED. Thank you very much. And let's now turn to the *Columbia*. You would need, and are requesting, incremental funding authority for the boat and fiscal year 2021. And if you don't get that, you are going to have to ask for an additional \$5.7 billion. Is that fair?

Secretary MODLY. That sounds correct.

Senator REED. That sounds correct. So basically the incremental funding will give you the flexibility to fund the ship, keep it on progress, and it is necessary that we do that. So if we don't give any incremental funding, you won't save that money. You will have to take more money out of your highs. Is that correct?

Secretary MODLY. I believe that sounds correct, sir. I can give you an answer on that.

[The information follows:]

The Navy has requested incremental funding authority for the Columbia program to support the award of the construction contract in October 2020. The planned contract will include the first two hulls (SSBN 826 and SSBN 827) and associated design and support efforts. This will enable the Columbia program to begin construction in October 2020, and provide industrial base stability, production efficiencies, and cost savings when compared to individual procurements. This contract cannot be awarded without incremental funding authority in fiscal year 2021.

Incremental funding authority will allow the Navy to program the costs for the first two ships over a 5-year period, reducing pressure on the Navy's shipbuilding account and risk to other shipbuilding programs. The program's approved acquisition strategy and budget requests assume incremental full funding in fiscal years 2021 through 2023 for SSBN 826 and fiscal years 2024 and 2025 for SSBN 827. Beginning in fiscal year 2026, the program's budget requests will include full funding in the year of authorization for SSBN 828 and follow ships. If disapproved, the Navy would be unable to award the option for construction of SSBNs 826 and 827; delaying the start of lead ship construction and delivery schedules, increasing construction costs due to schedule delays and build disruptions, and compromising the ability to meet U.S. Strategic Command requirements.

Further, if incremental full funding is not provided, the program would require an additional \$5.7 billion in fiscal year 2021 to award construction of SSBN 826. The program would be unable to award the SSBN 827 until incremental full funding authority is provided or the ship is fully funded in fiscal year 2024.

#### NATIONAL SEA BASED DETERRENCE FUND

Senator REED. The other point, and it was alluded to and very succinctly and well by Senator Durbin, I think the chairman also mentioned it, the industrial base, we have problems in every industrial base, not just a submarine industrial basic, but we have created the national sea based deterrence fund and that is being used very aggressively to go down not to the primes but to the small contractors and others and improve the quality.

And one of the reactions I have, sort of the compression of the schedule, is that some of the subcontractors need additional assistance at the industrial base training people, cybersecurity issues,

techniques, etc. So we would be well advised to reinforce the National Defense budget, in this case the sea-based deterrence fund?

Admiral GILDAY. Yes, sir. I think so. I would be strongly in favor of that. We are tracking all the parts for *Colombia*. I just stepped through it to our review yesterday where we are taking a look at those vendors that are most at risk with respect to being able to provide parts on time and working very closely with them along the years, as you have mentioned.

One of the thing I would add, sir, is that we will likely be coming with a legislative proposal that gives us—that we would request the authorities to be able to have the flexibility to spend money in cases of a CR (Continuing Resolution). So get back to that incremental funding so that in a program where we have to stay on schedule to get that boat on patrol in 2030, that we make best use of the money that we have.

Senator REED. That is correct. And in fact if we do a CR since the technically the *Columbia* will be a new start, you can't do anything, so we would have to have an anomaly. Is that correct?

Admiral GILDAY. That is exactly right. That is exactly the answer that we are looking for, sir.

Senator REED. Thank you very much. And, Mr. Chairman, at West Point, as I said, I really loved the Navy except for one sad day in December. So I want the record to show that. Thank you.

Senator SHELBY. Senator Collins.

#### DDG-51 ADVANCED RADAR

Senator COLLINS. Thank you, Mr. Chairman. Welcome to our witnesses and thank you very much for your service. Mr. Secretary, last week Admiral Kilby testified that they DDG-51 Flight III with its advanced radar, is the ship that the Navy must have in order to keep up with our adversaries. Secretary Geurts said that the Flight III's are needed to be a firm backbone for the Navy if we are going to compete on a global scale.

In a letter to me dated January 27th, you two talked about the critical role that the DDG-51 Flight III is playing. And that is why I was so surprised and alarmed when the budget came out and showed, as the chairman has indicated, deep reductions in the DDG-51 procurement in the future years defense program. It seems to me that these cuts are contrary to the testimony we have heard about the vital importance of these ships, that they undermined the President's commitment to a 355 Fleet Navy, and they also cause instability in the industrial base.

And we have heard that from a number of our colleagues today. It is important that we continue to add Flight III capability to the plate while also avoiding these up and down peaks and valleys in our industrial base that end up squandering the expertise and training of skilled workers at shipyards like Bath Iron Works. It also frequently causes cost increases in the long run.

So I would urge you to avoid this abrupt change in the number of ships that you plan to procure. I also want to ask you this morning about where we are on an additional follow on multi-year contract for Flight III's. Wouldn't that help to continue to add important capability to the Fleet, save us money, and help ensure that stability in the industrial bases that is so important?

Secretary MODLY. Senator, I agree with everything you said. The DDG Flight III, 51 Flight III is critical. It is going to be a critical part of our future Force. In the 2021 budget, we had to make some tough choices in 2021 that were basically focused on readiness and the safety of our sailors that are on these ships. And as you know all too well, a couple years ago, we had some very horrible tragedies on a couple of these ships largely because they were being overworked, we didn't have enough people on them. So we are trying to bring up the number of crew members. That costs money.

So we had to make some choices in 2021. But the long-term future for the DDG-51 Flight III is going to be a critical part of our future Fleet. And as we are looking at this new integrated Force structure assessment, it is part of that too. So we need to do a bit of a reset here in 2022, as we look at 2022, and we do that problem, in terms of how we do the types of things you are talking about, how we develop stability in the industrial base so we don't have these perturbations every other year.

And using these multi-year contracts, which we have done for the submarines, which we have done for the carriers, they are very, very helpful because not only do they provide stability to the industrial base, they drive the cost down for us as well. So yes, we are looking at all those factors.

Senator COLLINS. Well again, I think that it is very evident where you look at where our ships are deployed today that there is stress on our sailors, stress on our ships, and we need more of both. Admiral, I appreciate your recent visit to the Portsmouth Naval Shipyard in Kittery, Maine, which is often called the gold standard of public shipyards because of its efficiency and high quality work. And I appreciate the Navy's attention of the modernization needs of our shipyard.

#### SHIPYARD INFRASTRUCTURE INVESTMENTS

I noticed that in this year's budget request, the Navy is seeking authorization and partial funding for the \$715 million multi-mission dry dock one extension. And the Portsmouth Naval Shipyard is expected to receive \$160 million. I know that is going to be funded in increments. Could you talk about how important these investments are in order to ensure that the Navy's submarines are maintained on time and can be deployed.

Admiral GILDAY. Senator, I agree with you that that the public shipyards that we have, the four yards, are really the crown jewel in the crown of the industrial base. It keeps our Fleet operating. Up in Portsmouth and the other yards, the average age of these yards is 76 years old where—

Senator COLLINS. Portsmouth's is 200 by the way. It is the oldest one in the country.

Admiral GILDAY. And so the infrastructure we have neglected honestly for a long time, it is fair to say that the condition of the infrastructure across those four yards is poor, hence our investment of \$20 billion for the integrated optimization plan. We have three projects ongoing this year. One of them is at Portsmouth. We have eight MILCON (military construction) projects in the 2021 budget, two of those are for Portsmouth, and they are spread across the other yards as well.

And so we consider those—we would like to keep that investment strategy on track and continue to put money against it for all the reasons that you have stated, ma'am. The other thing in terms of the workforce is, we have paid very close attention to optimizing the flow of work across those yards so that we keep those folks employed because we can't face a situation again where we actually reduce that workforce to our detriment down the line because we cannot—it takes 40 years to get a master shipbuilder to actually build one, over four decades, and so we are not going to hire somebody off the street.

Senator COLLINS. Thank you, Mr. Chairman.

Senator SHELBY. Senator Murray.

Senator MURRAY. Thank you very much, Mr. Chairman, Ranking Member. Really appreciate the opportunity to be here today and thank you to all of you for all the work you are doing. Mr. Secretary, I wanted to start with you and I want to talk about coronavirus. My home State of Washington is really an epicenter of this right now, but it is coming to everyone. In my State, there has now been 24 deaths. It is counting, and the number of people, we are not even saying anymore because it is growing so much.

And this is really a serious crisis and every Government entity has to be equipped for a really a comprehensive response. It is not something we can do on the fly or last minute. We have to be prepared. We have to be prepared now, and frankly the lack of preparedness I have seen from a number of Federal officials is really disconcerting to me.

#### COVID PREPAREDNESS

So I wanted to ask you today how you are assuring soldiers, sailors, and their families who are stationed in my State and really across the country and around the world now, how is the Navy prepared to deal with this virus as it continues to grow?

Secretary MODLY. So, thanks, Senator, for the question because it is obviously a top of mind right now for all of us. We at the Department of Defense, we have been engaged on this since probably the second week of January in terms of how we can assist, how the Navy can assist, and in the initial phases of this we opened up Miramar Marine Corps Air Station for patients that were there in quarantine for a couple of weeks.

We have done it again now for another 300 coming off the cruise ship. So we have been engaged in the interagency. In terms of our own process for our own people, we have been very communicative with them in terms of what they need to be doing or passing along all of the basic measures that the CDC (Centers for Disease Control and Prevention)—

Senator MURRAY. To your military bases?

Secretary MODLY. To our military bases, exactly. And the Secretary of Defense, I believe last night signed out something, I hadn't seen it yet, that basically puts out some mandates for personnel moves, etc., to the various countries, in and out of various countries. We were waiting for that to follow on his guidance so that we can flow the same guidance down to our folks as well. So we are very engaged in this. It is a big part of what I do every—

Senator MURRAY. Do you have a plan for testing availability, for isolation, for anything beyond just it is coming to you?

Secretary MODLY. All the individual bases are going through that process in terms of how they would handle it on their individual bases. Some of them have unique circumstances like the Naval Academy, for example. All of our midshipmen are in spring break right now. And so, we stopped them from going to certain countries for spring break, but they are coming back here at the end of this week.

The superintendent has already set up facilities there if we need to isolation for those and testing for people who have symptoms. They are going to do a very extensive interview, and when every midshipman comes back, to ask them, where have you been? Who did you speak with? All those types of things. So each base is doing different things depending on the population that they are dealing with.

Senator MURRAY. Are you talking to them about social distancing? Are you talking about—

Secretary MODLY. Yes, ma'am. All that type of guidance is going out. I have already put out two vectors. I put out a vector message to the Fleet every Friday. I have already done that twice in the last couple weeks in terms of guidance.

Senator MURRAY. And what about a protective equipment. Do you have what you need?

Secretary MODLY. I am going to turn that to the CNO. I don't know, do you have an answer to that one?

Admiral GILDAY. We do have protective equipment in terms of, you know, we would prioritize the issuance of it. I think ma'am, you know, with the absence of a vaccine and then we do have testing, we do have that actually can conduct a test Force, but as you know, nationally we are trying to increase the amount of testing kits that we distribute.

And so until we do that, we are really trying to minimize the risk of anybody contracting it and then transmitting it. And so we have taken a number of steps, Secretary Modly just mentioned, and the Secretary of Defense, I expect will come out with top-down guidance today. The Joint Chiefs just met a day and a half ago and provided him our best advice. And so I would expect that we will see even more top-down guidance today.

Senator MURRAY. Okay. Can that guidance be shared with us when—

Admiral GILDAY. I am sure it will be public, ma'am. There is no reason why it wouldn't be.

Senator MURRAY. Okay. Do you have the resources you need to deal with this?

Secretary MODLY. I think right now we have the resources that we need to deal with it. We have not seen significant outbreaks anywhere in our Force. I think right now we only have two or three people in the service that have tested positive. So I think we are okay right now, but that may change.

Senator MURRAY. I understand that DOD (Department of Defense) has started to shut down some of the schools and childcare centers that are on the installations that obviously placing a burden on families. How are you dealing with that?

Secretary MODLY. Well with respect to—I am not—that is another thing that has come up to the individual commanders to make that decision as to whether or not they want to do it. I know with respect to the schools, they are looking at ways to possibly do tele-school for those students.

Senator MURRAY. I would suggest that all of your schools be ready with a plan should they have to shut down with how they can do online learning, how they deal with childcare, how they deal with nutrition, all those things. In my State, they are doing that, and having a plan in place for that ahead of time would be really important for all of your childcare centers schools. And any other information you can get us on that, obviously.

Admiral GILDAY. Ma'am, so we are actually doing that right now in some locations with virtual training. We have a plan at the Naval Academy in case a worst-case plan if we have to stop classes. And so the graduating class—we would be in a place—we could actually graduate them on time or even early if we had to.

And so we are looking at that. In terms of shutting down schools and childcare centers, we are doing that in the case basis. We are trying to ensure that we are stitched with the local communities as well so we are not out of sync. And so that is an important consideration.

Senator MURRAY. Okay, great. Thank you very much. Appreciate it.

Senator SHELBY. Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman. Gentlemen, thank you for your service. Thank you for your leadership. I am just reading through my clips this morning from the State of Alaska a short little article here on interception, aircraft interception by U.S. and Canadian aircraft of two Russian aircraft that flew over the Beaufort Sea, near the Northern Alaska Coast. NORAD (North American Aerospace Defense Command) is doing what NORAD is doing. We appreciate that a great deal.

As you know, I am very Arctic focused and I think appropriately so, and I will share with you this morning, I am really somewhat surprised as I come in and look fully at the statement to see bare mention of anything Arctic related. You have a recognition about China's investment in the Arctic and go on to say investment in infrastructure needed to dominate the emerging Arctic recognition. You are recognizing the new trade routes opening up throughout the Arctic, and yet as we think about where the Navy is, where the Marines are when it comes to the Arctic, I worry that we have got a significant gap.

Mr. Secretary, as you will recall, Secretary Spencer leaned in very, very, very much leaned in on the Arctic in a way that was, I think, very encouraging for us looking long-term about the issues as they relate to Russia, as they relate to China, but a level of awareness and preparedness. And so my questions this morning will be in this vein.

#### THE ROLE OF THE NAVY IN THE ARCTIC

First of all, I would like to hear directly from you what you believe the role of the Navy should be in this emerging space. Some will say it is the emergence of a brand new ocean, the equivalent

of the Mediterranean only it is up in the high North. Do you believe that from Navy's perspective, this has to be a priority for us, and if so, how does this budget reflect that?

Secretary MODLY. I will take that in two parts, Senator. So with respect to the prominence of the Arctic and in terms of our thinking, it is very prominent in our thinking because as you have stated, the Navy has a responsibility for maritime security and there is a whole, basically a brand new ocean opening up there because of the loss of the polar ice caps up there. And also the very aggressive and well stated intentions by both the Russians and the Chinese to make that part of their area of influence.

And they are demonstrating that on a daily basis. So yes, exactly. So part of the reason, part of the justification for why when we look at our Force structure assessment, it drives us to a number bigger than 355, is that, because our responsibility for being able to operate in more places and more different times—at the same time, excuse me, requires us to have more ships. It is the only way you can do it. So that is part of it.

The second part of it is, it is a joint problem as well. And so just over the last couple weeks, I have had conversations with Secretary McCarthy and Secretary Barrett, and we are forming a tri-Department group to look at not just Arctic but how that would impact basing situations and decisions for the Alaska area because it is a huge region—preaching to the choir here, I know, but it is a huge strategic asset for the country up there, in that location, and we need to think how we can leverage each other in terms of our implementation of an Arctic strategy so that we can make the best use of all the skills that we can bring and all the resources we can bring to bear up there. So we—

Senator MURKOWSKI. And it does have to be, excuse my interruption but I am running out of time. It does have to be that joint approach and I appreciate that focus. And I am going to be traveling with Secretary Barrett and had that opportunity for further discussion.

On the training side, I am always worried, always worried that we are not doing enough cold weather training. We have got the facility in California. Last I checked, the weather is pretty decent there as opposed to what we are facing up North, and we have had an opportunity to have the Marines out for an exercise last year. I understand it was really tough and that is a good thing because you need to be tested in that tough and really difficult environment out there.

General Berger, can you speak to the priority of Arctic and cold weather training for the Marines? Do you see further exercises in places like Adak or whether it is up at the cold weather training center in Black Rapids. What do you see on the training side?

General BERGER. Viewed through two lenses, the way you broke them out, homeland defense part and then maintaining the free and open commerce part, both the Department of Defense, both the Naval Department fills a role. For us, as you point out, training, operating in that environment is not the same as another one, both in terms of equipment and the types of how you will operate is different, fundamentally different.

And you have to experience that to really deeply understand it. We will continue to train in Alaska for those reasons. You can't replicate that in many other areas. The last part of that, ma'am, as you are familiar with, the other value of going to Alaska in addition to the environment is this scale at which you can train. It is huge and we have to be able to stretch the muscles of the Joint Force, of the Naval Force over great distances, across water, across terrain, and there are very few places I know of on the Earth where you can do that on a scale that you can do it in Alaska.

Senator MURKOWSKI. Well, we have the scale in the air on the land and in the sea, as you know, and we want to make that training available. It continues to be my understanding that the facility that we have there, Black Rapids, is good and solid and it is underutilized, which I still don't understand why we can't do more with that. We have opportunities out in Adak, and again, we would encourage those opportunities, because as you point out, the training and the experience is unparalleled. Mr. Chairman, thank you.

Senator SHELBY. Thank you.

Senator Baldwin.

Senator BALDWIN. Thank you, Mr. Chairman and Ranking Member for holding this hearing. Thank you all for testifying and for your service. Mr. Secretary, I know that our chairman has already asked some questions about the FFG(X) Program. I want to extend that discussion a little bit longer.

#### FFG(X) PROGRAM

As the Navy transitions from the littoral combat ship program to the frigate program, I am very concerned about the potential impact to Wisconsin shipyards and the Wisconsin shipbuilding industrial base. As you know, Fincantieri Marinette Marine in Wisconsin has hired and trained a very dedicated workforce to build and deliver 12 of the littoral combat ships and has increased hiring to ensure competitiveness in the frigate selection process.

As you look to transitioning to the frigate and in light of cuts to shipbuilding in the President's 2021 budget, how are you going to ensure that the shipbuilding industrial base from shipyards to the supplier base will not be impacted?

Secretary MODLY. Well as you mentioned, ma'am, the frigate is a critical part of our strategy. It is a critical part of our new Force mix, regardless of whichever assessment you take, the one that we recently did, the one that Secretary of Defense is working on. The frigate is a key element to that. It fills a hole in our Force mix that we currently can't fill.

So I can't speak specifically to what is happening with the procurement. It is in a procurement decision now, and so we have some good competitors in that process. One of the evaluation criteria they will make is the impact on the industrial base. They have to do that.

So I am sure that they will look at all the factors and make the best decision and that will come to me for final approval. But in terms of the ship itself, we need that ship. I believe we need a lot of them, and I think that eventually we will get on a path to doing that.

Senator BALDWIN. Additionally, Mr. Secretary—well, first of all, I just commend you for the work you have done to strengthen Naval readiness and to keep Americans safe now and into the future. One part of readiness is ensuring a high quality of life for our sailors and another is about ensuring that future ships are designed to improve maintainability to prevent additional burdens on the Navy's ship maintenance backlog. How do you go about accounting for those factors, quality of life and maintainability, as you evaluate competing designs for the frigate?

#### QUALITY OF LIFE AND MAINTAINABILITY

Secretary MODLY. I think all those factors will be considered, particularly as we are looking to put fewer and fewer people on our ships, on their platforms, because of just the cost of people and the level of automation that we can have on them allows that to happen. So what that does is it also translates into ships that are far more technically advanced, technologically advanced, which requires crews that are far more educated and those are harder people to keep because they have opportunities to go do things outside of the Navy.

And so it is hard to retain them. So you have to think about the quality of life. What is it like living on that ship? You know, what type of crew comforts do you have? What type of cycles, how often are you having to go out to sea, all those things factor into it. So particular as we start looking at—and this is across the whole Force because we want, we are investing heavily in Naval education for our Force.

We want very, very smart, agile minded people, and the opportunities for people like that outside the Navy in a strong economy is difficult. So we have to make sure that all those factors are part of our calculation in terms of what type of ship we buy, how we man them, how we crew them, etc.

Senator BALDWIN. Thank you. General Berger, I understand that the U.S. Marine Corps is in a transition period and the priorities do change, but I am concerned with a misconception that the JLTV (Joint Light Tactical Vehicles) was designed only for Iraq and Afghanistan and it doesn't fit within the National Defense Strategy.

And while this is mainly a problem I have with the Army's procurement plan, I am concerned with the signal it sends to industry when any service begins using successful acquisitions programs as bill payers for other priorities in future years.

Now, I will follow up with you in writing to get more detail, but leaving aside its various mission packages, wouldn't you agree that the JLTVs hull design would be useful against anti-vehicle and personnel landmines that we may see in future conflicts, and that we would want to see a similar hull design required in future manned platforms anyways?

General BERGER. Absolutely. I have been up to the factory where they build them, walked the line, seen what they have constructed. Beyond that, I was amazed, on our own working with Marines, took the cab off of it, mounted an elevated missile launcher, and say we can make this unmanned and have it satisfy your need for a vehicle weapon system that can be anti-ship. They are a phenomenal group there. We need that platform. Yes.

## ADDITIONAL COMMITTEE QUESTIONS

Senator SHELBY. Thank all of you for your appearance here today, and I have a number of written questions and other Senators may have too for the record that we hope you would answer.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

## QUESTIONS SUBMITTED TO HON. THOMAS B. MODLY

## QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

*Question.* The U.S. Marine Corps was funded in fiscal year 2020 to complete air-drop testing of a low-cost munition based on the Advanced Capability Extended Range Mortar.

Please provide an update on the program.

*Answer.* In fiscal year 2018, the Marine Corps terminated the Advanced Capability Extended Range Mortar (ACERM) effort—a ground launched mortar munition—because it was not in alignment with modernization priorities. In fiscal year 2018 and 2019, Congress provided the Marine Corps with \$9 million and \$7 million, respectively, for a “UAS air-delivered extended range munitions demo” which initiated the Low Cost Air-Drop Munition (LCAM) project currently underway. The principal performer for LCAM is Simmonds Precision Products, Inc., a subsidiary of Collins Aerospace of Vergennes, VT, and the same developer for much of the previous ACERM munition (LCAM is based on the ground launched ACERM munition). In fiscal year 2021, Simmonds Precision Products, Inc. plans to conduct three flight test events of LCAM munitions against stationary and moving land targets at the Dugway West Desert Test Center.

The first developmental flight test, scheduled for October 2020, will validate the LCAM initialization sequence, via the bomb rack, using the modified Universal Armament Interface developed for the MQ-1 Predator. Further, it will demonstrate safe separation from the launch platform and collect airframe and sensor performance data. The second test, scheduled for February 2021, will validate Bomb Rack Unit (BRU) function with multiple rounds and proper sequence and satisfaction of the fuse arming environments. It will also expand the verified performance envelope of the LCAM airframe and guidance system. The third developmental flight test, in June 2021, will have similar objectives as the second flight test.

The Congressionally-funded project will provide the Marine Corps with \$15 million in fiscal year 2020 for “air drop extended range munitions.” A contract with Simmonds Precision Products, Inc. is currently in development. Expected tasking will consider a high explosive warhead drop, flexibility for different multi-munitions capacity UAS rack systems, munition airframe modifications for increased range and maneuverability, navigation performance in GPS-absent conditions, tactical datalink and inter-munition datalink connectivity, autonomous terminal guidance, munition survivability features for the terminal phase of flight, greater target seeker capabilities, and target impact accuracy improvements.

*Question.* How do you intend to use the results of this program to advance low-cost precision fires technology?

*Answer.* We expect the results of this program could provide a number of insights related to low-cost precision fires technology. Specifically, we anticipate results could advance our understanding of low cost mid-course navigation systems in GPS-denied environments; intuitive tools for mission planning of complex engagements involving multiple targets; munition airframe optimizations for increased range and maneuverability; multi-spectral target detection and identification seekers; and autonomous terminal guidance. To ensure insights are widely shared across the joint force, the Marine Corps LCAM project team is closely coordinating with Army and Navy project managers who own LCAM enabling technology, for example, by inviting them to all flight tests and formal design reviews.

## QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

*Question.* What Navy programs have had the most impact on preventing suicides? And, what adjustments must be made to further ensure their effectiveness?

*Answer.* To address suicide and other destructive behaviors, the Chief of Naval Operations established the Culture of Excellence, a Navy-wide framework designed

to promote signature healthy behaviors and enhance warfighting excellence by instilling toughness, trust, and connectedness in Sailors. The Navy is using evidence-based primary prevention strategies to reduce destructive behaviors through decreased risk factors and to promote signature healthy behavior by increasing protective factors.

Relationships, legal problems, financial difficulties, transition periods, and mental health issues continue to be common stressors in most suicides. Of note, over 40 percent of Sailors who died by suicide never deployed.

As part of our Culture of Excellence, suicide prevention measures have been developed to increase embedded mental health providers who deliver direct support to our warfighters as far forward as possible for early intervention. We have also placed deployed resiliency counselors, who are civilian social workers, onboard aircraft carriers and large amphibious ships. Mental health and substance misuse services are available worldwide, including in mental health specialty clinics, primary care facilities, Navy installation counseling centers, on the waterfront, and embedded within the Fleet. At the unit level, Suicide Prevention Coordinators ensure commands have effective and comprehensive suicide prevention programs to help equip Sailors with the knowledge, skills, and resources to proactively navigate stress, support one another, and respond appropriately in the event of a crisis.

The Sailor Assistance and Intercept for Life Program is an outreach effort that provides rapid assistance, ongoing clinical case management, care coordination, and reintegration assistance for Sailors during the 90 days after a suicide-related behavior, the period of highest risk. This program boosts the resources available to Sailors and provides additional support to commands to help reintegrate Sailors after a suicide-related behavior and while receiving a mental health intervention. Additionally, the Expanded Operational Stress Control program was developed for use in conjunction with the Command Resilience Team Network to assist leaders in the use of chaplains, medical personnel, counselors, and community resources to build a culture that is supportive of help-seeking behaviors. The program's goal is to assist Navy leaders build resilience within commands and individual Sailors by increasing the awareness and understanding of stress and providing strategies to mitigate detrimental effects. The Navy's vision is to develop an environment in which all Sailors are trained and motivated to navigate stress, assist their shipmates, and most importantly seek help from available resources early.

*Question.* What specific programs are requested in the fiscal year 21 budget that requires appropriating?

*Answer.* The Navy appreciates the support Congress has given and continues to give to the problem of suicide in the military. We ask Congress continue to support the Navy suicide prevention program, embedded mental health providers, the Navy expanded Operational Stress Control program, and our Culture of Excellence campaign.

*Question.* Why has the Task Force Climate Change been terminated? And, what office has taken over its responsibilities?

*Answer.* The U.S. Navy Task Force Climate Change (TFCC) was established in 2009 in recognition of and to address important challenges for the Arctic and climate change, with the main objective being the incorporation of climate resilience as a cross-cutting consideration for planning and decisionmaking across the Navy. Through the work accomplished over nearly a decade, the Task Force met this objective by enabling the Navy to have knowledgeable, focused, and deliberate discussions that would inform and influence future Navy policy regarding Arctic capabilities and climate change considerations across the Department.

The Task Force was not intended to continue indefinitely; it was only to remain in effect until superseded by strategy and policy. In January 2016, the Department of Defense published Directive 4715.21, Climate Change Adaptation and Resilience, and in January 2019, the Navy published its Strategic Outlook for the Arctic. The release of these strategic documents highlighted the successful integration of climate change issues into institutional business processes allowing for the subsequent stand down of the Task Force.

*Question.* Please provide specific programs, projects, and staff levels conducting this work currently, including a detailed comparison with the Task Force Climate Change program.

*Answer.* The Chief of Naval Operations (CNO) assigned TFCC leadership and functions as additional duties to the Oceanographer of the Navy's staff; it was not intended to be a long-standing nor separately sourced staff. These additional duties and functions have been realigned and transitioned into existing responsibility areas contained in OPNAVINST 5430.48 series (CNO Operations Manual). For example, rather than TFCC providing public affairs guidance for Arctic and climate change issues, the Navy Chief of Information has that responsibility. Additionally, the

Navy's strategic approach to the Arctic outlined in TFCC Arctic Roadmap in 2009 and again in 2014 was transitioned to the Deputy Chief of Naval Operations Plans and Strategy (OPNAV N3N5), the Navy's expert in policy and strategic guidance development. OPNAV N3N5 led the generation of the January 2019 "Navy Strategic Outlook for the Arctic." DON incorporation of climate resilience considerations into existing responsibility areas did not require separate resourcing or staff.

The Navy views climate change as a critical readiness and national security issue, both afloat and ashore, and will continue to include climate change and environmental resilience considerations in its strategic approach to support national security priorities in the maritime domain.

*Question.* Do you believe our Navy and Armed Forces must adapt and adjust to new security threats amidst a changing climate? If so, how? And what can Congress do to help?

*Answer.* Alongside other components of the Joint Force, the Navy's primary mission is to defend the United States homeland, and our interests and commerce, from attack. In this era of great power competition, the major challenges to our security and prosperity come from the growth and modernization of the navies of our rivals, China and Russia. Building and fighting a Navy that deters or, if necessary, defeats these competitors is our primary focus. Even so, a changing climate will have compounding effects on other trends in great power competition. For example, the reduction of Arctic sea ice is opening new sea lanes to trade, creating significant interest in Moscow and Beijing. Consequently, the Navy expects the Arctic will become yet another—if secondary—venue for great power competition. Moreover, since many climate models predict rising sea levels, the Navy must ensure our base infrastructure is prepared to support deterrence or combat operations regardless of prevailing environmental conditions. Furthermore, an increase in storm activity at sea could negatively impact operational tempo—although this will be true for our allies and potential adversaries alike. Lastly, we are aware that climate change may affect some countries and regions more dramatically than others. For instance, American partners in critical regions such as East Asia or the Indian Ocean may request additional humanitarian assistance and disaster relief support from the maritime services.

*Question.* Do you concur with Admiral Davidson's assessment that there is insufficient infrastructure at Pacific training ranges (including JPARC in Alaska) to prepare the next generation of naval warfare? If so, how do you believe that the Navy must adapt to meet its additional Naval training requirements in the Pacific and cold-weather operations?

*Answer.* The Navy acknowledges that training capability gaps currently exist in the Pacific Fleet. To align with the National Defense Strategy and address the near peer threat, the Navy has made significant investments to address critical training range capability gaps in the Pacific Fleet. For Presidential Budget (PB) 18, the Navy invested \$158.4M across the FYDP to upgrade Pacific Fleet training capabilities. PB19 included an additional investment of \$203.8M across the FYDP to recapitalize the Barking Sands Tactical Underwater Range (BARSTUR) complex at the Pacific Missile Range Facility in Hawaii. PB20 added an additional investment of \$66.7M for modifications of the Electronic Warfare systems at Fallon Range Training Complex in Nevada. The Navy has invested \$429.8M towards improving the Pacific training ranges in the last three budget submissions.

The Navy is investing in under-water training and tracking system modernization through the Undersea Warfare Training Range program for both shallow and deep-water ranges. The Navy is investing in portable tracking ranges in support of Forward Deployed Naval Forces. The Navy is in the process of renewing the land withdrawal and pursuing expansion of the Fallon Range Training Complex to address aviation training requirements associated with fifth generation aircraft and long-range weapons; SEAL tactical ground mobility training and all pre-deployment SEAL team training.

Although live training remains an irreplaceable element of force generation, the Navy is also investing in Live, Virtual and Constructive (LVC) training infrastructure to better train the fleet in an evolving warfare environment, and address near peer threats under the fiscal and spatial constraints of our training environments. LVC integrates existing infrastructure into the Navy Continuous Training Environment (NCTE) network to provide a more complex, adaptive, secure and comprehensive training environment across the surface, undersea, and air domains. The Navy has invested \$1.85 Billion between PB18 and PB21 to enhance LVC training. The target date for declaring full operating capability of joint, multi-domain, globally distributed LVC training is 2026.

Additionally, the Navy is participating in the INDOPACOM commissioned survey of Pacific training ranges for their potential use as multi-domain experimentation,

exercise and training venues (to include recommended infrastructure upgrades to facilitate joint/combined activities using live, virtual and constructive technologies). The survey is currently in progress.

With regard to cold weather training and operations, Forward Deployed Naval Forces in Japan routinely train and operate in cold weather in and around Japan and the Korean Peninsula. The Navy participates in exercises such as Northern Edge and in the Arctic Expeditionary Capabilities Exercise in the Aleutians and Alaska's inland waterways. The Lessons Learned from these cold weather training exercises have not identified any significant training capability gaps associated with operations in these environments against near peer competitors.

As the Navy seeks to enhance capabilities to its ranges to prepare for great power competition, it also remains concerned with the potential degradation of existing range capabilities from threats such as encroachment from incompatible development. In the Pacific, offshore energy development poses an emerging challenge to maintaining training capacity in offshore ranges. The Navy is currently engaged with the Department of the Interior and State governments to ensure offshore wind development proposed off the coasts of California and Hawaii do not significantly impact range capabilities and fleet readiness.

The Navy understands that winning in the future operating environment will require comprehensive integration with Marine Corps capabilities through concepts such as Expeditionary Advanced Base Operations and Littoral Operations in a Contested Environment. Our integrated naval capabilities cannot be achieved without the ability to train together. Therefore, U.S. Fleet Forces Command (USFFC) helped establish—in partnership with Marine Forces Command—the Maritime Working Group, which focuses on identifying and resolving naval integration gaps. USFFC has also invited Marine Corps representatives from Training and Education Command to participate in the Fleet Training Requirements Management Group and Fleet Training Wholeness resourcing process. The Marine Corps is also working to establish a Live Virtual Constructive Training Environment program, which the Marine Corps plans to connect to the NCTE as a first step towards creating a true naval training environment.

As described in the 38th Commandant of the Marine Corps' Planning Guidance (CPG), "III MEF will become our main focus-of-effort, designed to provide U.S. Indo-Pacific Command (USINDOPACOM) and the Commander, 7th Fleet with a fight-tonight, standing force capability to persist inside an adversary's weapon systems threat range, create a mutually contested space, and facilitate the larger naval campaign." To support this, and as directed as part of the CPG, the Marine Corps is developing a training range modernization plan that embraces ranges, airspace, and training areas that incorporate improved instrumentation, enhanced feedback, and target systems that support training requirements from the individual Marine through the most capable Marine Air Ground Task Force to accomplish naval tasks in a peer threat environment.

The Defense Policy Review Initiative includes relocating deploying units from Okinawa, Japan to Guam, and developing associated basic training ranges and infrastructure. On Guam, individual Marine skills ranges are part of the Guam Supplemental Environmental Impact Statement (EIS). In a separate action, USINDOPACOM, with the Marine Corps as executive agent, is sponsoring the Combined Joint Military Training (CJMT) EIS to address existing and future training deficiencies in the Western Pacific, specifically the Mariana Islands. The CJMT EIS effort is studying the possibility of developing new unit and combined arms training range capability and capacity in the Commonwealth of the Northern Mariana Islands. These ranges and their associated airspace will provide the necessary training opportunities for Marines stationed in Okinawa and forward deployed to the Western Pacific.

The Marine Corps has budgeted for approximately \$28 million across fiscal year 2020 and fiscal year 2021 for investments in range and training simulators across Guam, and the Marine Corps will continue to do so in future years. Finally, the Marine Corps is using training opportunities in Australia to address Rotational Force training requirements.

In conclusion, the Navy is actively addressing the capability gaps in Pacific Fleet training ranges and is providing the required investments to improve the current training range infrastructure.

## QUESTIONS SUBMITTED TO ADMIRAL MIKE GILDAY

## QUESTION SUBMITTED BY SENATOR SUSAN M. COLLINS

*Question.* Admiral, last week you confirmed that the Navy is supportive of requests from U.S. European command that an additional two DDGs be assigned to Rota, Spain. I'm pleased to hear that as this is something I raised with your predecessor Admiral Richardson last year in response to increases in Russia maritime activity. How would these additional destroyers in Europe help U.S. European command and our NATO allies deter Russia?

*Answer.* The four DDGs already homeported in Rota, Spain as part of Forward Deployed Naval Forces—Europe (FDFNF-E) maintain ballistic missile defense (BMD) of continental Europe as their primary mission. These efforts are part of the European Phased Adaptive Approach to BMD, which is a critical component of NATO's Alliance-wide BMD capabilities. In addition to these duties, FDFNF-E ships regularly conduct theater security cooperation activities with allies and partners that enhances NATO's wider deterrence efforts and bolsters our collective security. FDFNF-E ships are also called upon to support combat operations in other theaters as required, drawing them away from the BMD mission and security cooperation efforts.

There is currently no plan to increase DDGs in Rota, Spain. However, two additional DDGs forward deployed to Europe will provide EUCOM needed capacity and flexibility to continue meeting its enduring mission requirements while also engaging in security cooperation activities and support to other operations as required. Additional capacity and flexibility will also enable EUCOM to more effectively track and respond to increasing Russian naval presence across the region. As GEN Wolters has said, additional DDGs in Europe as part of FDFNF-E will improve EUCOM's ability to gather vital indications and warnings in potential battle spaces throughout its area of responsibility, and conduct command and control in potential contingencies.

## QUESTIONS SUBMITTED BY SENATOR ROY BLUNT

## F/A-18E/F SUPER HORNETS

*Question.* Admiral Gilday, I want to thank you for the Navy's commitment to implement the National Defense Strategy in this year's budget request. Your budget shows there were clearly some tough choices to be made for balancing priorities. In your fiscal year 2021 budget request you included funding for 24 Super Hornets, to round out the third year of a multi-year buy. However, your budget has eliminated the purchase of 36 additional Super Hornets over the next 3 years from the schedule. This effectively eliminates 3 squadrons of new Super Hornets and puts the entire production line at risk of closure. Admiral Gilday, first, I would like to congratulate you and the Navy for achieving your goal of 80 percent mission capable rate for the Super Hornet and Growler fleets. The Navy has made thoughtful investments in recent years with the multiyear procurement contract for new Super Hornets and working at its depots to increase readiness across your F/A-18 fleet. However, I am concerned that after this fiscal year, the Navy has decided to stop buying Super Hornets. I understand that you are taking other measures to support tactical aviation, but buying new Super Hornets is the most direct way to address your shortfall and maintain high readiness. I think it is a mistake to stop buying Super Hornets at this time. Can you please tell me if it is true that the Super Hornet program is still the Navy's most cost effective tactical fighter to procure and operate in the fleet?

*Answer.* The Super Hornet is less expensive to procure and operate than the Joint Strike Fighter today. The unit recurring flyaway (URF) cost in fiscal year 2019 for the F/A-18 E/F was \$65.2M while the F-35C was \$98.1M. To operate the aircraft, the cost per flight hour (CPFH) in fiscal year 2019 Dollars was \$22.7K for the F/A-18 E/F and \$49.1K for the F-35C. CPFH of 4th and 5th Gen platforms is expected to equalize near the end of the FYDP as a greater number of F-35C will be operated in the Fleet. Strike Fighter Inventory Management (SFIM) modelling accounts for new procurement Block III Super Hornets, Service Life Modification Block III Super Hornets, new procurement JSF, depot maintenance repair, and aircraft projected utilization based on the Optimized Fleet Response Plan. The SFIM model projects that Strike Fighter shortfall is almost completely eliminated by the end of the FYDP, as previously briefed.

*Question.* And, if that is the case, why did the Navy make the decision to eliminate 36 aircraft that were in your previous budget?

*Answer.* Prior delays to the Joint Strike Fighter program required the Navy's F/A-18E/F fleet to absorb risk to backup and attrition aircraft. However, the Department is committed to achieving a mix of 4th and 5th Gen assets by 2030 with F-35C procurement and F/A-18E/F SLM providing mechanisms to manage these risks. In order to meet the demands of the National Defense Strategy, the prudent decision was to transition investment into development of the Next Generation Air Dominance (NGAD) Family of Systems (FoS) in order to replace the F/A-18E/F as it reaches end of service life. This strategy will ensure that Naval Aviation maintains air warfare dominance for decades to come. Additional details are available at a higher classification.

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QUESTIONS SUBMITTED TO GENERAL DAVID H. BERGER

QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

*Question.* What programs have had the most impact on preventing suicides? And, what adjustments must be made if they are needed?

*Answer.* The Marine Corps approaches the challenge of suicide prevention through five major programs and initiatives, described below. Collectively, we believe these programs and initiatives are helping to reduce the incidence of suicide, even if those reductions are modest.

- Unit Marine Awareness and Prevention Integrated Training (UMAPIT):* updated for CY20, UMAPIT (pronounced YOU-MAP-IT) teaches every Marine the basics of suicide prevention, normalizes life changes, and emphasizes seeking help early in hopes of decreasing stigma. Research on social media and suicide is also included, as well as suicide safeguards. Survey results indicate this training is effective at increasing overall behavioral health knowledge, knowledge of where to refer Marines, likelihood of making Behavioral Health referrals, belief that it is socially acceptable to discuss suicide, and belief that suicide can be prevented.
- Combat and Operational Stress Control (COSC):* COSC initiatives promote prevention, intervention, protection and crisis response for stress reactions at the unit level. Operational Stress Control and Readiness (OSCAR) team training is one such COSC initiative and was updated for CY20. This training builds teams of selected Marines and unit leaders as well as medical and religious personnel who work together to act as sensors for the commanders by noticing small changes in behavior and taking action early. OSCAR teams support the commander in building unit strength, resilience, and readiness. The Marine-led training teaches team members to help Marines face everyday stressors before they become overwhelming. OSCAR team members use their leadership skills and knowledge of the full spectrum of stress reactions to break stigma and intervene when Marines show signs of stress, including suicidal ideations.
- Behavioral Health Non-Medical Counseling:* Non-medical counseling services are available to Marines to augment a Commander's efforts to teach and strengthen coping skills, mitigate stressors, and identify Marines in crisis, and/or at risk for suicide.
- Marine Intercept Program (MIP):* MIP is a targeted intervention that expands follow-on care for Marines who have attempted suicide or have had a suicide ideation. MIP provides follow-up contacts by telephone or in person, safety planning, and suicide risk assessment as well as coordination with the Marine's commander.
- Death by Suicide Review Board (DSRB):* DSRB analyzes all deaths by suicide to provide strategic and operational recommendations that address multiple Marine Corps suicide prevention goals. Recommendations from DSRB help commanders at all levels to understand the risks of suicide and improve prevention initiatives.

*Question.* What specific program are you implementing to improve the quality of life?

*Answer.* We are looking at possibilities from our public health approach to suicide prevention that acknowledges a complex interplay of individual-, relationship-, and community-level risk factors. This approach focuses on reducing suicide risk of all Service members and their family members by attempting to address the myriad underlying risk and socio-demographic factors (e.g., reluctance towards help-seeking, relationship problems, legal and financial concerns, access to lethal means). At the same time, this approach focuses on enhancing protective factors (e.g., strong social connections, problem-solving, and coping skills). Risk and protective factors can be mitigated and strengthened, respectively, by quality-of-life programs that offer ap-

propriate resources (e.g., financial counseling, relationship counseling, resilience training).

*Question.* Do you believe our Marine Corps and Armed Forces must adapt and adjust to new security threats amidst a changing climate? If so, how? And what can Congress do to help?

*Answer.* I believe the Marine Corps and joint force must constantly adapt and adjust to the environment, whether in terms of adversaries or climate. Regarding adversaries, the Marine Corps is building a force to deter, compete with, and if necessary, defeat our pacing threat. Your continued support for PB21 will help us achieve that goal. In terms of the changing climate, its effects to date do not necessitate any major changes to Marine Corps programs.

The Marine Corps is prepared and will be prepared to fight in any clime and place and is constantly evaluating the future operating environment to include evaluating threats based on climate change. We are answering the requirements of the National Defense Strategy by building a force to compete against a peer threat in the Indo-Pacific. In order to maintain our current posture the Marine Corps requests continued support of our fiscal year 2021 budget request.

*Question.* Is Arctic and cold weather training a priority for the Marines? If so, what support do you need to ensure Marines get this critical training?

*Answer.* Arctic and cold weather training is a priority for those units which are expected to support specific regional operational plans (OPLANS), rather than a priority for the entire force.

The Marine Corps' primary venue for cold weather training is the Marine Corps Mountain Warfare Training Center, located in the Sierra Nevada Mountains of Northern California. At this facility, Mountain Training Exercises involve several thousand Marines each year and are focused on mobility and force-on-force training in cold weather and high elevation conditions.

The Marine Corps also conducts multiple formal courses for individual leaders in cold weather skills, including weapons employment and mobility across extreme winter terrain at locations in Alaska, Minnesota, Wisconsin, and Vermont.

As an example of the Marine Corps' commitment to cold weather training, in September 2019 approximately 600 Marines and Sailors from I MEF participated in the Arctic Expeditionary Capabilities Exercise in the Aleutian Islands. Additionally, during February and March 2020 Exercise Arctic Edge was conducted in Fort Greely, AK where 336 Marines participated in Joint and combined military operations in and arctic environment.

Additionally, the Marine Corps trains in Norway, above the Arctic Circle, in exercises that enhance interoperability with NATO allies, including the Norwegian Army and British Royal Marines. In the Pacific, the Marine Corps conducts cold weather training in northern Japan and alongside our Korean allies as part of the Korea Marine Exercise Program.

At this time, existing training venues and exercises are sufficient to meet the Marine Corps' needs for Arctic and cold weather training.

*Question.* USEUCOM's second priority on their Unfunded Requirements letter calls for \$7.5M for Marine European Training Program—"Life support requirements for Marine Coordination Element, Norway (MCE-N)". Why are no similar requests being made to bring Marines to Alaska as a consistent rotational training program?

*Answer.* To my knowledge, no Combatant Commander has determined that a rotational Marine Corps force is required in Alaska. If and when that times comes, the regional Marine Forces Commander will advise the Combatant Commander on how best to train and employ that force.

*Question.* What do you need from Congress to ensure you have the support needed to make training programs in Alaska consistent? Particularly Black Rapids/Northern Warfare Training Center.

*Answer.* The Marine Corps does not seek additional resources at this time. Our existing training venues and exercises, to include episodic training in Alaska, are sufficient to meet the Service's needs for Arctic and cold weather training.

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QUESTIONS SUBMITTED BY SENATOR ROY BLUNT

MARINES AT FORT LEONARD WOOD

*Question.* General Berger, as you know, Fort Leonard Wood in my home State of Missouri is proud to be home to the most Marines in the Nation outside of a Marine Corps base.

Last year we saw between 5,000 and 6,000 Navy and Marine Corps personnel complete their training at Fort Leonard Wood with over 90 percent of courses being multi-service.

I would welcome you, along with Admiral Gilday and Mr. Secretary, to visit Fort Leonard Wood in the near future.

I want to take a moment to talk about training. Fort Leonard Wood has proven it generates significant efficiencies for multi-service training, which has been realized by all services and several military occupations that currently take advantage.

I understand that education and training are one of your top priorities as Commandant.

You talk about refining relationships to enhance partnerships with other services, in particular with the Navy.

In your Commandant's Planning Guidance you state that the Marine Corps is dealing with antiquated training facilities and ranges as well as lacking modern simulators to sustain training readiness.

In your plan to address these issues have you considered how to further take advantage of existing capabilities from other services, such as what the Army offers at Fort Leonard Wood?

*Answer.* The Marine Corps will continue to explore ways to maximize training at the bases and stations of other services, to include Fort Leonard Wood, in order to meet our force generation requirements. We trained 5,300 Marines at Fort Leonard Wood in FY/CY18, 5,680 in FY/CY19, and anticipate training 4,910 Marines in FY/CY 20. We plan to continue utilizing the facilities at Fort Leonard Wood to meet our force generation needs.

*Question.* Additionally, can you discuss the benefits or drawbacks of conducting training in a multi-service environment?

*Answer.* Conducting training in a multi-service environment can increase efficiency and enhance the warfighting capabilities of the joint force in three ways. First, exposing service members to the operational culture of their service services enables them to be better partners during joint operations. Second, training in this environment encourages the transmission of best practices, with the potential to raise training standards across the services. Finally, training in a multi-service environment has the potential to reduce costs when multiple services can conduct training using the same infrastructure. While the Marine Corps takes every opportunity to train in this environment, the majority of our training will continue to focus on building service-unique capabilities in a naval context.

#### SUBCOMMITTEE RECESS

Senator SHELBY. Mr. Secretary, thank you very much, Admiral, General. The committee stands in recess until Tuesday, March the 24 at 10 a.m. where we will then receive testimony from the Department of the Air Force. The committee is in recess.

[Whereupon, at 11:01 a.m., Wednesday, March 11, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 24.]