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HEARING  
ON  
NATIONAL DEFENSE AUTHORIZATION ACT  
FOR FISCAL YEAR 2015  
AND  
OVERSIGHT OF PREVIOUSLY AUTHORIZED  
PROGRAMS  
BEFORE THE  
COMMITTEE ON ARMED SERVICES  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED THIRTEENTH CONGRESS  
SECOND SESSION  
—  
SUBCOMMITTEE ON SEAPOWER AND  
PROJECTION FORCES HEARING  
ON  
DEPARTMENT OF THE NAVY FISCAL  
YEAR 2015 BUDGET REQUEST FOR  
SEAPOWER AND PROJECTION FORCES  
—

HEARING HELD  
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### WEDNESDAY, MARCH 26, 2014

#### DEPARTMENT OF THE NAVY FISCAL YEAR 2015 BUDGET REQUEST FOR SEAPOWER AND PROJECTION FORCES

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**DEPARTMENT OF THE NAVY FISCAL YEAR 2015 BUDGET  
REQUEST FOR SEAPOWER AND PROJECTION FORCES**

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HOUSE OF REPRESENTATIVES,  
COMMITTEE ON ARMED SERVICES,  
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES,  
*Washington, DC, Wednesday, March 26, 2014.*

The subcommittee met, pursuant to call, at 3:29 p.m., in room 2118, Rayburn House Office Building, Hon. J. Randy Forbes (chairman of the subcommittee) presiding.

**OPENING STATEMENT OF HON. J. RANDY FORBES, A REPRESENTATIVE FROM VIRGINIA, CHAIRMAN, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES**

Mr. FORBES. I want to welcome all of our members and the distinguished panel of Navy and Marine Corps leaders for today's hearing. We have testifying before us on the fiscal year 2015 budget request the Honorable Sean Stackley, Assistant Secretary of the Navy for Research, Development, and Acquisition; Vice Admiral Joe Mulloy, Deputy Chief of Naval Operations for Integration of Capabilities and Resources; and Lieutenant General Kenneth Glueck, Jr., Deputy Commandant for Combat Development, Integration and Commanding General of the Marine Corps Combat Development Command.

Gentlemen, thank you all for being here, for your service to our country. We look forward to your thoughts and your insights on these important issues. First of all, I want to commend the Department on their continued emphasis on the undersea warfare domain. I believe that the United States has a clear asymmetric advantage in this area, and it is critical to continue procurement of two *Virginia*-class submarines a year. I also appreciate the continued emphasis on the *Virginia* payload module and support the eventual inclusion of this capability in the fiscal year 2019 Block 4 procurement.

As to the aircraft carrier force structure, I am dismayed at the intent of this administration to reduce our aircraft carrier fleet. The equivocation and vacillation on this issue is, frankly, disappointing. It is a fact that the administration has requested appropriations in fiscal year 2015 only for inactivating the USS *George Washington*. It is a fact that the law requires 11 aircraft carriers. It is a fact that the USS *George Washington* refueling and complex overhaul is not included in the Future Year Defense Plan. It is a fact that the hull of the USS *George Washington* has another 25 years of service life remaining. The administration's rhetoric that they are not removing an aircraft carrier of the fleet simply does not match their actions. I think our decision on this issue is

clear. I look forward to fully restoring the requisite funding to ensure we retain the USS *George Washington* for another 25 years.

There are a multitude of other procurement shortfalls in the Navy and Marine Corps budget regarding ships, aircraft, and weapons. Our subcommittee is going to take a hard look at the entirety of combatant commander requirements and relate those to what is requested in the budget to ensure our maritime forces are best funded with the right capabilities.

I look forward to discussing several of these issues today, and specifically I want to have an in-depth discussion on the Navy's cruiser retention plan. If the Navy believes it must pursue this plan because of budget constraints, then we look forward to understanding the details of how you all plan to execute this endeavor in the decade ahead and eventually restore all 11 cruisers to the fleet in a timely fashion.

We also want to understand the risk if 22 cruisers are required to meet global force management requirements today, why is it now acceptable risk to reduce by half the quantity when world events obviously indicate otherwise?

And finally, the Navy has cultivated tremendous uncertainty related to developing and maintaining offensive surface warfare missile capabilities. Despite being well below missile inventory requirements, the Navy has cut in half planned production of Tomahawk missiles in 2015 and terminated that line in 2016. And further concerning, replacement missile capabilities are in the infancy stages of concept development and years off from operational fielding. We need to again understand why this is acceptable risk, and what is your surface attack missile road map going forward.

As to the Marine Corps, I believe that the amphibious ship construction industrial base is fragile. A significant gap exists between current and new ship construction plans that will lead to destabilizing the industrial base. We need to move with firm and deliberate steps to ensure that we retain an appropriate and unquestionable force structure to support our maritime presence and warfighting requirements.

As to the Amphibious Combat Vehicle program, I understand the Marine Corps plans to pursue a two-tiered approach that would procure a wheeled armored personnel carrier in the short term and continue the development to achieve capabilities in the long term associated with high water speed technology efforts from previous amphibious vehicle programs. While this approach seems reasonable, I look forward to gaining a better understanding of the Marine Corps' plans. We need to be assured we are providing our Marines with essential capabilities at the right time.

I look forward to discussing these important topics with our expert panel of judges. I want to also point out that we understand the great service you provide to our country. We also understand that you three are the messengers, and we appreciate that a lot of these decisions are not your decisions, but we thank you for sharing your insight with us on them, and with that, I return—I turn to my good friend and colleague, the ranking member of the subcommittee, Congressman Mike McIntyre.

[The prepared statement of Mr. Forbes can be found in the Appendix on page 37.]

**STATEMENT OF HON. MIKE MCINTYRE, A REPRESENTATIVE  
FROM NORTH CAROLINA, RANKING MEMBER, SUBCOMMITTEE  
ON SEAPOWERS AND PROJECTION FORCES**

Mr. MCINTYRE. Thank you, Mr. Chairman.

And thanks to each of you for your continued service and commitment to our Navy, our Marine Corps, and to our great country's armed services. Welcome to each of you today. I know earlier this month, the full committee in this room heard from Secretary Mabus and Admiral Greenert and General Amos about the big picture budget request, of course, for the Navy and Marine Corps, and today we do want to dive down deep into the details as we consider underwater warfare and other concerns pertaining to submarine building, weapons programs, some of our Marine Corps programs as well as, of course, shipbuilding.

While the Navy is facing many challenges, we are pleased that in the proposed budget that the Navy-Marine Corps is being funded strongly in some areas that it will need to be funded in with our shift to the Pacific and our focus in pivoting to the Pacific region.

When we talk about the positive parts, the continued strong support for building two *Virginia*-class submarines a year, knowing that the U.S. dominates undersea warfare; in that environment, we know the *Virginia* class will continue to help us maintain that important edge. Another encouraging area in the budget is the *Arleigh Burke*-class DDG [guided missile destroyer] program, now in its fourth decade, still making sure that we have superb ships year after year in that class. And with the plan now to start a Flight III set of ships with even better air defense capability, we are encouraged by that.

However, we realize that both services, the Navy and Marine Corps, face significant challenges in this year's budget, and that is what we want to hear about in this hearing.

First, as our good chairman, my good friend Mr. Forbes mentioned, the potential loss of an aircraft carrier and an air wing is a major concern. Aircraft carriers, we know, allow the United States to project power almost anywhere in the world on very short notice and is a strong statement of our being a force for democracy. No nation can match that, and I am concerned that letting another aircraft carrier go, we are opening the door to an even steeper decline in American naval power and presence.

However, if we do keep the carrier and air wing, the question is and we would welcome your recommendations at what is being given up if more funding isn't provided to the Navy?

I also want to hear about the concern about the Navy, how it can afford to replace the *Ohio*-class ballistic submarine, given the many other shipbuilding needs. We want to know what our options are for dealing with this issue, including the potential of setting up an account, perhaps similar to the National Defense Sealift Fund Congress established in the 1990s to help the Navy build more sealift capability. So we would like to hear about a possibility that way in order to make sure that we can replace the *Ohio*-class ballistic missile submarine. With such an account, the Navy would be able to spread the burden of replacing this very expensive capability

without gutting the rest of our shipbuilding budget, which is so important.

We also want to hear about the proposed layup, as it is called, of some of our cruisers and amphibious ships. I am encouraged that the Navy is taking serious this subcommittee's concerns about the declining size of the fleet, but we need more detail about how this plan would work and what the risks might be. What we don't want to see happen is these ships go into layup status and then not be properly funded and eventually decommissioned as a result. If that happens, we will have wasted more money than if they were retired. So we want to understand exactly what this proposal includes when the term laying up these ships is talked about. Particularly with layups this basketball season being so prevalent during March Madness, we want to make sure we are planning properly in March so we don't have madness in our budget with something as important as United States Navy.

So we thank you for the seriousness that you take these topics, and we look forward to asking these serious questions and getting these serious answers as we plan ahead to continue America's best defense that we have to offer, and we thank you for being at the forefront of that.

Thank you, Mr. Chairman.

Mr. FORBES. Gentlemen, as you know, without me having to say it, our subcommittee is incredibly bipartisan. We have enormous respect for each other. I am going to defer my questions until the end when we get there because we may have votes probably at about 3:15, something like that—4:15, I am sorry.

So if you could, we have your joint statements that will be made a part of the record, and if each of you would try to limit your remarks to maybe 5 minutes or so if possible so we could move on from there.

And with that, Mr. Secretary, we will let you start off for us.

**STATEMENT OF HON. SEAN J. STACKLEY, ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH, DEVELOPMENT AND ACQUISITION, DEPARTMENT OF THE NAVY**

Secretary STACKLEY. Yes, sir. Chairman, Ranking Member McIntyre, distinguished members of the subcommittee, thanks for the opportunity to appear before you today to address Department of the Navy acquisition programs.

Joining me today are the Deputy Chief of Naval Operations for Capabilities and Resources, Vice Admiral Joe Mulloy, and Deputy Commandant for Combat Development and Integration, Lieutenant General Ken Glueck. With permission of the subcommittee, I propose to provide a brief opening remarks and submit a separate formal statement for the record.

Mr. FORBES. It will be admitted.

Secretary STACKLEY. Two years ago, in testimony before this subcommittee, the Navy described how we had reshaped our shipbuilding, aviation, and tactical vehicle plans to reflect the priorities of the new defense strategy, and Congress strongly supported that year's 2013 budget request. In fact, funding was increased for additional ships and aircraft. However, sequestration more than offset those gains, and the Department of the Navy ended up about \$11



billion out of balance across the operations, maintenance, and investment.

Last year, we again submitted a budget sized and shaped to provide the capability, capacity, and readiness required by the defense strategy, and while this committee was particularly supportive of our request, at the end of the day at the bottom line the Bipartisan Budget Act [BBA] reduced the Navy-Marine Corps budget by \$6 billion in 2014 and another \$15 billion in 2015.

So this year's budget submission is anchored by the BBA in 2015, and though we exceed the Budget Control Act caps across the Future Years Defense Plan, the Navy and Marine Corps request falls \$38 billion below the level planned just 1 year ago. So to minimize the impact of this reduced top line, we have leveraged every tool available to drive down cost. We have tightened requirements, maximized competition, and capitalized on multiyear procurements for major weapons systems, and we have attacked our cost of doing business from headquarters billets to service contracts so that more of our resources can be dedicated to warfighting capability. And in balancing resources and requirements, we have placed priority on forward presence, near-term readiness, stability in our shipbuilding program, and investment in those future capabilities critical to our long-term technical superiority.

Major milestones this past year highlight some of those capabilities. The Marine Corps took the Joint Strike Fighter to sea, conducting extensive testing on board USS *Wasp*. The Navy conducted first flight of its high endurance unmanned maritime surveillance aircraft, the Triton, followed shortly by the first trap and catapult on and off an aircraft carrier of the unmanned combat air system.

The Navy's game-changing maritime patrol aircraft, the P-8A Poseidon, is today ranging the Western Pacific on her first deployment and contributing to the search for Malaysian Airline Flight 370. In the first demonstration of the Navy's integrated fire control capability, an E-2D Advanced Hawkeye passed track data to an Aegis cruiser firing the Navy's newest missile, the SM-6, to knock out a target well over the horizon without ever tracking it on the ship's radar. And in a series of firsts, USS *John Paul Jones* demonstrated the power of Aegis modernization by simultaneously engaging inbound cruise and ballistic missile targets. USS *Lake Erie* knocked out a ballistic missile target by firing on the remote track of a distant satellite. A few months later, she would take out a complex separating ballistic missile target and, in a third test, set the mark for the highest altitude intercept to date. Meanwhile, the DDG 1000 advanced gun system went nine for nine, firing 155[mm] rounds at ranges greater than 60 nautical miles with a strike pattern unlike anything ever seen from the barrel of a gun. And the Long Range Anti-Ship Missile conducted its first air launch demonstration, striking a maritime target from a distance far beyond the reach of the weapons in our arsenal today.

With particular regard to Navy shipbuilding, we kept on track our objective for a 300-ship Navy. Seven first-of-class ships met major milestones. *Gerald Ford*, the first new design aircraft carrier since *Nimitz*, and *Zumwalt*, the first new designed destroyer since *Arleigh Burke*, launched just 1 week apart, each at extremely high levels of completion. The amphibious assault ship *America* success-

fully completed sea trials. The joint high speed vessel *Spearhead* and the mobile landing platform *Montford Point* delivered to the fleet. The littoral combat ship *Freedom* successfully completed her 10-month maiden overseas deployment. And finally we laid the keel for the first afloat forward staging base, the *Chesty Puller*.

In total, 43 ships are under construction in shipyards and weapons factories stretching across the country, yet this critical industrial base is fragile, and we will need to work with industry and Congress to keep it whole as we navigate the budget beyond the BBA.

Meanwhile, the third leg of our balanced naval air-ground task force, the Marine Corps tactical vehicles, is at the front end of much needed recapitalization. In 2015, we commenced procurement of the Joint Light Tactical Vehicle to replace the HUMVEE [High Mobility Multipurpose Wheeled Vehicle], and separately, we are moving forward with acquiring a highly capable, highly survivable wheeled vehicle in a first phase of the Amphibious Combat Vehicle [ACV] program. The ACV is, as the Commandant stated in testimony, a top Marine Corps priority. And the strategy for procuring this vessel is striking a necessary balance between requirements and affordability.

I would like to briefly discuss two critical issues posed by our budget request. First, the refueling complex overhaul of *George Washington* CVN-73. The Navy has a hard requirement for 11 aircraft carriers, and title 10 requires the Navy to retain 11 aircraft carriers. However, the cost to refuel CVN-73 plus maintain its air wing, manpower, and support would require an additional \$7 billion across the 2015–2019 period, and the Secretary of Defense has stated if we return to BCA [Budget Control Act] funding levels in 2016, we will likely be compelled to inactivate the CVN and its air wing. Therefore, in this budget submission, we have effectively taken a pause, maintaining the option to include refueling CVN-73 in our 2016 budget as we await determination of that budget's top line.

Second, cruiser and LSD [landing ship, dock] modernization. The oldest 11 cruisers, CG-52 through 62, have been modernized and will deploy with carrier battle groups until their end of service which commences in 2019. The Navy plans to modernize and extend the service life of the remaining 11 cruisers, CG-63 through 73, through an extended phased modernization program. The elements of the program are that we will commence in 2015 with planning and material procurement for repair and modernization of hull, mechanical, and electrical [HM&E] systems for all 11 cruisers. The depot work will be scheduled to ensure efficient execution and, to the extent practical, to provide stability to the industrial base, and once complete that HM&E phase, these cruisers will be maintained in the modernization program until completion of their subsequent combat systems modernization, which will be aligned with retirement of the first 11 cruisers.

A similar yet simpler approach is planned for three of the LSD-41 class ships. This Navy plan is made affordable by drawing down ship manpower and operating costs during the extended modernization period, a cost avoidance in excess of \$6 billion. It ensures we are able to sustain the 12-ship LSD-41/49 class for its full

service life and the critical air defense commander capabilities of the cruiser force beyond its current service life into the 2040s. It also retains flexibility, if needed, to accelerate completion of the modernization pending availability of added funding and training of additional crews. In total, in managing the cumulative impact of the sequestration in 2013, the BBA level funding in 2014 and 2015, the reductions across 2015 through 2019, the Department has been judicious in controlling costs, reducing procurements, stretching developments, and delaying modernization. However, these actions necessarily add costs to our programs, add risk to our industrial base, and add risk to our ability to meet the Defense Strategic Guidance. If we are forced to execute at BCA levels in fiscal year 2016 and beyond, these cuts will go deeper and will fundamentally change our Navy and Marine Corps and the industrial base we rely upon.

Mr. Chairman, thank you for the opportunity to appear before you today. We look forward to answering your questions.

[The joint prepared statement of Secretary Stackley, Admiral Mulloy, and General Glueck can be found in the Appendix on page 40.]

Mr. FORBES. Thank you, Mr. Secretary.  
Admiral.

**STATEMENT OF VADM JOSEPH P. MULLOY, USN, DEPUTY CHIEF OF NAVAL OPERATIONS FOR INTEGRATION OF CAPABILITIES AND RESOURCES**

Admiral MULLOY. Chairman Forbes, Ranking Member McIntyre, other distinguished members of the committee, I am Admiral Joe Mulloy, and I am very honored to be here with you today, and I look forward to your questions.

I just want to indicate that I support Mr. Stackley's statement, but for the last 4 and a half years, I have served as the Department of Navy budget officer, and many of your staff members know who I am. I have seen the highs and lows of the Navy budget. I had the peak budget and over \$170 billion in fiscal year 2011. I have also saw the pain of sequester and what it took to the Navy to try to operate with what started as an 8.6 and became a \$4 billion reduction.

We certainly appreciate the BBA law that was passed by the Congress, that it gave some stability, but as Mr. Stackley pointed out, it also came at a cost of a significant amount of money. We are forced to come up with a balanced position minus \$38 billion over the FYDP [Future Years Defense Program], and looming over our head is fiscal year 2016, again with either a sequester or not, and another over \$30 billion cut through the FYDP. I look forward to your questions. I think this provides a balanced budget trying to maintain all facets of the Navy because before I was budget officer, I was the N5N8 [Deputy Chief of Staff for Plans, Policies and Requirements, U.S. Pacific Fleet], doing all pol-mil [political-military] planning and operations for the Pacific Fleet and all infrastructure and resources for out there, so I have seen our fleet used, I have seen our forces prepared, and did all that planning for over 3 years, so I have been on both ends of this in the Pentagon and

out at the fleet, and I think we tried to find balance in here, but I look forward to your questions.

[The joint prepared statement of Admiral Mulloy, Secretary Stackley, and General Glueck can be found in the Appendix on page 40.]

Mr. FORBES. Admiral, thank you. You certainly bring a unique experienced background to our committee, and we appreciate your willingness to help us.

General.

**STATEMENT OF LTGEN KENNETH J. GLUECK, JR., USMC, DEPUTY COMMANDANT FOR COMBAT DEVELOPMENT AND INTEGRATION, AND COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND**

General GLUECK. Thank you, sir.

Chairman Forbes, Ranking Member McIntyre, distinguished members of the subcommittee, thank you for the opportunity to testify before you today. The Marine Corps' ability to serve as our Nation's premier crisis response force is due in large part to this subcommittee's strong support, and on behalf of all Marines, I say thank you.

History demonstrates when fiscal austerity reduces the size of available forces, the Nation must rely on the persistent presence and power projection capabilities of the Navy-Marine Corps team. The Marine Corps remains first and foremost a naval service, operating in close partnership with the Navy. Today the two naval services leverage the seas not only to ensure global peace and stability but also, when necessary, to project our national power and influence ashore. A forward-deployed Marine Corps provides our combatant commanders a universal tool that they can immediately employ. This force can serve as a leading edge of a larger joint force or deploy and sustain itself in even the most austere environments. This ability to rapidly respond to developing crises not only ensures the combatant commander has the right force in the right place at the right time but also provides our national leaders with valuable decision space.

Flexible and scaleable by organizational design and instinctively adaptive by culture, the Marine Corps is guided by our expeditionary ethos and bias for action. These characteristics are the hallmark of our corps' capstone concept, Expeditionary Force 21. Expeditionary Force 21 blends our time-tested concepts of Operational Maneuver from the Sea, Ship-to-Objective Maneuver, Seabasing, with the strategic agility, operational reach, and tactical flexibility that forward-stationed and forward-deployed expeditionary units provide.

Crucial to these capabilities and persistent presence are our amphibious warships. They are versatile, interoperable warfighting platforms capable of going into harm's way and serve as a cornerstone of America's ability to project power and respond to the full range of crises. With embark Marines, amphibious ships are the Swiss Army knife of the fleet, providing diverse capabilities unlike any other naval platform. They are critical to both our combatant commanders' theater engagement strategy and crisis response options, significantly contributing to both regional stability and secu-

rity. From humanitarian assistance and disaster relief to forcible entry operations, it is the amphibious fleet that answers the call. When the Nation requires a forcible entry capability, these warships can launch the assault echelons in two Marine expeditionary brigades. However, an inventory fewer of 38 ships creates a significant risk in maintaining continuous presence and undermines the ability to generate the necessary capabilities to respond to crisis or conduct forceful entry. While our goal remains to—an increase of sea-based and forward-deployed forces, we are examining alternatives that will still ensure persistent presence.

Future security environment requires a robust capability to operate from the sea and maneuver ashore to positions of advantage. The core capability of technology—excuse me. Core capability of expeditionary forces is the ability to project forces ashore from amphibious platforms and to maneuver once ashore. The Amphibious Combat Vehicle program provides us that capability. The Amphibious Combat Vehicle has been refined to reflect the family assistance approach to a military problem. It will integrate at sea with amphibious as well as maritime sealift ships and connectors and enable amphibious operations rapidly from further offshore. The Amphibious Combat Vehicle leverages experience gained in the Expeditionary Fighting Vehicle program, the Marine Personnel Carrier program, current threat analysis, and commercial technology to provide a superior armor protection and mobility. The Amphibious Combat Vehicle is the Marine Corps' number one ground modernization priority. It will replace our aging 40-year-old Amphibious Assault Vehicle. It will be procured on a phased approach, thus complementing the existing capabilities to maximize both surface power projection and littoral maneuver. The benefits of this phased effort are aimed at producing an amphibious capability that deploys from greater distances and speed, thus ensuring greater standoff distances for our forces. Given continuing advancements in applicable technology, the Marine Corps believes that further investment in these technologies will lead to the envisioned high water speed capability.

Additionally, as part of the systems approach, the Navy and Marine Corps team will continue its investment in the next generation of future connectors. These connectors, with enhanced speed and range, both aviation and surface, will provide future expeditionary force commanders with the flexibility to operate in contested environments. The type of transformational technology the MV-22 Osprey has already demonstrated needs to be brought to our surface connector fleet.

Clearly there are challenges to today's new normal security environment as well as the challenges of constrained and uncertain budgets, but rest assured that our forward-stationed, forward-deployed Marines are poised to remain the Nation's premier expeditionary force in readiness. In partnership with the Navy, the Marine Corps looks forward to working with you to address these issues. Thank you for the opportunity to be here, and I look forward to your questions.

[The joint prepared statement of General Glueck, Secretary Stackley, and Admiral Mulloy can be found in the Appendix on page 40.]

Mr. FORBES. General, thank you.

And with that, I would like to now recognize the ranking member, Mike McIntyre, who since his Tarheels have now exited the tournament is supporting the Virginia Wahoos I know as they go in there, and now recognize him for any questions he may have.

Mr. MCINTYRE. Absolutely, I want to uphold the ACC [Atlantic Coast Conference] tradition. Congratulations to Virginia.

Mr. Stackley, I want to ask you one question. I know our time is going to be compressed, and I want to have other members, give them a chance to ask questions since we have votes coming up. The subcommittee has heard numerous times from the Navy that the *Ohio* replacement program could consume most of the normal shipbuilding budget for 10 years or more. I referred to some to this in my opening remarks today.

What are the alternatives? Could one of them be the establishment by Congress of a fund similar to the National Defense Sealift Fund so that funding for procurement of the *Ohio*-class submarine is funded across the Department of Defense? Would you address that, please?

Secretary STACKLEY. Yes, sir, thanks for the question. First and foremost, to be real clear, the *Ohio* replacement program, as repeatedly stated by the CNO [Chief of Naval Operations], is our top priority in this budget. It will remain a top priority in the next budget. We are doing everything we have to to protect the funding stream to ensure that the boat is designed on schedule, built on schedule, and deploys on schedule in 2031.

Now, what that means is if you look at what the cost of the program is in current dollars, it is about a \$17 billion research and development funding stream, most of which will be obligated and expended leading up to that first ship's procurement, and in today's dollars, we are looking at a \$6.3 billion cost for the lead boat and targeting \$4.9 billion for subsequent boats 2 through 12. The first boat is procured in 2021; the last boat in 2035, so there is a 15-year period where it will be the largest part of our shipbuilding program and, as has been pointed out, puts extraordinary pressure under our shipbuilding—on our shipbuilding program.

So the notion of a National Defense Sealift Fund [NDSF] type of funding mechanism, that won't change the bottom line cost for the *Ohio* replacement program, clearly. What it would do, as it had done for the NDSF fleet, is provide a mechanism that is extremely flexible to deal with the year-to-year challenges associated with executing the funding associated with concurrent building the lead boat, completing the R&D [research and development] effort that would be done in parallel with the lead boat, and then ramping up procurement of follow boats. Ultimately, though, when we are building one boat per year in the 2026 through 2035 timeframe, then that is going to be a steady requirement by the Department of the Navy for what is today about \$5 billion per year, and out in that timeframe, when you add inflation and other considerations, will measure up to a significant part of our shipbuilding budget. So creating an NDSF, the flexibility that NDSF provided to us, aided our efficiency in building the NDSF fleet. Pulling that budget out of our SCN [Shipbuilding and Conversion, Navy], our shipbuilding top line, if we are able to sustain our shipbuilding top

line, that does great—you know, that gives us the ability to continue to procure the balance of our force, but in the end, the bottom line for building out the *Ohio* replacement program will be about the same. So the source of the funding ultimately becomes the challenge greater than the mechanism for the funding.

Mr. MCINTYRE. All right, thank you, Mr. Secretary.

Any other response?

Admiral MULLOY. Sir, having served as budget officer, I completely support Mr. Stackley's position is that ultimately as we looked at this, this is 45 percent over 15 years of the entire SCN account. The first two boats are scheduled over 5 years, but it is half of our budget all those years, so the NDSF account like does provide tremendous flexibility for solving problems, but as Mr. Stackley pointed out, it ends up being the total amount of money that we are talking about is right now as the DON [Department of the Navy] is planning on doing that, but it would—it essentially crushes the other shipbuilding part of the budget is that I have half the budget on one ship, I have to build an aircraft carrier, spread it over 4 years, and then I end up looking at is the DDG and amphibious submarine, and do I build one, two or three, but I can't build all three in every one year. So it comes back to being, even if we then look at all our other accounts, you know, do I shave down aviation? I have a lot of things I need to buy out there. We now are stuck into OSD [Office of the Secretary of Defense] and will be talking to the Hill. So an NDSF fund that has some other way of adding money to it would be more flexible there for us as opposed to it is just moving Navy dollars there, it doesn't provide any flex—it provides flexibility but not source dollars.

Mr. MCINTYRE. Okay, thank you. Were both you gentlemen classmates in the Naval Academy? You both graduated in 1979, right?

Admiral MULLOY. Yes, sir.

Mr. MCINTYRE. Thank you. It is amazing that these years later, you serve us together at this table on this day, and God bless you and thank you.

And thank you, General.

Thank you, Mr. Chairman.

Mr. FORBES. Thank you, Mike.

The gentlelady from South Dakota is recognized for 5 minutes.

Mrs. NOEM. Thank you, Mr. Chairman.

To Admiral Mulloy, what is the average lifespan of an aircraft carrier?

Admiral MULLOY. Ma'am, the average lifespan of a *Nimitz*-class aircraft carrier is about 50 years. The USS *Enterprise* just completed a little over 51 years.

Mrs. NOEM. Okay, thank you.

Secretary Stackley, as we all know, the Tomahawk has been and will continue to be hopefully the Nation's long-range precision strike weapon of choice. Although you did reference a new long-range missile that you have been under development. I know the Navy decreased the procurement of the Tomahawk Block 4 cruise missiles by 800 and plans to cease the production of the Tomahawk beginning in fiscal year 2016. So can you describe some of the thinking and the analysis on that and maybe a little bit more detail on your future weapon that you have just tested?

Secretary STACKLEY. Yes, ma'am, thanks for the question. First, the budget does not—the budget cuts our quantity for Tomahawk in half from prior years, so we had been sustaining a 200 Tomahawk per year rate. In 2015, we have dropped down to 100, and in 2016 and out, I guarantee you we will revisit the question of whether the time is right to cease production of Tomahawks, but what we have procured to date meets our inventory requirements for Tomahawks, so we have about 4,000 in our arsenal. We have satisfied our inventory requirement. What we have got to get to is that next-generation weapon. That next-generation weapon could be an upgraded Tomahawk, could be another weapon that would show up at the competition. So we are moving forward with development of what has been referred to as next-generation land-attack weapon, and the key elements of that weapon will be its increased lethality, survivability beyond what Tomahawk brings today.

So the future of Tomahawk 100 in the 2015 budget request, we will certainly revisit that as we build the 2016 budget. We are going to press forward with advances to our cruise missile line. We are today demonstrating and testing what I refer to as the Long Range Anti-Ship Missile, that is an air-launched version. A future increment which will be competed will be a surface ship-launched version, which will require development from whoever shows up from industry, and then downstream, there is modification of the Tomahawks that we have in our inventory and ultimately a recertification of those Tomahawks that we have in our inventory. So we are trying to keep it all in balance. We are keeping a close eye on our inventory numbers, and equally important, we are going forward in terms of advancing the capability of those cruise missiles.

Mrs. NOEM. Well, recertification is to begin in fiscal year 2019. Is that correct? Do you see—because in fiscal year 2016 is when you basically have it zeroed out as far as new Tomahawks, correct?

Secretary STACKLEY. Yes, ma'am.

Mrs. NOEM. Because you believe that your inventory is sufficient enough to bridge the gap until we get past recertification and into a new weapon that could be developed?

Secretary STACKLEY. Yes, ma'am, our inventory is very healthy.

Mrs. NOEM. Okay.

Secretary STACKLEY. But we are keeping a close eye on the recertification timeline. We cannot delay that, so we have to get into recertification in the 2019 timeframe. There is that potential gap between 2016 and 2019 as far as Tomahawk production. Recertification is different from all-around production, and we are working with Raytheon in terms of the risks that this potential gap would pose on their factory.

Mrs. NOEM. But you do have some plans for modernization in fiscal year 2020, correct? Is that—could that not be streamlined a little bit better with recertification so that the modernization could happen at the same time these weapons are brought in and recertified—

Secretary STACKLEY. Absolutely.

Mrs. NOEM [continuing]. So that it is a bit more streamlined.

Secretary STACKLEY. Absolutely, and that is the part of the discussion that we are having with Raytheon. In fact, there is a fairly



healthy R&D stream going towards Tomahawk for the modifications that we need for the missile.

Mrs. NOEM. Okay.

Admiral Mulloy, did you have something to add?

Admiral MULLOY. Yes, ma'am, I appreciate the question also. Clearly, as you pointed out, with the inventory we have is a very large number of these weapons, which we are continuing to modernize. There have been four steps. The most important one is a brand new digital radio——

Mrs. NOEM. Right.

Admiral MULLOY [continuing]. Which we are installing which allows the combatant commanders, you know, carrying out national command authority missions to retarget the aircraft and have much more reliable communications, no matter where they are from satellites. That install is going forward. There are a number of other ones that we need to do, and those are also in the plan, but as we talked about, we are down in the Navy \$31 billion. What we had to look at was, what do I have to do with a weapon that I have overcapacity on but I need to modernize and I need to certify? Part of the line, in fact actually your staff will find this, we have bought spares in 2015 and 2016 such that when the line starts back up to do the certification, we have the appropriate amount from the vendors to keep going, but that period of time is we, on average, have shot 100 weapons a year. We have, as we looked at all the plans and met the requirements of the combatant commanders, in the areas that we have to take some risk in tough years, we have to have a path to reach ahead. And so this is one of the ones we looked at was we will analyze a shutdown. We want to fund the R&D to get the next weapon. We want to fund the R&D to make the current weapon work and take a much smaller view as compared to other parts of this budget, a smaller risk, and, you know, having looked at detail about what these weapons require and having personally been at sea with these, Tomahawks are amazing things. But they were also built when I was a junior officer, and we have modernized them, but we need to keep thinking about the future.

Mrs. NOEM. Well, that would be my hope, that as we recertify, that we would also look at modernization at the same time so it is streamlined and there could be some savings then——

Admiral MULLOY. Yes.

Mrs. NOEM [continuing]. Rather than bringing those weapons back in to modernize just after they have been through the recertification process.

Admiral MULLOY. Yes, ma'am, and we are looking at what could be done at that time because, as we say, this is on Block 4, we can talk with a radio.

Mrs. NOEM. Right.

Admiral MULLOY. The early ones I qualified with didn't have any of this. They were all just merely, not even GPS [Global Positioning System] capable, but we never looked totally down. We have never eliminated the ability to do camera and TERCOM [Terrain Contour Matching] guidance because in a GPS-enabled or a world that has electromagnetic deviations, you want to have a weapon that can

still find a path, so we have never eliminated some of the stuff that made it work. The idea is to keep working to make it better.

Mr. FORBES. The gentlelady's time has expired.

Recognize the gentleman from Connecticut for 5 minutes. After his questions, we are going to recess for about an hour, unfortunately. We will be back at 5:00 if you could stay with us until that time.

Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman.

In light of the press of time, I won't talk about how the UConn Huskies are, men and women, are both in the Sweet 16.

Mr. FORBES. And we hope they come in second. We will be supporting them strongly.

Mr. COURTNEY. The women I don't think I would put much money on that.

But anyway, Mr. Stackley, again, you laid out sort of the scenario with the CVN-73 in terms of, you know, the fact that it is sort of a pending question right now that sort of turns on whether or not we check, we, again, fix the BCA levels, as you put it, in your remarks, and again just for clarification, when you say BCA levels, you are talking about sequester? Is that correct?

Secretary STACKLEY. Yes, sir.

Mr. COURTNEY. All right. Because, I mean, obviously, the BCA has a different level also built into it, which is nonsequester, and I guess so, you know, everybody is sort of crystal clear, two questions: Number one, if the sequester levels go into effect in 2016 and years beyond, I mean, really it is not just aircraft carriers that are going to be impacted if that were to happen, and maybe you can just talk a little about that in terms of the spread of damage that would occur.

Secretary STACKLEY. Yes, sir, and well, let's start with the fact that the budget that we submitted, the 5-year Future Years Defense Plan budget is about \$38 billion for the Department of the Navy above that BCA adjusted cap level, and that is in 2016 through 2019. If we have to, if we have to budget to that BCA level or, alternatively, if we submit the budget at the current top line and it gets sequestered—

Mr. COURTNEY. Right.

Secretary STACKLEY [continuing]. We have already discussed the impact in terms of CVN-73 RCOH [refueling and complex overhaul], but you look across the rest of the board and you just take an average of \$8 billion to \$9 billion that is going to come out of the Department of the Navy budget and you try assess where it is going to come, and we have very limited alternatives in terms of where we are going to pull it. So it is going to clearly impact our procurements, but it is also going to impact the size of the force and the way we operate it, and that is going to directly impinge on our ability to meet our requirements in terms of the Defense Strategic Guidance.

So whether it is a shipbuilding program, an aviation program, whether it is the depot maintenance schedule, whether it is the number of ships and aircraft that not necessarily that we are able to deploy, but we are able to surge in the event of crisis, those numbers are all going to come down. And there is—we have done

everything we can inside of our lines to wring out our costs of doing business. We have done everything we can in terms to try to drive down the cost of our major weapons systems, the cost of our operations, and we have been starting to cut our quantities, so, at this point forward, deeper cuts into that top line are going to go directly at the tip of the spear, and we are going to be looking at, in the 2016 budget build, at that, at that extreme case.

Mr. COURTNEY. So, for example, DDGs, submarines, you know, littoral combat ships, I mean, what does that mean?

Secretary STACKLEY. Well, the CNO has already stated in testimony that we could be looking at three fewer DDG-51s in the next budget cycle, or if we are at BCA levels, a *Virginia*-class submarine, that is at risk, the CVN-73 which we have already talked to at length. Each program is going to be revisited in terms of we have to maintain a balanced force. We have to look at our near-term requirements in terms of combatant commander demands. We are going to end up taking risk in terms of future readiness because our investments are going to end up bearing a very tough brunt of further reductions.

Mr. COURTNEY. Well, thank you. I mean, I think, you know, my friend Mr. McIntyre raised the issue of the ORP [*Ohio* Replacement Program] funding which I have asked Secretary Hagel and Secretary Mabus about, and I mean that is definitely a long-term, relatively long-term, you know, fiscal challenge that we have to fix or deal with, but obviously, right now, we have got to not lose sight of the fact that sequester didn't evaporate with the passage of the budget last December and the spending bill. And I think, you know, laying out the damage, as you just did, I think is a pretty powerful warning to people who care about a 300-ship Navy and our national defense, that this is right now, you know, in front of us, and we have just got to, you know, figure out ways to turn off that sequester.

Secretary STACKLEY. Yes, sir. The effort of Congress last year to give us the Bipartisan Budget Act gave us 2 years of breathing room and gave us a funding level above those BCA capped levels. That is greatness. However, if we allow this time to lapse and we don't address the longer-term issue, then we will be sitting here next year talking about the devastation associated with BCA, and we will be having the same conversations we had last year regarding sequestration and what the impacts are to our ability to meet our requirements for national security.

Mr. FORBES. The gentleman's time has expired.

We will recess until right after the votes, and reconvene immediately upon the votes.

Thank you, gentlemen, for your patience.

[Recess.]

Mr. FORBES. I know these votes interfered with your schedules. But that is what we are here to do.

So, at this particular point in time, I would like to recognize Congressman Wittman, who chairs the Readiness Subcommittee, for any questions that he might have for 5 minutes.

Mr. WITTMAN. Thank you, Mr. Chairman.

Vice Admiral Mulloy, Mr. Stackley, Lieutenant General Glueck, thank you so much for joining us today. We really appreciate your

perspective in this challenging time to figure out how we put the pieces of these things together.

Lieutenant General Glueck, I want to begin with you and go from the perspective of the Commandant in his words about LPD-17 and that the LPD-17 hull form should be what we use as the replacement for LSD. Can you elaborate a little bit on why that LPD [landing platform/dock] hull form is the preferred platform for replacement of the LSD? What are its capabilities? How does it meet the Marine Corps' needs? And if you can put that in perspective about how the Marine Corps sees its structure going in the future and why that is so important for capability within the Marines.

General GLUECK. Thank you, sir, for that question. And also thank you for your support to our Wounded Warriors. It is greatly appreciated.

I think when you look at the LPD-17, it has been a success story for the Navy-Marine Corps team. And we are working through a lot of the bugs in that right now. So we view it as a proven performer. As you look at what I believe are the requirements for the new normal that exists out there today, you know, it is going to be independent deployers, as, you know, Admiral Locklear has talked about that his requirement out there as a combatant commander is in the neighborhood of, you know, 50, 54 ships to maintain that engagement.

And we see that ability to be an independent deployer that the LPD-17 hull and form brings in terms of their ability to do C2 [command and control], the aviation capability, the medical capability, and the surface capability are all the type of capability that you want in a future ship to be able to do the things that our Nation requires them to do for stability.

Mr. WITTMAN. Secretary Stackley, in that realm of the perspective of the Marine Corps and also the Navy about the LPD hull form, its capability, its need to be put into service as a replacement for the LSD, understanding, too, that we have a requirement for 38 amphib; we are at 28 currently.

From your perspective, and hearing that the Marine Corps looks at that as being able to meet their need, if the funding was available, in your opinion, does Navy and Marine Corps need another LPD?

Secretary STACKLEY. Let me answer that a couple ways. First, you go back to the basic requirement, which CNO and Commandant have agreed to in terms of the lift capability that our Navy and Marine Corps team needs in total in terms of both major combat operations, but more prevalent is just the routine operations that are being conducted globally today.

So you have a balanced amphib [amphibious] force of 38 ships that are required to meet that requirement. And that is a mixture of big-deck amphib, the LPD-17 hull form, and today the LSD-41. That gives you the total lift package.

Now, we don't have a plan to get to 38 ships. We have a plan to get to 33 ships, which introduces some risk in terms of being able to provide the total lift for a major combat operation. But Navy and Marine Corps have agreed that that is acceptable risk.

Now inside of that, when you take a look at the LSD-41/49 class and you say, well, should we continue with the LPD 17 hull form as replacement for LSD-41/49 class, the answer is that is a lot more capability than the LSD-41/49 have today.

But the other thing that the Marine Corps is wrestling with is their vehicles, their equipment that they deploy with is a lot more than they had when the LSD-41/49 class was being built.

So I think General Glueck and his team have worked—worked hard in terms of trying to determine what the future lift requirements are. And, you know, under those parameters, the LPD-17 hull form is a better fit for the Marine Corps requirement, independent of that 38, 33, total number of ship requirement.

Now, the other thing we have to balance that with is affordability. And that has been one of the challenges. So, right now, we are completing the analysis of alternatives [AOA] for the LSD-41 replacement, referred to as LXR, and the LPD-17 is prominent in that analysis of alternatives. And what we have to wrestle with is, how do we get to a hull form that does provide the degree of lift and capability that the LPD-17 does but within an affordable top line.

And then the last, the last thing that we are wrestling with, which doesn't show up in the AOA, it doesn't show up in terms of Marine Corps requirements, is the industrial base considerations. Now, when we look at shipbuilding, the area where we are most fragile is in our amphib ship construction. And it is just the nature of the beast. LPD-17 production, you know, we have built out—we are building out our last of the LPD-17s. We don't require construction of the LXR to start until about the 2020 timeframe. And so this gap cannot be filled simply with big-deck amphibians. So we are wrestling with how to best mitigate the gap in production, how to deal with the affordability issue that this budget stresses, and then how to meet the Marine Corps' requirement in terms of lift capability that an LP-17 would bring to the fight.

Mr. WITTMAN. Very good. Thank you, Mr. Chairman.

I yield back.

Mr. FORBES. Gentlelady from Hawaii is recognized for 5 minutes.

Ms. HANABUSA. Thank you, Mr. Chair.

And aloha, Vice Admiral. Good to see you again.

Mr. Stackley, one of the things that has always plagued us is really the question, what is the number? What is the number that we need? You know, we have heard 306. We have—we are at 283. We had former Secretary of the Navy John Lehman here, who was the famous almost 600. He corrected us and said he wasn't quite at 600. And of course, Admiral Roughead was here, too, and they were, like, 346, 348 or vice versa.

But then when the question then rises, okay, what comprises that number? Then everyone sort of says, well, it depends on what we need it for.

But we have got to acquire, as you know, and the build out is going to be determined, I call it policy by acquisition, because whatever we buy and we acquire kind of sets it for the future.

So what is the number? What is the number that we need? We have got to pivot to Asia-Pacific that Admiral Locklear has made

very clear that he doesn't feel like he has got enough ships to do that. So what is it? Where are we going to go?

Secretary STACKLEY. Yes, ma'am. Let me start with just the documented requirement. The Navy has a document referred to as the Force Structure Assessment. It was last completed in 2012, delivered to the Hill last year, signed out by the CNO, and that is for a balanced force of 306 ships: 11 aircraft carriers, 33 amphibious ships, 88 large surface combatants, 52 small service combatants, 48 attack boats, et cetera.

So 306 is the balanced force structure. But clearly, it factors in affordability. So in his—in one of his hearings earlier this year, the CNO, when answering this question, described that, well, to meet the combatant commanders, the full range of combatant commanders' demands or requirements, it would take a 450-ship Navy. And nobody is contemplating a 450-ship Navy today.

So what we are struggling with is what can we afford and ensure that it is a balanced force. And then how do we take that 306-ship Navy that is in the Force Structure Assessment and meet to the best of our ability the combatant commanders' demands. And that has going towards things like forward-deploying ships, so you get greater operational availability, greater presence. Take the LCS [littoral combat ship] class and look at 52-ship class and having 26 of them deployed at any one time, and just getting more mileage out of the ships that are in the force, recognizing that we are going to be limited in terms of the force structure that we can build with the budgets that we have.

Ms. HANABUSA. The Army has said that they have more ships than the Navy. Is that true?

Secretary STACKLEY. Well, first, I would describe that the ships that the Army is referring to are predominantly lift ships, prepositioning ships. But, otherwise, beyond those larger ships, what the Army would call a ship wouldn't meet the Navy's definition of a ship. And I will just stop right there.

Ms. HANABUSA. But the question is, for those that might meet the definition of a ship, how many are we talking about?

Secretary STACKLEY. The Navy—the maritime, which includes Military Sealift Command, the Navy, we have a portion of our fleet, which is referred to as maritime prepositioning ship. And so we have a number of ships that are prepositioned with equipment loaded out in the event of a need for immediate response to a crisis.

Beyond that, we have a Ready Reserve Fleet that are ships that could be called up in the event that the Nation determined that we wanted to activate these Ready Reserve ships. Total number of those, I would have to get back to you with an exact number. It is pretty well accounted for. But you are in the double digits. A few years ago, it was about 50-plus Ready Reserve ships and 19-odd pre-pos [prepositioning] ships.

Ms. HANABUSA. Before we broke, the statement you made that, of course, I find troubling—I represent Hawaii—is the fact that you said that even the *Virginia*-class subs would be at risk, the two *Virginia*-class subs, at the sequester, if we don't do anything with the sequester in 2016. So when you say that, what do you mean? That we are not going to be able to build the two? Or the two are

not high enough in terms of priority that they will be continue to be considered what we need?

Secretary STACKLEY. Let me start with the requirement. So we have a requirement for 48 attack submarines inside of that Force Structure Assessment. Today we are at 54. So today it looks like we have a surplus to the requirement, but the reality is that during the period of the 1990s, we fell short in terms of building out submarines. And so we need to sustain a two-boat-per-year pace to minimize the shortfall that we are going to be staring at in the 2020s.

So in the latter portion of the 2020s, 2029 timeframe, we are going to—our projection right now is we will have 41 attack submarines against a 48-boat requirement. So that is a screaming need.

So within the budget that we have submitted, we do, in fact, sustain two boats per year. And our intent is to sustain two boats per year except for those years in which we will be procuring the *Ohio* replacement program submarines. So there will be years when we are procuring one *Virginia* per year.

When I discussed what happens at the BCA levels, again, these are the deliberations that we are going through right now as we build the 2016 budget and we take a look at the choices that we would have to make if we are down to the BCA levels. A *Virginia* is under discussion in terms of whether or not it would fit within our top line, along with the three DDG-51s, along with the CVN-73 RCOH, along with a number of other ships and aircraft in our program.

Ms. HANABUSA. Thank you.

I have exceeded my time. I yield back, Mr. Chair.

Mr. FORBES. Thank you.

General, you have been saying that you need a track replacement for the legacy Amphibious Assault Vehicle fleet as your number one priority for a long time. Now you have shifted plans to buy a wheeled vehicle. Can you explain to the committee, for the record, what has changed and where your priorities are now?

General GLUECK. Thank you for that question.

Our requirement has all been based on the requirement to replace the AAV, which is a track vehicle that is coming up on over 40 years of age.

Back 25 years ago, we developed a concept called Ship-to-Objective Maneuver. And three elements of that were the MV-22, the LCAC [Landing Craft Air Cushion] and then an AAV [Advanced Amphibious Assault Vehicle], which was a high-speed vehicle, track vehicle.

After a quarter of a century of research, and we looked at this in many different ways, and actually a program name changed to the EFV, you know, it was canceled. And it was unaffordable.

We kept up an ACV directorate at that time, an advanced combat vehicle directorate, that was focused on doing the research on high speed technology to see if it was actually realistic to achieve that goal in an affordable way, would give us the operational capability that we wanted.

After 2 years of research, we found that a track vehicle was able to get up on the plane and it could give us the 25 knots. However,

there were very many tradeoffs to be able to do that. And those tradeoffs were considered to be unacceptable in performance potential to actually assure where 90 percent of the vehicle would have its life ashore. So it was optimized for 10 percent of its mission and not optimized for 90 percent of its mission.

So we went out to the Nevada test facility out in Carson City, Nevada. And they have all the vehicles out there, all the track vehicles we own, as well as all the wheeled vehicles that we have in the inventory today and included the MPC, which is a program that we had earlier that we were working on, Marine Personnel Carrier. And we got a chance, took the Commandant out there. We drove in every one of the vehicles. Went over their course. And, you know, we saw that the difference between the wheel technology and track technology. And, quite frankly, over the past 20 years, the advancement in wheel technology has far exceeded that of track technology because of the commercial demand.

And so we found that because of the great leverage that we have gotten from the commercial industry, that the capability of the wheeled vehicle far exceeds that of a track vehicle. So that is where we set up the program now to go ahead and pursue the ACV [Amphibious Combat Vehicle] as a wheeled vehicle.

Mr. FORBES. Thank you, General.

Can any of you explain to us what the GEF, the Global Employment of the Force?

Admiral MULLOY. Sir, that is a classified portion of—it falls out of from a planning guidance that basically says, when I have so many assets, how do I break down what I would send for where? So it is created by the Joint Staff working with the Secretary of Defense and then the services as a classified annex of how you would use the force. But it also then drives to you later the states you have to set up. So we could certainly provide something in writing back in terms of more about what that is. But it is less in the resourcing area. It is definitely in the planning area. But ultimately it does drive us for a long-term view about what you have to have.

Mr. FORBES. Admiral, do the combatant commanders have any role in that, in creating that?

Admiral MULLOY. I know they are involved with when it gets reviewed and developed. I believe it is developed by OSD [Office of the Secretary of Defense] Policy and the Joint Staff. It is staffed out for them to look at it. But I would—I have to get back to you with the exact specifics of their role. But almost everything we do under the reorganization, going all the way back to Gramm-Rudman, is the combatant commanders have a direct input to the Secretary of Defense on a wide variety of items. So they do look at that.

Mr. FORBES. The question I would ask each of you, if you would, for the record for this committee, if you would provide a time when this committee could review that in a classified setting, and we are happy to do it in a classified setting. We have made those requests, and so far just haven't been able to look at that. But we would like to do that. I think most of our members would.

The second thing that I would like to ask, Mr. Secretary, and I know this is no surprise to you, is aircraft carriers. We talked



about earlier where you said there is a statutory requirement for 11 carriers. And I know that you appreciate that. Secondly, we know that Congress had allocated and appropriated money for at least the planning phases of that carrier for this cycle, which I think was about \$243 million. Am I off a little bit on that?

Secretary STACKLEY. 245.

Mr. FORBES. 245. It is my understanding now, correct me if I am wrong, that the Navy has basically said, we are not going to utilize that, those planning dollars now. Is that correct?

Secretary STACKLEY. Partially. So, of the \$245 million for planning, a portion of that was associated with defueling the aircraft carrier, a portion of it was associated with modernizing the aircraft carrier, and a portion of it is associated with the refueling piece. And so we are moving out on the defueling piece because it is applicable to either path, whether we inactivate or do the complex refueling overhaul for CVN-73. So that is moving out. That is about \$63 million. That leaves \$182 million that we have unobligated today that is pending a determination of which path are we on, inactivate or refuel.

Mr. FORBES. Now, help me with this, if you would. And, again, please don't think I am talking about any one of three of you because I know this is not necessarily your decisions.

But I remember when we looked at sequestration for a long period of time and the President's budget continually ignored sequestration. And we would ask, how come your budgets aren't reflecting sequestration? And the answer we got from the Pentagon was consistently, oh, this is so horrible, we can't possibly look at it because it would be too impactful, so we are just assuming it is going to go away.

And then we hear now as we look at the President's budget, I think your statement was, and the nomenclature doesn't matter, but we are going to take a pause because we are going to see what happens to sequestration.

And when I am looking at the President's budget, why didn't the President include enough money to bump up to do that carrier in his budget? Because if it was the law, if it is, as everyone says, so strategically important for us as a Nation, the President didn't limit himself to what sequestration called for, he bumped up those numbers. Why wasn't the carrier dollars included in that budget that the President sent over?

Secretary STACKLEY. I am going to start this response and then I am going to have Admiral Mulloy join in here.

My simplest description for this is last year, I think we built six different budgets. And whereas normally we would build a budget and refine it over time, last year we were literally building a half a dozen different budgets. And this is and around things like government shutdowns and furloughs and everything else that was taking place.

And so we did not have clarity in terms of what budget was going over to the Hill because we had not, one, received the BBA had not been enacted yet, so we weren't sure which direction Congress was heading in with 2014 and 2015. So there was a lot of uncertainty very late in the day in terms of our budget build process.

And when the determination—when the BBA became clear, and the determination was we are going to retain that carrier if we can retain this top line, frankly, at that stage of the budget process, it was too difficult to move 7 billion into—inside of that top line. And that is my simplest, clearest explanation of where we are and how we got there.

And Admiral Mulloy can probably improve upon that.

Admiral MULLOY. Yes, sir. I would say it all comes down to the timing. They were developing the plan to—when 2014 and 2015 locked in, as the Secretary pointed out, 2015 was a dramatic cut, but we were able to balance and work with OSD to be able to—and also appreciate the fully funding of the 2014 submarine that was done by the Hill. And so items came up that freed some money, but not to the level we needed to have.

As OSD went down and looked at how do they lock all these—the DOD [Department of Defense] budgets, the Navy point was, here is money, we are going to fix some parts of shipbuilding. But the carrier became a key component at the end. We have been directed to continue to develop as work in POM-16 [Program Objective Memorandum-16], given the DOD budget, across the FYDP of that, what they call the green dash line, is that DOD will work for resources to solve problems. The Marine Corps end strength was one small component. The Navy, which is the clearest and largest component that starts in 2016.

And so I think they are looking for what happens in the 2015 going to 2016 from the Hill. What does that look like. And then economically. But we are going to develop a plan that has the carrier in there as part of the Department of Defense budget.

Mr. FORBES. I guess I still scratch my head a little bit on if this carrier was a priority and if it was necessary to meet the strategic guidance for 2012, which I assume it is, because we have constantly been told it was, I don't—I am still grasping with why the President didn't include it in his budget when it came over here.

Admiral MULLOY. Sir, all I can say is, again, as Mr. Stackley pointed out, we had six different budgets. If you remember, last summer, DOD could not believe that we could not cut two or three carriers. The Navy, through a tremendous effort led by Mr. Stackley in the area of what it called good stewardship. And of all the areas we tried to tighten, myself as budget officer with execution and where can we make money, we freed up money out of the Navy budget to be able to reduce that number down. And it really came down to being as you are spinning a lot of plates at the end as you lock this in January, I believe that it was the Navy is saying is, you know, this really isn't there yet, this is our budget. And everyone said, we really want it in. We will go back and do it again. Because it is—2015 was tight with the BBA. And we had the room, as we showed you before, was, we can slide the carrier because the *Stennis* comes later. We can make a decision in 2016 to start the ship and just still get it done. Basically it will—we can still get down out of the dry dock in Newport News before the *Stennis* comes in. It is pending upon economic requirements. And that is really all I can tell you right now, sir, on my understanding of my money as I lock that budget.

Mr. FORBES. And we appreciate all that you guys have done and the terrible situation you have been in with budgets.

It is just as we look at the carrier and we hear the rhetoric kind of coming out of the White House of why we haven't made a decision, but we see you taking the appropriated dollars that we had for the planning, for the refueling, not utilizing those, we see no money in for the request to do the acquisitions that would need to be done this year, and we don't see it in the FYDP, but we saw it in before, it is kind of like that old adage, if it walks like a duck and quacks like a duck, it is probably a duck. It looks like to us the decision has been made to take the carrier out. But you are saying, "but we could put it back in," as opposed to saying, "we have delayed the decision."

And I hope that is wrong. And I hope Congress perhaps can send a message that we need to correct that. But we certainly don't fault any one of the three of you for that.

Secretary STACKLEY. Sir, the only thing I would add to what you just described was the statement was actually a little bit more clear in terms of we could put it back in. The statement was we would put it back in if we can hold on to the budget levels that we submitted with this budget.

Mr. FORBES. Last two questions. And then I want to get Mr. Langevin's questions in.

Cruisers, you know, that is a big question. None of us so far with the plans we have got have a comfort level that we can—will ever see those cruisers come back out, at least on the plan that we have now.

You know, and some of us are concerned that really what we see is an elaborate way to bring about early retirement of these cruisers after Congress has twice rejected this idea.

What comfort level can you give to this subcommittee that these cruisers are going to come out?

Because everything we see is you telling us, as you just said with the carrier, we will put it back if we get more money. We know destroyers are next on the chopping block perhaps to put some in, you know, next time. Give us that comfort level that this committee would have that these cruisers will see life again.

Secretary STACKLEY. Yes, sir. Let me start with a few key points. One, today, we have \$2.2 billion inside of the Ship Modernization Overhaul and Sustainment Fund that Congress established. In the last 2 years, when the Navy was struggling with what our budget levels would be and our ability to retain those cruisers, that fund was not in a working condition where we could actually put it to work. What you all did with last year's budget in terms of giving it life out to 2021 gives us the ability now with certainty to put that money to work.

So a key part of the cruiser modernization plan, which, one, gives you the ability to hold us accountable but, equally important, gets us going, is we need to—our proposal is that we take those 11 cruisers and we commence effectively immediately CG-64 goes into her modernization at the end of this year, and we would bring the other 10 cruisers into the first phase of the phased plan, which starts with the hull, mechanical, and electrical systems. And we would not wait a number of years, but we would go into the 10

ships, baseline their material conditions, get the material on order, and then, working across the industrial base, phase and schedule those ships to when they can most efficiently be modernized for the hull, mechanical, and electrical systems. That is the front end of the program; \$2.2 billion won't get us all the way there. We have some additional funding in the FYDP. And, frankly, we need to work with you all to come up with a mechanism to replenish the fund that has been established.

But in the near term, what we would be executing is a modernization program for the cruisers that will bring their material condition up to the level that it needs to be to get them their extended service life. And then when you look downstream in the 5-year period from now when they are completing their HM&E modernization, then the Nation has choices.

What we are proposing is we would complete the combat systems portion of the modernization so that we can lockstep replace retiring cruisers, the first 11, one for one, with the fully modernized cruiser from the last 11 and then be able to keep 11 cruisers tied to our battle groups out into the 2040s.

So, in terms of confidence and commitment, I think what we propose to do is work with you on the details, detailed on the front end. On the back end, what we would be dealing with is, okay, the funding stream that would go with that plan—and, frankly, we are relying on our ability to draw down the manpower associated with the cruisers and the operating and support costs during this period to help finance the combat systems modernization on the back end. So we are committed to giving you the level of detail that you need to give you confidence that we are going to execute.

I think we can do this in a stepwise fashion so each step of the process Congress has a clear eye on the condition of those cruisers and our ability to complete the phases and so we do not lose momentum as we go through the entire process.

Mr. FORBES. And we will look forward to kind of walking through that plan. We trust each one of the three of you, but we don't necessarily trust everybody else that might be dictating that. And we don't trust all of our colleagues in what they may do in budget discussions. That is why we want to make sure that we have a plan that is going to be workable.

Last question I have is, has DOD performed a new analysis of mission needs to identify what capability gaps the Navy might need to address through a new shipbuilding program to replace the littoral combat ship? If not, then how can DOD know that it needs a new ship generally consistent with the capabilities of a frigate? Where is the properly validated requirements for this new program?

Secretary STACKLEY. I am going to start, and Admiral Mulloy finish.

The requirements for the LCS program are well documented. And right now we are moving smartly through the execution of that program in terms of the basic hull and then the mission packages.

What the Secretary of Defense described in his guidance to us and then his subsequent announcement was that the Department is looking to increase the lethality of the LCS and something simi-

lar to a frigate. So we do have a requirements team taking a hard look at exactly what would that mean. What missions, what roles, what is the concept of operations, looking forward beyond first 32, to those next 20 small surface combatants. What is that concept of operations and the additional lethality that it would require, similar to a frigate.

I don't want to predetermine the outcome of that review. The team, frankly, is locked up in a war room that we have set aside. What I would welcome and invite is your staff to visit, to join, to take a look at the process, take a look at their findings, interim findings along the way. And this then will be used as we put together our 2016 budget and look at either modifying the LCS or, if need be, a new ship class.

In either case, when it comes to modifying an LCS, we have always contemplated future flights of LCS. So this could be a very simple, straightforward, in-stride modification, just like we do with other ship classes.

If it equates to a new ship class, that is a very different picture. And so, again, just like every other discussion we have had today, a piece of this requirements definition is going to include affordability. So we have to strike the right balance between what is that degree of added lethality, added capability to an LCS that we need for the CONOPS [concept of operations] in which you will be operating, which includes with the rest of the battle force. And then what does that mean in terms of cost? And what does that mean in terms of schedule, when we would be able to introduce that capability for the small service combatant.

Mr. FORBES. We are caught between two very powerful currents that both want to go in different directions. I don't know where the subcommittee ends up coming out. But we have got to make sure they have the right analysis so we can make that decision.

Admiral, if you want.

Admiral MULLOY. Yes, sir. What I would say is that the requirements paperwork almost has to come after. But as the Secretary pointed out, we do a lot of changes in other classes of ships. I mean, as you look at the *North Dakota*, the first of Flight IV, or the flight—I mean, the flight we are doing now with the *South Dakota*, is, there have been changes. I mean, the *North Dakota* is being built with vertical launch tubes in the bow and a wraparound array. Nothing to do with the original MNS/ORD [mission needs statement/operational requirement document] when the *Virginia* was designed had that in it. Yet the combat power and the design of that ship is fundamentally changing. Flight III *Burkes* are not having a whole new set, but they are fundamentally very different than Flight I when the *Burke* was built.

So the Navy has a pattern of making changes to improve ships. So we really have to get the tiger team, with which I have some of my people on the staff, Admiral Aucoin does, Mr. Stackley is leader, is this key component. And then is it a change to the ship? Is a whole new ship? Either way, we can write some paperwork faster than we have to.

I have a copy of the *Nautilus*, initial paperwork design written by—in the 1950s. It is 6 pages long to build naval nuclear power. It is not the document you would see that had for *Virginia* class.

So I am not sure we have to go back to 6 pages. But I know we can work faster on that once we define what we have. And I think some of your staff coming to see this team or meet some of the people would be outstanding. Because the Secretary has taken it very seriously that we need to figure out what those next 20 are. But we need small surface combatants, going back to the FSA design, is small surface combatants fill a range of needs. They are not all at the high end, but they magnify and amplify phase 1 convoys, ASW [anti-submarine warfare]. They also support phase zero operations around the world in engagement. And that is what we need to go back to, what does the ship have to bring? And what does it have to have for the little higher end capability but mesh it into the whole class?

Mr. FORBES. Thank you.

Mr. Langevin, recognized for 5 minutes.

Mr. LANGEVIN. Thank you, Mr. Chairman.

I want to thank our witnesses for being here today. And we appreciate the benefit of your testimony. And grateful for your service. So thank you all.

Mr. Secretary, let me start with you. In your testimony, you referenced the coupling of the *Ohio* replacement and the U.K. [United Kingdom] Successor programs and the need to maintain the current schedule and funding profile. Could you outline for us your progress in driving costs out of this system as well as some of the serious risks that would occur if there was any further slippage to the program?

Secretary STACKLEY. Yes, sir. Let me first describe that today we are on schedule in terms of both the *Ohio* replacement program schedule and supporting the Successor. We have effectively prosecuted the design of the common missile compartment, which is the major portion of the design between us and the U.K., ahead of when it would normally have been designed, developed and designed, if we were just doing it for the *Ohio* replacement. But that was done to support their schedule, but it also helps us in terms of retiring some of our risk ahead of the *Ohio* replacement.

In terms of progress regarding cost, we are going after two pieces of the cost. We are going after the development costs, and we are going after the unit costs for the submarine itself. And we have a, what is referred to as a design for affordability program in place between the Navy, Electric Boat, and Newport News all participating, just taking a fundamental look at, how is this new boat going to be designed? Where are there opportunities to reduce its cost, either in terms of the way we build or the way we buy?

But most fundamentally, the key portion in terms of keeping cost and schedule under control is reusing technology to the extent possible. So we are porting over as much of the *Virginia* systems as we can that will apply to the *Ohio* replacement as well as and equally important the strategic programs associated with missile launch.

So key components that drive both cost and risk are being tackled through mature designs and reuse. And then what that leaves is the balance of the boat and new development that is associated with improving survivability of the *Ohio* replacement to last well into this century. That development has very dedicated efforts to

retire the risk. And that is where a lot of our current research and development is focused.

Mr. LANGEVIN. Thank you for that answer, Mr. Secretary.

On another program, as we watched the deployment of the updated laser weapon system onboard the USS *Ponce* this year, I know that the Navy is also working on other solid state laser technical maturity program technologies to put a higher power integrated weapons system to sea in 2016, as I understand it.

I particularly applaud the inclusion of a dedicated funding stream in the budget for integration of these capabilities onto existing platforms. I think that is a very positive development, positive move in the right direction.

Could you offer an update from your perspective on the status and the promise of these directed energy capabilities at sea as well as other high energy weapons systems, such as railguns.

Secretary STACKLEY. Yes, sir. In terms of directed energy, lasers and rail—electromagnetic railguns are the two principal weapon systems that we are focused on right now. They both have great promise matched by great challenges. So in terms of laser development—in fact, we have gone down several paths trying to get to a laser weapon system that would be appropriate for shipboard weapons system.

The solid state laser broke through in terms of the greatest potential. And what we are literally doing on *Ponce* is we are not going to wait for the normal, natural development timeline. CNO has basically said, let's get it out there. Let's get it out there. Let's get it into the sailors' hands, let's start to figure out what it means to operate in a marine environment onboard ship a laser weapon system.

So we are going to run into all sorts of challenges that we didn't fully anticipate. But the learning that is going to come with putting that smaller scale laser weapon system on the *Ponce* is going to accelerate the longer-term potential and promise that lasers bring.

Not 2016, sir. We have got a ways to go in terms of maturing the technology for the broader shipboard application. But it is also on our priority list because of the potential it provides.

Railguns are a bit different. Railgun is an extremely unique technology. You are probably well aware we have demonstrated its capability down at Dahlgren, the Naval Surface Warfare Center. But we have several areas that we have got to tackle in order to weaponize that potential. One is something as simple as the barrel of the gun. We are dealing with large electrical power. And so the barrel of the gun has got to be able to handle, frankly, the megajoules that we are looking at there.

A second is the projectile itself. You know, we are going to be firing a projectile Mach 7. We need to ensure that—there is a lot of testing that goes to developing a Mach 7 projectile coming from the barrel of a gun. And a third part of the kill chain is simply the fire control system.

So we have got a gun right now that on land, we can point, we can fire a slug at Mach 7. What we have got to do is get to a fire control system associated with this gun that can spot the target and put the round on the target.

So those are three of the key technologies that we are continuing to work while we demonstrate the basic technology. We are going to, just like the laser weapon system, we are going to get a smaller scale railgun and outfit onboard one of our joint high speed vessels again to get it into the fleet's hands, to demonstrate, and to create more momentum behind that development.

Mr. LANGEVIN. Thank you. Well, I am a strong supporter of these type of technologies. I think are they are game changing, and they are going to help the fleet be much more effective as—and that goes across the services once these technologies are further developed and ready for deployment.

Last question I have is we have invested billions of dollars to ensure that our aircraft carriers project—can project power anywhere on the globe. And it is critical that we continue to make the investments to ensure that we are leveraging our carriers' capabilities to the maximum extent possible.

How do you envision Unmanned Carrier Launched Surveillance and Strike enhancing the carrier wing?

Secretary STACKLEY. Sir, I will start this response, and I will have Admiral Mulloy cap it off.

So, today, we have this demonstrator called UCAS, the Unmanned Combat Air System, that has basically demonstrated the ability to operate unmanned fixed wing on and off of an aircraft carrier.

The next big thing we have got to figure out is how to integrate it in the air wing. So it, in fact, does bring to bear its capabilities in increasing the overall air wings' capabilities.

In the near term, you described the Unmanned Carrier Launched Aerial Strike and Surveillance system which we simply call UCLASS. We are working on the request for proposal to go out and compete the development of UCLASS so that we can deploy nominally a half a dozen of these aircraft on a carrier late in this decade to, in fact, not just integrate it in the air wing but start to exploit some of the capabilities that it will bring.

Clearly, its high endurance is going to give the Navy the ability to provide ISR [intelligence, surveillance and reconnaissance] capabilities for the carrier 24/7. It is going to give us the ability to provide orbits, 6 to 1,200 miles away from the carrier, 24/7, in the case of the 600-mile type of a range. But beyond that, we are going to give it a strike capability and then have the ability to start going after targets of opportunity.

Beyond that, what I would propose is that we offer you a classified brief so you can see where, in fact, we are looking to go with this capability in the future.

Mr. LANGEVIN. I would certainly welcome that.

And, Admiral, did you have something to add?

Admiral MULLOY. Yes, sir. I would like to further emphasize that in the two parts of Mr. Stackley talked about risk reduction. Right now, we are working with the UCAS, and we have decided to extend that program, so we are working above threshold program to come to the Hill in 2014, and you will see in 2015 an added item to continue to fund for \$50 million until we actually get the UCLASS vehicles from this RFP [request for proposal] to start coming. Because it comes in three sections, sir. There is the air vehicle



itself, which we are expecting RFP. There is the carrier segment, which is onboard handling of the vessel. And there is a communication and command and control. Do you operate in the area? Does the CAG [carrier air group] operate it? Does it turn over to a combatant commander for the use, if we get extended range on it? So all three sections have to come together. And the UCAS allows us to work those. Some of it will be on an aircraft carrier. Some of it will be actually flying at Pax River [Naval Air Station Patuxent River]. Some may go to Fallon to work into the air wing. So we are asking for the support.

So we are asking for the support for the ATR [above-threshold reprogramming] and for this budget item for UCAS. They all directly lead into the UCLASS program to retire the risk of all these segments. We really are excited that we acknowledged as a requirement in I think it was last year's NDA they said get six vehicles first, and that is where we are going on that was to get out there and get that on a carrier and operate and see where it can go. But on those, what are called key performance parameters, there are six and six key supported parameters, there is the key system attributes that all relate to the lethality, connectivity, modularity of that and the ability that it can operate on a ship, that it has to be able to operate at sea state 3 and be able to get to sea state 5. It has to carry weight, it has to fly long enough that it doesn't interfere with the air wing. You ideally want to make sure this goes off early and can either stay out of one full cycle or go out long enough that it doesn't interfere with the flight deck, that it supports the CAG and the air wing by being up all the time and not exhausting the crew. So you have to marinize it, it is different than a land-based item. It has to fit into what I call the flow of life in the battle group, that it enhances the battle group, and therefore, it enhances the combatant commander's needs, and that is what we are working through with the RFP directly ties to those parameters, sir.

Mr. LANGEVIN. Admiral, thank you for that answer, and I applaud the Navy's work in this area and being so forward thinking and working so aggressively to integrate this capability into the carrier wing so it can enhance our capabilities exponentially.

Thank you, Mr. Chairman. With that, I yield back.

Mr. FORBES. Gentlemen, thank you for your patience.

As you know, one of the most important things of this hearing is the transcript we create, not just your testimony. We have submitted your written transcript or your written testimony, but I would like to give you any time you need now if there was something that we did not discuss that you think is important that we get in that transcript for you to be able to elaborate on now or something that perhaps was confusing that you want to correct.

The other request I would make, not that you have to respond to this now, but if you would respond back to the committee, perhaps in writing, of those six budgets you described, which of the budgets did not include CVN-73 in the planning? Was it just the sequestration budget? And then if you can, give us a little written explanation. We are still kind of fumbling around to understand why we had time to plan for the \$115 billion and the \$26 billion,

almost \$141 billion extra, but we didn't have time to plan for the carrier.

[The information referred to can be found in the Appendix on page 75.]

Mr. FORBES. And so, with that, General, would you like to start off with any comments that you think that the Marine Corps needs to make sure we get in this transcript that wasn't in your testimony?

General GLUECK. Thank you, Mr. Chairman.

I would say that we request your support in a couple areas. One is the funding flexibility in the ACV way ahead. As you know, the program has been evolving, and we have some money in the budget, and what we would like to do is to be able to move some of that money around to be more effective and efficient with the funds that do exist, not asking for anything more.

Secondly, we would like to get your support on the funding of the development of our high speed connector technology as we move forward. Since we walked away from the high speed vehicle, we now continue to pursue the high speed connector technology.

And lastly, support of increased amphibious ship investment as well as the maintenance and inventories. Thank you, sir.

Mr. FORBES. General, thank you.

Admiral.

Admiral MULLOY. Yes, sir, I appreciate the chance to be here. This is my first hearing, so I was very excited to be over here, but I will say even better than I thought, I look forward to talking to my family when I get home.

I would say the areas to expand, not so much directly related to the cruiser but talking about ballistic missile defense, is the Navy's path ahead is the DDG program. We are building DDGs. Every one we are building now from the bottom up is BMD [ballistic missile defense] compliant, and we are looking forward to in fiscal year 2016 the very first of the Flight III, which will have the advanced, the AMDR [Air and Missile Defense Radar] radar and even greater capability to provide that. And so the path ahead for us is to have the ships converted, which is the Flight IIAs, we start the first one in 2016. You will see in this budget is funding for three sets. We have to do the 2 years ahead of OPN [Other Procurement, Navy], and then we want to start a path. So we acknowledge converting the BMD Flight I and II ships, but we need to start doing the IIAs because they are not any BMD capable. Flight Is and IIs have some capability. The total need for the combatant commander is to raise the number of capabilities, and it is really not a cruiser issue; they are AAW [anti-aircraft warfare] ships. It is a DDG issue, and that is our path to fund that.

The other one is linking up with our Marine Corps is, we support the tremendous efforts last year of the committees to allow us to move the second AFSB [Afloat Forward Staging Base], to fund it for SOF [special operations forces], other modifications, and to finish that design, which will also support our Marine Corps team. We are now looking at the capability of integrating AFSBs and MLPs [Mobile Landing Platforms] into more than just being a MPSRON [Maritime Prepositioning Ship squadron] or the maritime squadron offload. These will be able to go out and do exercises

and advancements, and we are very excited about this connectivity of an AFSB, afloat staging base, would be a place for a Marine Corps Special Purpose MAGTF [Marine Air-Ground Task Force] to operate as well as our special forces. So the CNO and SECNAV [Secretary of the Navy] are very excited about, where can we take this kind of technology of those ships to support our national force, whether it is a national mission force or our Marine Corps team to react to problems around the world that then frees up the amphibians to remain tied to the amphibious group? So I think you will see more on that as we go, and you will see in the budget, we have added a third one in 2017 because we see a need for three of these around—*Ponce* has been there; she is a great ship. I was on her as a third-class midshipman, and she is still out there working, but we need to have a solution that solves problems. AFSBs are part of that. So, other than that, sir, I thank you very much for your time.

Mr. FORBES. Admiral, thank you and thanks for being here for the hearing, and you did a great job. And, you know, our hearings are always fun and exciting, so they are always enjoyable.

So, Mr. Secretary, we will let you finish up.

Secretary STACKLEY. Yes, sir, I am probably just going to run through a list here just to cap off a few topics.

Admiral Mulloy discussed the DDG mod program to get us up through the Flight IIs, IIAs. We are on track for that. This comes back a little bit, though, to the cruiser modernization discussion as well. So when we come back to you with more details on cruiser mod, what I would like to do is put that side by side with destroyer mod so you can see a few things. One, you will see how we are following through on that commitment on the destroyers. I discussed the *John Paul Jones*, you know, tracking and knocking out a ballistic missile target, at the same time working a cruise missile target. That is breakthrough capability. That came out of the destroyer modernization program. That is the Aegis Baseline 9 that she was, she was the first one to go through. So we are moving through that smartly. When you overlay a cruiser mod on top of that, a couple things will emerge. One is going to be capacity. So when we talk about scheduling cruiser mod, both the HM&E and the combat systems piece, what you need to take a hard look at is the capacity and when do we have the time to do that, when is it best to do cruisers versus destroyers, and that is going to be part of our calculus as opposed to dealing with one in isolation from the other.

Second is we talk about upgrading through the Flight IIA. Flight III. Flight III is a great news story. We have awarded the AMDR missile—I am sorry, the AMDR radar development contract, and we are on track for the preliminary design review for that radar later at the end of this calendar year, early in fiscal year 2015. Similarly, we are doing the preliminary design review [PDR] for the ship to take a look at the ship impacts, and all of the concerns that had been previously raised regarding shipboard margins for power cooling, stability, and weight, those are all being clearly addressed, and so we see the ship PDR coming along very well. We see the development on the radar coming along very well, and we look forward to coming back next year in our 2016 budget request,

where we will include the Flight III. Between now and then, we will continue to work with your staff to demonstrate the maturity of that design as it comes along.

General Glueck discussed the amphibs, we discussed the amphibs. That is—when we look at all the industrial base issues that we have in shipbuilding, that is one that is most pressing, and it does not have a simple solution for all the reasons that we have discussed, but we do look forward to continuing to work with your subcommittee on this issue because it is so important to us.

We have talked the CVN-73 at length, and I know we will continue to talk it, discuss the issues surrounding that as we go through the budget cycle, and you all deliberate on the 2015 bill that you ultimately pass.

Thank you for the discussion on LCS, I do hope that your staff or yourself get the opportunity to come over, visit our war room for those discussions.

The last two things I want to wrap up on, one is our acquisition workforce. We are engineering-centric, rightfully so. Last year was tough, tough, tough on our workforce. All the pressures of the budget, all that churning of the budget, all the uncertainty, the lay-offs, the furloughs put our workforce under great strain, but they hung in there. They hung in there, and they are back at it this year unfazed, very dedicated. What we have to do, and I look for you to keep a watchful eye on us, is to preserve our investment in that workforce as we go forward.

Congress put in place the Defense Acquisition Workforce Development Fund that has been very instrumental for us to be able to build up that skill set and get our engineering force and our contracts officers, program management team up to the level needed to succeed in the development of these difficult programs. What we have to ensure is, as we face these budget pressures, that we don't go back to where we started and see the same type of fallout in terms of our shortfalls in program management and development that we had seen about a decade ago.

Last is our development, our research and development. A lot of this discussion today was on major programs, building—sustaining the current fleet and building the next fleet, but what we have to likewise keep an eye on is the fleet after next, our R&D investments. Those capabilities that we are looking at today, that we have to get across the long haul to deal with the threat which, frankly, is investing heavily right now. The threat is investing heavily right now in dealing with our vulnerabilities. We have got to ensure that as the budget pressures mount, we don't look at the R&D, we don't look at cutting that R&D stream and forgoing the capabilities that we have got to put in the hands of future sailors and Marines so that they can enjoy the same degree of superiority that we enjoy today.

Mr. FORBES. Gentlemen, our country is very fortunate to have the three of you serving in the capacities in which you are serving. Thank you for giving us your time today, and with that we are adjourned.

[Whereupon, at 6:01 p.m., the subcommittee was adjourned.]

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# **A P P E N D I X**

MARCH 26, 2014

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**PREPARED STATEMENTS SUBMITTED FOR THE RECORD**

MARCH 26, 2014

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**Opening Remarks of the Honorable J. Randy Forbes**  
**for the**  
**Seapower and Projection Forces Hearing on**  
**Department of the Navy Fiscal Year 2015 Budget Request for Seapower and**  
**Projection Forces**  
**March 26, 2014**

I want to welcome all of our members and the distinguished panel of Navy and Marine Corps leaders for today's hearing.

We have testifying before us on the fiscal year 2015 budget request:

The Honorable Sean Stackley, Assistant Secretary of the Navy for Research, Development and Acquisition;

Vice Admiral Joe Mulloy, Deputy Chief of Naval Operations for Integration of Capabilities and Resources; and

Lieutenant General Kenneth Glueck, Jr., Deputy Commandant for Combat Development, Integration, and Commanding General of the Marine Corps Combat Development Command.

Thank you all for testifying today and we look forward to your thoughts and insights on these important issues.

First of all, I want to commend the Department on their continued emphasis on the undersea warfare domain. I believe that the United States has a clear asymmetric advantage in this area and it is critical to continue procurement of two Virginia class submarines a year. I also appreciate the continued emphasis on the Virginia Payload Module and support the eventual inclusion of this capability in the fiscal year 2019 Block five procurement.

As to the aircraft carrier force structure, I am dismayed at the intent of this administration to reduce our aircraft carrier fleet. The equivocation and vacillation on this issue is frankly disappointing. It is a fact that the administration has requested appropriations in fiscal year 2015 only for inactivating the USS George Washington. It is a fact that the law requires 11 aircraft carriers. It is a fact that

the USS George Washington refueling and complex overhaul is not included in the Future Year Defense Plan. It is a fact that the hull of the USS George Washington has another 25 years of service life remaining. The administration's rhetoric that they are not removing an aircraft carrier out of the fleet simply does not match their actions. I think our decision on this issue is clear. I look forward to fully restoring the requisite funding to ensure we retain the USS George Washington for another 25 years.

There are a multitude of other procurement shortfalls in the Navy-Marine Corps budget regarding ships, aircraft and weapons. Our subcommittee is going to take a hard look at the entirety of combatant commander requirements and relate those to what is requested in the budget to ensure our maritime forces are best funded with the right capabilities. I look forward to discussing several of these issues today.

Specifically, I want to have an in-depth discussion on the Navy's Cruiser retention plan. If the Navy believes it must pursue this plan because of budget constraints, then I look forward to understanding the details of how you all plan to execute this endeavor in the decade ahead and eventually restore all 11 cruisers to the fleet in a timely fashion. We also want to understand the risk. If 22 cruisers are required to meet global force management requirements today, why is it now "acceptable risk" to reduce by half that quantity when world events obviously indicate otherwise?

And finally, the Navy has cultivated tremendous uncertainty related to developing and maintaining offensive surface-warfare missile capabilities. Despite being well-below missile inventory requirements, the Navy has cut in half planned production of Tomahawk missiles in 2015, and terminated that line in 2016. And further concerning, replacement missile capabilities are in the infancy stages of concept development and years off from operational fielding. We need to again understand why this is acceptable risk and what is your surface-attack missile roadmap going forward.

As to the Marine Corps, I believe that the amphibious ship construction industrial base is fragile. A significant time gap exists between current and new-ship construction plans that will lead to destabilizing the industrial base. We need to move with firm and deliberate steps to ensure that we retain an appropriate and unquestionable force structure to support our maritime presence and warfighting requirements.

As to the Amphibious Combat Vehicle program, I understand the Marine Corps plans to pursue a two tiered approach that would procure a wheeled armored personnel carrier in the short term and continue the development to achieve capabilities in the long term associated with high water speed technology efforts from previous amphibious vehicle programs. While this approach seems reasonable, I look forward to gaining a better understanding of the Marine Corps' plans. We need to be assured we are providing our Marines with essential capabilities at the right time.

I look forward to discussing this important topic with our expert panel of witnesses.

With that, I turn to my good friend and colleague, the ranking member of the subcommittee, Mike McIntyre.

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BY THE HOUSE ARMED SERVICES  
COMMITTEE SUBCOMMITTEE ON  
SEAPOWER AND PROJECTION FORCES

STATEMENT

OF

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(RESEARCH, DEVELOPMENT AND ACQUISITION)

AND

VICE ADMIRAL JOSEPH P. MULLOY  
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RESOURCES

AND

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BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

DEPARTMENT OF THE NAVY SEAPOWER AND PROJECTION FORCES  
CAPABILITIES

MARCH 26, 2014

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SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. Chairman, Representative McIntyre, and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address the Department of the Navy seapower and projection forces capabilities. The Fiscal Year (FY) 2015 President's Budget submission is governed by the 2014 Quadrennial Defense Review which implements the 2012 Defense Strategic Guidance (DSG), albeit with higher risk, and continues our efforts to ensure our ability to fight and win the nation's wars, operate forward, and sustain readiness. Although forestalled somewhat in FY 2014 and 2015 by the Bipartisan Budget Act (BBA) of 2013, the principal risk to the Department's ability to meet the DSG remains the considerable uncertainty in future funding. This uncertainty hinders planning and impedes balancing near and long term readiness and capability. In working to mitigate this challenge, we have set priorities in our shipbuilding, aviation, weapons, and combat vehicle plans. And we have worked aggressively within the Department of the Navy to reduce and control the costs of our acquisition programs. In all these efforts, our principal requirement remains to equip the Navy and Marine Corps with the most effective warfare systems, through procurement, modernization, and sustainment, to address the security challenges of today and tomorrow. The Department will continue to work closely with the Congress to maintain the right balance across capacity, capability, readiness, and the industrial base.

Though budget issues, including furloughs and the Government shutdown, have been hard on the Department, our Sailors and Marines deployed around the world continued to perform the mission last year and get the job done, being where it mattered when it mattered. The year began with the *USS JOHN C STENNIS* (CVN 74) Carrier Strike Group and the *USS BONHOMME RICHARD* (LHD 6) Amphibious Ready Group, embarked with the 31st Marine Expeditionary Unit, both on patrol. Carrier Air Wing 7 and *USS DWIGHT D EISENHOWER* (CVN 69) left for a four month deployment only two months after returning home from a six month deployment. The Carrier Strike Group included, for the first time, a German ship- FGS Hamburg. Our submarine forces continued to perform superbly around the globe. For example, in April, *USS ALABAMA* (Gold) (SSBN 731) completed a 108-day strategic patrol, one of the longest Strategic Ballistic Missile Submarines (SSBN) patrols in recent years. In recent weeks, the destroyer *USS KIDD* (DDG 100), P-3 aircraft, and our newest Maritime Patrol Aircraft, the P-8A, have provided critical support in the search for the missing Malaysian airliner.

The Marine Corps continues to excel in response to today's evolving security environment. In April, Marines stood up Special Purpose Marine Ground Task Force - Crisis

Response in support of AFRICOM. In May, a Marine Rotational Force deployed to Darwin, Australia in support of the nation's Pacific Pivot.

In Afghanistan, I Marine Expeditionary Force (MEF) completed a year-long deployment furthering stability operations and transitioning the fight to Afghan-led operations. II MEF relieved I MEF at Camp Leatherneck in Helmand province. In March, Carrier Air Wing 9 left the U.S. 5th Fleet area of responsibility after flying more than 9,000 sorties in support of coalition forces in Afghanistan.

In August, the Department of the Navy responded to chemical weapons attacks in Syria by patrolling four destroyers and *USS SAN ANTONIO* (LPD 17), with elements of the 26th Marine Expeditionary Unit onboard, in the Eastern Mediterranean to provide stability to the region. *USS HARRY S TRUMAN* (CVN 75), *USS GETTYSBURG* (CG 64), and *USS BULKELEY* (DDG 84) safeguarded the Northern Arabian Sea while the *USS NIMITZ* (CVN 68) patrolled the Red Sea.

And in November, the Navy and Marine Corps responded following the devastation of Typhoon Haiyan. *USS GEORGE WASHINGTON* (CVN 73), *USS FREEDOM* (LCS 1), *USS ASHLAND* (LSD 48) and *USS GERMANTOWN* (LSD 42) transited to the Philippines in support of relief efforts. More than 900 Marines delivered supplies to the thousands of survivors left without food and water.

Our nation's away team, the Navy and Marine Corps, continued this pattern of assuming the watch again and again throughout 2013. This operational tempo keeps nearly half of our Fleet underway every day. Forty-eight thousand Sailors and Marines stand watch daily around the globe, constantly ready to do that which our nation may ask them to do. No other military and no other nation on earth today, has the reach, the presence, the capability, the training and the resolve to maintain this pace or breadth of operations.

The Navy and Marine Corps are well suited and uniquely positioned to perform the missions of the DSG, as implemented by the 2014 QDR. In addressing these requirements, the Department's FY 2015 budget submission sustains our support to partners in the Middle East, rebalances our effort toward the Asia-Pacific region, focuses our presence at key maritime crossroads, and meets the highest-priority capability demands of the geographic Combatant Commanders. We made tough strategy-based choices to ensure a coherent budget that delivers the overseas presence directed by the Secretary of Defense in support of the Global Force

Management Allocation Plan (GFMAP); continues our essential, near term investments in the Middle East and Asia-Pacific; and develops capabilities over the long term to address warfighting challenges in these same regions. These tenets guide the priorities and direction of the Department of the Navy's Fiscal Year 2015 President's Budget request.

However, the potential for a return to sequestration-level funding in FY 2016 and future years increases our risk in meeting the current and future requirements necessary to meet our missions.

Despite its serious impacts, the 2013 sequestration was manageable in part because of key budget reprogrammings made by the Department, with congressional support. The Department was able to execute its plans for procurement of the ships and aircraft appropriated for FY 2013, and in particular was able to award the FY 2013-2017 multi-year procurement (MYP) of DDG 51 Class destroyers. In order to accomplish this however, the Department also had to mitigate impacts to some programs in execution to temporarily avoid reductions by deferring costs to future years.

Congress' passage of the BBA of 2013, which raised discretionary funding caps above the sequestration level for FY 2014 and FY 2015, allowed us to avoid indiscriminate funding reductions across all programs. As a result, the Department will be able to procure the eight ships appropriated in FY 2014, including the additional tenth destroyer in the MYP. Critical aircraft procurement continued with the recapitalization of our maritime patrol capability with the P-8A, our carrier based E-2D early warning aircraft and much of our vertical lift capacity across both services with the V-22, H-60, and H-1. However, while the BBA provided some relief in FY 2014 and FY 2015, the lower funding levels compared to our FY 2014 President's Budget compelled the Department of the Navy to make tough choices and accept higher risk in our ability to meet the DSG. Today, the Navy is trying to manage the reduced funding levels by improving efficiencies, reducing costs, and providing stability where possible. The FY 2015 request reflects the results of these efforts.

#### **The Fiscal Year 2015 President's Budget Request**

As the Department moves into FY 2015 and beyond, the FY 2015 President's Budget submission balances force structure, readiness, and capability to meet national security commitments. Simultaneously the plan is developed to minimize impacts to the industrial base where possible, in order to avoid further future increases in cost, or perhaps even permanent

losses to our national industrial capability. A brief overview of Seapower and Projection Forces programs follows.

### Shipbuilding

The Navy reported to Congress in January 2013 the results of the Force Structure Assessment (FSA), which determined the capabilities of the future force needed to meet the full range of missions required of the Department of the Navy in support of the DSG. The FSA analysis resulted in a battle force requirement of 306-ships<sup>1</sup>.

The Department's Shipbuilding Plan continues to build toward the balanced force required by the FSA. In support of this, the FY 2015 President's Budget requests funding for seven ships: two VIRGINIA Class attack submarines, two DDG 51 ARLEIGH BURKE Class destroyers, and three Littoral Combat Ships (LCS). Additionally, the budget request includes continued incremental funding for CVN 79. The FY 2015 submission for the FYDP (FY 2015 to FY 2019) plans for the procurement of 44 ships.

While the Navy's FY 2015 plan maintains our steady momentum towards achieving the FSA requirements, as the Chief of Naval Operations (CNO) stressed in his recent posture statement to the full committee, in order to remain a balanced and ready force while complying with the reduction in funding below our FY 2014 levels, we were compelled to make difficult choices in the FY 2015 plan. The FY 2015 President's Budget maintains the option to refuel or inactivate one nuclear aircraft carrier (CVN), and operate or shutdown a carrier air wing (CVW). If reduced Budget Control Act (BCA) levels remain in place in FY 2016, *USS GEORGE WASHINGTON* (CVN 73) and associated air wing would need to be inactivated in lieu of conducting the planned Refueling Complex Overhaul (RCOH). This decision will be made as part of our FY 2016 budget submission.

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<sup>1</sup> It should be noted that the Department of the Navy revised guidelines for accounting for the size of the Navy's Battle Force. Therefore, numbers in this statement are not directly comparable to those used in prior testimony. Changes to guidelines include clarifying the accounting for smaller, forward deployed ships (e.g. patrol coastal, mine countermeasures ships, high speed transports) and ships routinely requested by Combatant Commanders (e.g. hospital ships).

The following table illustrates the differences between new and old Battle Force accounting guidelines:

	<i>Today</i>	<i>FY 2015</i>	<i>FY 2020</i>
<i>PB-15: New Guidelines</i>	290	284	308
<i>PB-15: Old Guidelines</i>	284	274	304



An additional key component of our budget plan is a phased modernization of 11 cruisers, which are the most capable ships for controlling the air defense of a carrier strike group. The Navy's Cruiser Modernization Plan will allow the Navy to reduce funding requirements while most efficiently increasing the capability and extending the service life of our large surface combatants.

Just beyond the FYDP, the Navy must recapitalize our SSBN force, manage the block retirements and replacement of aging SSBNs built in the 1980s and 1990s, and contain the cost of replacing these ships. The significant cost associated with recapitalizing the Nation's sea based strategic deterrent will require an increase of the shipbuilding budget, up to ~\$19 billion (FY 2014 dollars). Our ability to meet the FSA battle force requirements is heavily dependent upon attaining this level of funding.

The key elements of the FY 2015 shipbuilding request will now be discussed for each area of the plan.

#### **Aircraft Carriers**

Our aircraft carriers are central to our Nation's Defense Strategy, which calls for forward presence; ability to simultaneously deter potential adversaries and assure our allies; and capacity to project power at sea and ashore. These national assets are equally capable of providing our other core capabilities of sea control, maritime security, and humanitarian assistance and disaster relief. Our carriers provide our nation the ability to rapidly and decisively respond globally to crises, with a small footprint that does not impose unnecessary political or logistical burdens upon our allies or potential partners.

FORD Class carriers will be the premier forward deployed asset for crisis response and early decisive striking power in major combat operations for the next half-century. We have established a steady state FORD Class procurement plan designed to deliver each new ship in close alignment with the NIMITZ Class ship it replaces. The design improves warfighting capability, survivability, operational availability, and quality of life improvements for our Sailors, while reducing crew and aviation wing size by as many as 1,200 personnel and decreasing total ownership costs by approximately \$4 billion per ship. *Gerald R. Ford* (CVN 78), the lead ship of the class, was launched on November 17, 2013. CVN 78 displaced 77,000 tons at launch and was 70 percent complete – the highest levels attained in aircraft carrier new construction. This unprecedented level of completeness by launch included the installation of

the Dual Band Radar (DBR) arrays, and the pulling of over 60 percent of electrical cable. As a result, CVN 78 is optimally prepared for its post-launch test program. CVN 78 will be delivered in FY 2016 as the numerical replacement for the *USS ENTERPRISE* (CVN 65), which was inactivated on December 1, 2012 after 51 years of active service.

The Navy is committed to delivering CVN 78 within the cost cap. We are continuing efforts to identify cost reductions; drive improved cost and schedule performance to contain cost growth; and reverse the rising cost trends associated with first-of-class non-recurring engineering, contractor and government furnished equipment (GFE), and ship production issues on the lead ship. The FY 2014 National Defense Authorization Act (NDAA) revised the CVN 78 cost cap to \$12,887 million. The FY 2015 President's Budget request aligns the CVN 78 budget with the cost cap.

The Navy and shipbuilder are also committed to driving down and stabilizing aircraft carrier construction costs for *John F. Kennedy* (CVN 79) and subsequent hulls. As a result of the lessons learned on CVN 78, the approach to carrier construction has undergone an extensive affordability review. The Navy and the shipbuilder have made significant changes on CVN 79 to reduce the cost to build the ship. These efforts, identified in the May 2013, CVN 79 Report to Congress, include the following:

- Improvements in material availability and pricing;
- Major changes in build strategy and processes with a determined focus on executing construction activities where they can most efficiently be performed;
- Design changes for greater producibility; and
- Aggressive measures for cost control in GFE.

These efforts are ongoing and additional process improvements continue to be identified.

The Navy extended the CVN 79 Construction Preparation contract into 2014 to enable continuation of ongoing planning, construction, and material procurement while capturing lessons learned associated with lead ship construction and early test results. The continued negotiations of the DD&C contract afford an opportunity to incorporate further construction process improvements and cost reduction efforts. Award of the DD&C contract is expected in late 2014.

The FY 2014 National Defense Authorization Act (NDAA) adjusted the CVN 79 and follow ships cost cap to \$11,498 million to account for economic inflation and non-recurring

engineering for incorporation of lead ship lessons learned and design changes to improve affordability. The Navy is committed to delivering CVN 79 within the cost cap by continuously implementing initiatives to reduce costs. The FY 2015 President's Budget rephases CVN 79 funding, resulting in the ship being delivered in mid-FY 2023 vice late FY 2022. The delay will have no impact on projected force structure, with *USS NIMITZ* (CVN 68) not due to be inactivated until FY 2025.

With more than half of the service life of the NIMITZ Class still remaining, the RCOH continues as a key enabler for the enduring presence of the aircraft carrier Fleet. This year's budget request includes cost to complete the RCOH for *USS ABRAHAM LINCOLN* (CVN 72) partially restoring program funding removed during the FY 2013 sequestration. It also includes funding for advance planning for defueling *USS GEORGE WASHINGTON* (CVN 73), work common to either inactivation or RCOH. However, the final decision on the future of CVN 73 will be made in the FY 2016 President's Budget request.

If sequestration spending levels remain in place in FY 2016, CVN 73 would be inactivated. This path has a cost avoidance of approximately \$7 billion in the 2015-2029 FYDP, which includes the cost to overhaul and retain CVN 73 with her associated air wing and the logistics, manpower and training support costs. This permanent reduction in the aircraft carrier force is unavoidable if sequestration-level cuts are re-imposed, and will result in a corresponding decrease in operational availability to meet global demands and emergent crises. In this event, the Navy will be unable to meet historical Combatant Commander demands.

### **Submarines**

Submarines' stealth and ability to conduct sustained forward-deployed operations in anti-access / area-denial environments serve as force multipliers by providing high-quality Intelligence, Surveillance, and Reconnaissance (ISR) as well as indication and warning of potential hostile action. In addition, attack submarines are effective in anti-surface warfare and undersea warfare in almost every environment, thus eliminating any safe-haven that an adversary might pursue with access-denial systems. As such, they represent a significant conventional deterrent. The Navy is mitigating an impending attack submarine force structure shortfall in the 2020s through three parallel efforts: continuing procurement of two VIRGINIA Class submarines per year; reducing the construction span of VIRGINIA Class submarines; and extending the service lives of selected attack submarines. While each of our attack submarines

provides considerable strike capacity, our guided missile (SSGN) submarines provide substantially more strike capacity and a robust capability to covertly deploy special operations force (SOF) personnel. Lastly, the Navy's 14 SSBNs provide the nation with an around-the-clock, credible, modern and survivable sea-based strategic deterrent.

The FY 2015 President's Budget requests full-funding of two VIRGINIA Class submarines and advanced procurement for the FY 2016 and FY 2017 vessels. The VIRGINIA Class submarine program has delivered the last six ships on budget and ahead of schedule. The next ship, *North Dakota* (SSN 784), fully encompasses the Design for Affordability efforts begun in 2005, which include a completely redesigned bow section, and is expected to have the shortest construction span for a VIRGINIA Class submarine.

The Navy will award the next 10-ship, MYP contract in spring 2014. It continues the co-production of the VIRGINIA Class submarines between General Dynamics Electric Boat and Huntington Ingalls Industries - Newport News Shipbuilding through FY 2018.

Ballistic missile submarines, coupled with the TRIDENT II D-5 Strategic Weapons System, represent the most survivable leg of the Nation's strategic arsenal and provide the Nation's only assured nuclear response capability. SSBNs provide survivable nuclear strike capabilities to assure allies, deter potential adversaries, and, if needed, respond in kind. The Nuclear Posture Review completed in April 2010 determined that the U.S. would retain a nuclear triad under the New START including the 14 SSBNs currently in-service. Originally designed for a 30-year service life, the OHIO Class was extended to its limit at 42 years of operation. With the OHIO Class SSBNs being an average of 23.3 years old, the U.S. must continue development of the follow-on 12-ship OHIO Replacement as the current SSBNs' life cycles cannot be extended further. This is our top priority program within the Department of the Navy.

In December 2012, the Navy awarded a research and development contract for the OHIO Replacement. This contract focuses on meeting the program's performance requirements while reducing costs across design, production, and operations and sustainment. The Navy recently validated that its industry partners met or exceeded the cost-reduction targets established for FY 2013. These reductions bring the Navy closer to its cost goals and serve as a positive start for what will be a long-term effort to minimize costs while delivering the required warfighting capability. The cost reduction efforts will continue throughout the design phase.

The FY 2015 budget requests funding to continue development of the OHIO

Replacement SSBN and ensures Common Missile Compartment (CMC) efforts remain on track to support the United Kingdom's SUCCESSOR Program's schedule. Given the need to recapitalize this aging strategic asset, coupled with the ongoing need to support Navy force structure, the Navy continues to pursue the means to resource construction of the next generation nuclear ballistic missile submarine in time to fulfill U.S. Strategic Command requirements.

The Navy's four guided missile submarines (SSGNs) provide significant warfighting capability but will be retired in the mid-2020s after 42 years of service. To mitigate the 60 percent reduction in undersea strike capacity when they retire, the Navy is exploring using the inherent modularity of the VIRGINIA Class SSN and is designing a VIRGINIA Payload Module (VPM) that will include four 87-inch wide missile tubes each capable of launching seven TOMAHAWK cruise missiles. This module provides greater than three times the payload capacity with less than 15 percent the cost increase to mitigate the large undersea strike capacity lost when SSGNs retires. The President's Budget for FY 2015 requests continued VPM Research and Development, providing an option to start procurement as part of the Block V contract scheduled for award in early FY 2019.

#### **Large Surface Combatants**

Guided missile cruisers (CGs) and guided missile destroyers (DDGs) comprise our large surface combatant Fleet. When viewed as a whole, these ships fulfill broad mission requirements both independently and in conjunction with a strike group. The demands for increased capability and capacity in Ballistic Missile Defense (BMD) and Integrated Air and Missile Defense (IAMD) continue to be a focal point. In order to meet the increased demand for BMD, the Navy is forward deploying four BMD capable DDGs to Rota, Spain. The *USS DONALD COOK* (DDG 75) arrived in Rota in February 2014. One additional ship will arrive later this fiscal year, and the remaining two will arrive in FY 2015.

The ARLEIGH BURKE Class (DDG 51) program remains one of the Navy's most successful shipbuilding programs – 62 ships are currently operating in the Fleet. The FY 2015 President's Budget request includes funding to execute the third year of the MYP and procure two DDG 51 destroyers. The ships will incorporate IAMD and provide additional BMD capacity to the Fleet when they deliver in the early FY 2020s. The President's Budget also includes a funding request to complete the construction of *John Finn* (DDG 113), *Ralph Johnson* (DDG 114), and *Rafael Peralta* (DDG 115) to restore program funding removed by the FY 2013

sequestration.

Air and Missile Defense Radar (AMDR) is the future multi-mission radar of the Navy's surface combatant fleet, which will meet the growing ballistic missile threat by improving radar sensitivity and enabling longer range detection for engagement of increasingly complex threats. In October 2013, the Navy awarded the contract for development of the AMDR, with options for up to nine low rate initial production (LRIP) units. This scalable radar is on track for installation on the second FY 2016 DDG 51 hull to make it the first Flight III ship that will better support joint battle space threat awareness and defense, including BMD, area air defense, and ship self-defense. The AMDR radar suite will be capable of providing simultaneous surveillance and engagement support for long range BMD and area defense. The program demonstrated during a March 2014 total ship design review that the Flight III design is on track to have adequate space, weight, power, and cooling service life margins. Engineering Change Proposal detail design efforts for the DDG Flight III design must continue in FY 2015 to support introduction on one of the FY 2016 ships.

The DDG 1000 ZUMWALT Class guided missile destroyer will be an optimally crewed, multi-mission, surface combatant designed to provide long-range, precision, naval surface fire support to Marines conducting littoral maneuver and subsequent operations ashore. In addition to the ship's two 155mm Advanced Gun Systems capable of engaging targets with the Long Range Land Attack Projectiles (LRLAP), the ship will be capable of conducting anti-submarine warfare (ASW), land attack and will provide valuable advancements in technology such as signature reduction (both acoustic and radar cross-section), active and passive self-defense systems, enhanced survivability features, and shipboard automation (in support of reduced manning). The DDG 1000 program concluded 15 of 15 successful LRLAP test firings in 2013, completing the guided flight test program. As a result, the LRLAP is on track for at-sea testing which is planned for FY 2015. The program also completed a competition for a steel deckhouse for the DDG 1002. The competition for the deckhouse is one example of the Navy's ongoing initiatives to control program cost. The DDG 1000 is scheduled to be christened in April 2014 and enter the Fleet in 2016. The FY 2015 budget requests funds to continue the DDG 1000 program.

### **Small Surface Combatants**

The Littoral Combat Ship (LCS) enables the Navy to implement the DSG imperative to develop innovative, low-cost, and small-footprint approaches to achieve our security objectives. The modular, open systems architecture inherent in LCS's combat system allows for rapid integration of technological solutions that increase capability at reduced cost. The LCS complements our inherent blue water capability and fills war fighting gaps in the littorals and strategic choke points around the world. LCS design characteristics (speed, agility, shallow draft, payload capacity, reconfigurable mission spaces, air/water craft capabilities) combined with its core C4I, sensors, and weapons systems, allow LCS to bring unique strengths and capabilities to the mission.

The FY 2015 President's Budget includes funding for three LCSs. The reduction to the number of ships procured in FY 2015 is the result of the tough choices required under reduced funding levels in FY 2015 relative to the FY 2014 plan. The reduction from four to three LCSs in FY 2015 will require the Navy to extend the pricing for one block buy ship. The FY 2015 President's Budget request also includes funding to complete construction on LCS 5 through LCS 16 that was deferred due to sequestration in FY 2013.

The LCS Mission Modules program continues its efforts to field capability incrementally as individual mission systems become available, rather than wait for all the mission systems needed for the end-state capability. Beginning in March 2014, the program commenced Initial Operational Test and Evaluation (IOT&E) on the Surface Warfare (SUW) Mission Packages (MP). The Remote Minehunting System (RMS) completed its reliability growth program this past year and continues to test well. RMS supports the Mine Countermeasure (MCM) MP which expects to begin IOT&E in 2015. The ASW MP is planning a Preliminary Design Review in 2014 with IOT&E scheduled to begin in 2016. The LCS, with a MP, provides capability that is equal to or exceeds the current capability of the ships that it is replacing. The FY 2015 budget requests funding for 3 modules (1 MCM, 2 SUW).

The Navy successfully validated LCS's operational flexibility during a 10-month deployment to Southeast Asia with the manning concept of rotational crewing, shore-based training, and LCS maintenance strategies. This deployment will be followed by the USS FORT WORTH (LCS 3) deployment in 2014. While the Navy continues to focus on the merits of LCS and the capabilities it brings to the fleet, the service also recognizes the importance of maintaining awareness of emerging threats and capabilities of our Nation's adversaries. As a

result, the Navy is examining options to increase the lethality of our small surface combatant force. Specifically, the Navy is studying existing ship designs (including the LCS), a modified LCS, and a completely new ship design, including their estimated cost, to determine the most affordable method for improving the capability of this critical element of our force. Pending the results of this study (due in support of FY 2016 budget formulation), the Navy will restrict LCS contract actions within the first 32 ships of the class.

### **Amphibious Ships**

Amphibious ships operate forward to support allies, respond to crises, deter potential adversaries, and provide the nation's best means of projecting sustainable power ashore; they also provide an excellent means for providing humanitarian assistance and disaster relief. Amphibious forces comprised of Sailors, Marines, ships, aircraft and surface connectors provide the ability to rapidly and decisively respond to global crises without a permanent footprint ashore that would place unnecessary political or logistical burdens upon our allies or potential partners. There are two main drivers of the amphibious ship requirement: maintaining the persistent forward presence, which enables both engagement and crisis response, and delivering the assault echelons of up to two Marine Expeditionary Brigades (MEB) for joint forcible entry operations.

The Chief of Naval Operations and Commandant of the Marine Corps have determined that the force structure for amphibious lift requirements is 38 amphibious ships. Balancing the total naval force structure requirements against fiscal projections imposes risk on meeting this requirement. Based on the footprint of a 2.0 MEB assault echelon force, a minimum of 30 operationally available ships are necessary to provide a force made up of ten Amphibious Assault Ships (LHD/LHA), ten Amphibious Transport Docks (LPD) and ten Dock Landing Ships (LSD). Planning factors call for a force of 33 ships to achieve this availability, and this will be achieved in total in FY 2018, and with the required mix (11/11/11) in FY 2024 with delivery of LHA 8. At the end of FY 2015, the Amphibious Force Structure will stand at 30 ships, which includes 9 LHD/LHAs, 9 LPDs, and 12 LSDs.

LHA(R) Class ships are flexible, multi-mission platforms with capabilities that span the range of military operations - from forward deployed crisis response to forcible entry operations. These ships will provide the modern replacements for the remaining LHA 1 TARAWA Class ship and the aging LHD 1 WASP Class ships as they begin decommissioning in the late 2020s. *America* (LHA 6) and *Tripoli* (LHA 7) are optimized for aviation capability in lieu of a well



deck and will deliver in April 2014 and 2018, respectively. LHA 8, the first Flight 1 ship, will have a well deck to increase operational flexibility and a smaller island that increases flight deck space to retain aviation capability. It will be funded in FY 2017 and will deliver in FY 2024. The Navy expanded the Early Industry Involvement efforts for the LHA 8 design and initiated a phased approach to the design for affordability of amphibious ships. The increased funding in FY 2014 will fund these affordability efforts that foster an interactive competition with industry partners in developing a more affordable, producible detail design and build strategy, and drive towards more affordable ships. Funding for LHA(R) planning, testing, outfitting and post-delivery is included in the President's Budget.

The SAN ANTONIO Class (LPD 17) provides the ability to embark, transport control, insert, sustain, and extract elements of a Marine Air-Ground Task Force (MAGTF) and supporting forces by helicopters, tilt rotor aircraft, landing craft, and amphibious vehicles. The Navy accepted delivery of *USS SOMERSET* (LPD 25) in October 2013, the 9th of 11 ships. The remaining two ships are under construction and will deliver in spring 2016 and summer 2017, respectively. The FY 2015 President's Budget requests funding for cost to complete, outfitting, post-delivery, and program close-out costs.

LX(R) is the replacement program for the landing ship dock, LSD 41 and LSD 49 Classes, which will begin reaching their estimated service life in the mid-2020s. The Navy will leverage LX(R)'s Analysis of Alternatives (AoA), which will conclude in FY 2014, to determine the ship's key performance parameters. The program is anticipated to begin technology development in early FY 2015. Throughout development, affordability will be a key focus for this ship class. Industry will be involved in identifying cost drivers on this class of ship. Advanced procurement funding in FY 2019 is planned with the lead LX(R) Class ship planned in FY 2020. The lead LX(R) will deliver in time for LSD 43's retirement in FY 2027. The Navy plans to maintain 11 deployable LSDs in the active force until LX(R) delivers by rotating three LSDs to complete phased modernizations beginning in FY 2016. This will extend *USS WHIDBEY ISLAND* (LSD 41) and *USS GERMANTOWN* (LSD 42) (with mid-life complete) to 45 operational years of service. *USS TORTURGA* (LSD 46) will complete a midlife availability so as to achieve the desired 40 year operational service. This plan mitigates presence shortfalls and 2.0 MEB Assault Echelon shipping requirements.

### Auxiliary Ships

Support vessels such as the Mobile Landing Platform (MLP) and the Joint High Speed Vessel (JHSV) provide additional flexibility to the Combatant Commanders. The *USNS MONTFORD POINT* (T-MLP 1) and *USNS JOHN GLENN* (MLP 2) ships are designed to support the Maritime Prepositioning Forces, enabling at-sea transfer of vehicles from cargo ships to facilitate the delivery of these vehicles, equipment, personnel and supplies between the sea and restricted access locations ashore. MLP 1 delivered, and with the installation of the Core Capability Set (CCS) completing in spring 2014, it will continue with its integrated testing and evaluation phase throughout the summer and fall to explore further use beyond MPF to facilitate expeditionary operations. The shipyard's delivery of MLP 2 occurred in March 2014; the ship will have its CCS installation completed by early FY 2015. Both MLP 1 and MLP 2 were delivered by the shipyard on cost and on schedule. MLP Afloat Forward Staging Base (AFSB) variant utilizes the MLP base ship, but is outfitted with an AFSB capability vice the CCS. The MLP AFSB variant will retain sealift capabilities inherent to the baseline MLP with added vertical lift capability to support sealift and other missions in response to Combatant Commanders' requirements. In the past, the Navy provided Fleet assets to address the AFSB demand. In order to avoid diverting a Fleet asset to fulfill this request, the Department of the Navy converted the *USS PONCE* (AFSB (I)) to provide an interim AFSB capability. Three MLP AFSB variants are currently planned. *Lewis B. Puller* MLP 3, the first AFSB variant, is under construction and will deliver in late 2015, in time to replace *USS PONCE* by FY 2017. The Navy plans to award MLP 4 AFSB and MLP 5 AFSB in FY 2014 and FY 2017, respectively.

The JHSV provides a high-speed, shallow-draft alternative to moving personnel and materiel within and between the operating areas, and to supporting security cooperation and engagement missions. In FY 2013, the tenth and final JHSV was awarded and *USNS SPEARHEAD* (JHSV 1) and *USNS CHOCTAW COUNTY* (JHSV 2) delivered. The Navy is exploring opportunities to further enhance JHSV's operational profile to support/enhance warfighter requirements such as Special Operations support; Maritime Interdiction Operations; submarine rescue; and Intelligence, Surveillance and Reconnaissance missions. The FY 2015 President's Budget requests program support and close out costs, and cost to complete funding for *Brunswick* (JHSV 6), *Yuma* (JHSV 8), *Bismarck* (JHSV 9) and *Burlington* (JHSV 10) in order to restore funding reduced by FY 2013 sequestration.

Combat Logistics Support ships fulfill the vital role of providing underway replenishment of fuel, food, repair parts, ammunition and equipment to forward deployed ships and embarked aircraft, to enable them to operate for extended periods of time at sea. Combat Logistic Support Ships consist of T-AOE fast support ships, T-AKE auxiliary dry cargo ships, and T-AO fleet replenishment oilers. The T-AO and T-AKE ships serve as shuttle ships between resupply ports and their customer ships, while the T-AOE ships serve as station ships, accompanying and staying on-station with a Carrier Strike Group to provide fuel as required to customer ships.

Research and development efforts continue as the Navy matures its concept for the replacement of the KAISER Class (T-AO 187) of Fleet Replenishment Oilers. The new replacement oilers, currently designated as T-AO(X), will be double-hulled and meet Oil Pollution Act 1990 and International Marine Pollution Regulations. Similar to the LHA(R) and LX(R) programs, T-AO(X) benefitted from early industry engagement in terms of cost/capability trade-off studies that will help to refine the ship specifications. The Navy's budget request plans the lead ship in 2016 with serial production beginning in 2018. The total ship quantity is expected to be 17 ships.

#### **Affordability and the Shipbuilding Industrial Base**

The interconnectivity of today's shipbuilding industry with its supplier and vendors is complex, and there is a cascading effect that today's decisions can have near-term as well as years into the future. A healthy design and production industrial base is critical to achieving the Department of the Navy's priorities and fulfilling the Navy's needs going forward. Perturbations in naval ship design and construction plans are significant because of the long-lead time, specialized skills, and extent of integration needed to build military ships. The complex configuration and size of naval vessels result in design times that range from two to seven or more years, and construction schedules that can span up to nine years. Individual ships cost from hundreds of millions to several billions of dollars, making each one a significant fraction of not only the Navy's shipbuilding budget, but also industry's workload and regional employment numbers. Consequently, the timing of ship procurements is a critical matter to the health and sustainment of U.S. shipbuilding and combat system industries.

Stability and predictability matter. It matters to the Navy, to industry, to their workforce, to their families and to their communities. Our nation's defense industrial workers are skilled, experienced, and innovative and they can't be easily replaced. The Department must provide

stability and predictability to the industrial base to maintain our ability to continue to build the future Fleet.

Affordability and quality matter. Together with our industry partners, we have made significant progress in the past few years improving both measures. The quality of our ships improved as evidenced by the reduction in the number of critical deficiencies issued by the Board of Inspection and Survey during Acceptance Trials. The Department of the Navy is also focusing on affordability efforts across all phases of acquisition. For ships under contract, we have held the line on minimizing change. We have demanded discipline in waiting until designs are nearly complete before starting production. We have used competition to reduce costs. With the assistance of Congress, we have employed MYP and block buy contracts to provide stability, obtain economic order quantity discounts, and facilitate learning, which yielded cost savings. We are driving affordability earlier and earlier into the life cycle: interacting with the users and sponsors to better understand the requirements and how they drive cost; and engaging with our industry partners to better understand the trade-offs and inflection points between performance and cost. We are setting affordability cost targets at both the procurement and operating and support levels, to ensure that we do not optimize one at the expense of the other. We are looking internally as well to maximize our buying power and eliminate less value added processes and oversight.

Our ability to mitigate the adverse impacts on the shipbuilding industrial base from constrained resources has its limits. At the reduced BCA levels we are facing starting in FY 2016, Navy funding of the Ohio Replacement will significantly impact the industrial base and the future ship mix due to reduced procurement of other ship classes. The result will be increased risk in the Navy's ability to support the DSG, and inevitably reductions in the shipbuilding and combat system industrial base, with further long term impacts on platform affordability and force size.

#### **Surface Ship Modernization**

The President's Budget request for FY 2015 proposes a CG/LSD Phased Modernization Plan that will provide the means to retain the best Air Defense Commander and Marine expeditionary lift capabilities through the 2030s and CGs into the 2040s. This plan paces the threat through the installation of the latest technological advances in combat systems and engineering in CGs 63-73 and LSDs 41, 42 and 46. As a result, these ships remain relevant and

viable throughout their entire service life, enabling the Navy to sustain dominant force structure. To date the Navy has modernized CGs 52-58 with the Advanced Capability Build (ACB) 08 Combat System as well as substantial Hull, Mechanical, and Electrical (HM&E) upgrades, and has nearly completed modernization on CGs 59-62 with the improved ACB 12. These investments have allowed the first 11 ships of the TICONDEROGA Class to remain the world's premier Air Defense Commander platform, fully capable of integrating into the Carrier Strike Group construct or operating independently in support of Combatant Commander demands.

The Navy has developed an affordable framework to retain the remaining eleven cruisers (CG 63-73) in the active Fleet, through induction into a phased modernization period starting in FY 2015. The Navy will begin the phased modernization of these ships with material assessments, detailed availability planning, and material procurements. Subsequently, the Navy will perform hull, mechanical, and electrical systems (HM&E) upgrades, critical structural repairs, and extensive corrective and condition-based maintenance. The final phase will include combat system installation, integration, and testing. This will occur concurrently with re-manning the ship, immediately preceding restoration to the Fleet. By combat systems modernization occurring immediately prior to restoration, these ships will have the latest practicable combat systems upgrades while mitigating the risk and cost of technical obsolescence. The Navy intends to draw down the manpower for these CG's during their modernization, thus greatly reducing the cruiser costs during the period. The current plan is to complete modernization of each cruiser on a schedule that sustains 11 deployable Air Defense Commander CG's (one per Carrier Strike Group) into the 2040's.

Similarly, the Navy plans to perform the final WHIDBEY ISLAND Class modernization through this phased modernization plan. This plan modernizes LSD 46, and installs additional structural, engineering, and combat systems modifications on LSDs 41 and 42. As a result of the modernization investment, the Navy will extend the operational service life of these ships, during which time they will remain relevant and reliable until they retire 44-51 years after commissioning.

The Phased Modernization plan for CGs and LSDs allows the Navy to garner 172 additional operational ship years above the permanent force structure cuts required to meet the limits imposed by the BCA, and precludes the Navy from having to increase our overall end strength by about 3,700 people, which would otherwise be required to fill critical shortfalls in

our training pipelines and fleet manning. Phased modernization also greatly benefits the industrial base by providing a steady, predictable work flow which increases production efficiency and lowers cost to the Navy. The HM&E-centric maintenance and modernization availabilities can be scheduled at times when there is a shortage of work in the various homeports, thereby leveling the work load and effectively utilizing industrial facilities, such as drydocks and piers. Without the pressure of meeting near term Fleet deployment schedules, the work can be planned in the most economical and efficient manner, including reducing the need for costly overtime rates and hiring subcontractors to supplement shipyard workforce. An additional advantage of the phased modernization approach is that it provides an option to restore the ships to service in the event of a shift in the strategic environment in much less time than would be required to construct new ships.

The FY 2015 President's Budget request also includes funding for the modernization of three destroyers. To counter emerging threats, this investment is critical to sustain combat effectiveness and to achieve the full expected service lives of the Aegis Fleet. The Navy is proposing a two-pronged modernization plan to maintain relevance throughout the destroyer fleet: continue to modernize the Flight I/II destroyers, and modernize the Flight IIA destroyers beginning in FY 2017. This approach maximizes return on investment by modernizing the ships close to their midlife, and increases BMD capacity by installing BMD on Flight IIA destroyers. The destroyer modernization program includes HM&E upgrades as well as advances in warfighting capability and open architecture combat systems. This renovation reduces total ownership costs and expands mission capability for current and future combat capabilities.

#### **Naval Aviation**

There are several central themes to our 2015 Naval Aviation Budget plan: Persistent multi-role intelligence, surveillance, and reconnaissance; supporting capabilities as maritime patrol; and targeted modernization of the force for relevance and sustainability.

To meet the demand for persistent, multi-role ISR capability, the Navy and Marine Corps are building a balanced portfolio of unmanned and manned aircraft, leveraging other service capacity where able, but valuing the unique contribution of maritime ISR.

The Department of the Navy is also recapitalizing our aging fleets of airborne early warning and maritime patrol aircraft. Specifically, we are replacing our fleet of E-2C airborne early warning aircraft with the E-2D and P-3C maritime patrol aircraft with a modern P-8A.

### **Unmanned Aircraft Systems (UAS)**

The UCLASS system will enhance carrier air wing capability and versatility for the Joint Forces commander through integration of a persistent and mission flexible unmanned aircraft into the Carrier Air Wing by FY 2021. The Joint Chiefs of Staff issued a new memorandum in February 2014 reaffirming the need for rapid fielding of an affordable, adaptable carrier-based ISR platform with precision strike capability. UCLASS will provide that persistent ISR with precision strike capabilities supporting missions ranging from permissive counter-terrorism operations, to missions in low-end contested environments, to providing enabling capabilities for high-end area denied operations. It will be sustainable onboard an aircraft carrier and designed to be fully integrated with the current carrier air wing. The UCLASS system will also have the ability to pass command and control information along with sensor data to other aircraft, naval vessels, and ground forces. Sensor data will be transmitted to exploitation nodes afloat and ashore. Interfaces will be provided with existing ship and land-based command and control systems, as well as processing, exploitation, and dissemination systems. The UCLASS system will achieve these capabilities through development of a carrier-suitable, semi-autonomous, unmanned Air Segment; a Control System and Connectivity Segment; and a Carrier Segment. These segments will be overseen by the Government as the Lead System Integrator, providing government-led system-of-systems integration for the UCLASS Program.

The UCLASS Program builds on the knowledge gained through the UCAS Demonstrator (UCAS-D) efforts. UCAS-D will advance technological development and risk mitigation for the UCLASS system and continue the autonomous aerial refueling (AAR) demonstration. UCAS-D has completed two Carrier Qualification detachments consisting of catapult testing, arrested landings and envelope expansion, to include testing in off-nominal conditions and increased sea states. The latest AAR testing period was completed in December 2013 utilizing a manned surrogate aircraft. AAR development and testing is planned to continue throughout 2014. The Department of the Navy is working to reduce risk and align program/CVN operational schedules to best accommodate risk mitigation to meet demonstration objectives.

The MQ-4C Triton (formerly known as BAMS or Broad Area Maritime Surveillance) is a key component of the Navy Maritime Patrol Reconnaissance Force. Its persistent sensor dwell, combined with networked sensors, will enable it to effectively meet ISR requirements in support of the Navy Maritime Strategy. The FY 2015 President's Budget postpones the MQ-4C Triton

LRIP from FY 2015 to FY 2016. Due to software integration delays during initial testing, the program experienced a year-long delay to the start of flight testing. The program schedule has been adjusted to accommodate this delay and the program remains executable within current funding levels.

Triton will start establishing five globally-distributed, persistent maritime ISR orbits beginning in FY 2017. MQ-4C Triton test vehicles have completed 12 test flights as of February 25, 2014 and are on schedule to begin developmental testing later this year. This rigorous integrated flight test program will support the planned FY 2016 Milestone C. The Navy procured two U.S. Air Force (USAF) Global Hawk Block 10 UAS in FY 2004 for demonstration purposes and to perform risk reduction activities for the Triton UAS Program. In April 2011, Navy accepted three additional Block 10 aircraft from the USAF to be utilized as spare parts assets. These aircraft, the Broad Area Maritime Surveillance Demonstrators, or BAMS-D, have been deployed to CENTCOM's Area of Responsibility for over five years. BAMS-D recently achieved over 10,000 flight hours in support of CENTCOM ISR tasking. Continued operation of these demonstration assets are adequate to cover all Navy needs through FY 2016.

The MQ-8 Fire Scout is an autonomous vertical takeoff and landing tactical UAV (VTUAV) designed to operate from any suitably-equipped air-capable ships, carry modular mission payloads, and operate using the Tactical Control System (TCS) and Line-Of-Sight Tactical Common Data Link. Our FY 2015 efforts continue the development of an endurance upgrade (MQ-8C), integrate radar and weapons on the MQ-8C, and continue payload and LCS integration with the MQ-8B and MQ-8C. The President's Budget request defers procurement of MQ-8C air vehicles to better align with LCS deliveries, while procuring MQ-8 System ground control stations, ancillary, training and support equipment, technical support and logistics to outfit the ships and train the Aviation Detachments. Commonality of avionics, software, and payloads between the MQ-8B and MQ-8C has been maximized. The MQ-8B and MQ-8C utilize the same ship-based ground control station and other ship ancillary equipment.

Fire Scout was deployed to Afghanistan from May 2011 until August 2013, and amassed more than 5,100 dedicated ISR flight hours in support of U.S. and coalition forces. Additionally, successful deployments aboard *USS KILKRING*, *USS SIMPSON*, *USS BRADLEY*, *USS SAMUEL B. ROBERTS* and *USS ELROD* have supported Special Operations Forces (SOF) and Navy operations since 2012. The MQ-8B Fire Scout has flown more than 4,800 hours from



frigates, performing hundreds of autonomous ship board take-offs and landings. The Fire Scout program will continue to support integration and testing for LCS-based mission modules.

The Tactical Control System (TCS) provides a standards compliant, open architecture, with scalable command and control capabilities for the MQ-8 Fire Scout air vehicle. In FY 2015, TCS will continue to transition to the Linux operating system software to a technology refreshed ground control station, enhance the MQ-8 System's Ocean Surveillance Initiative for ships Automatic Identification System and sensor track generation. The Linux operating system conversion overcomes hardware obsolescence issues with the Solaris based control stations and provides lower cost software updates using DoD common application software. In addition, the TCS Linux upgrade will enhance collaboration with the Navy's future UAS common control station.

#### **Airborne Early Warning Aircraft**

The E-2D Advanced Hawkeye (AHE) is the Navy's carrier-based Airborne Early Warning and Battle Management Command and Control system. The E-2D AHE provides Theater Air and Missile Defense and is capable of synthesizing information from multiple onboard and off-board sensors, making complex tactical decisions and then disseminating actionable information to Joint Forces in a distributed, open-architecture environment.

Utilizing the newly developed AN/APY-9 Mechanical/Electronic Scan Array radar and the Cooperative Engagement Capability system, the E-2D AHE works in concert with tactical aircraft and surface-combatants equipped with the Aegis combat system to detect, track and defeat air and cruise missile threats at extended range and provide Strike Group Commanders the necessary required reaction time.

The first Fleet E-2D squadron (VAW-125) has transitioned and was designated "safe for flight" in January 2014. Initial Operational Capability (IOC) is on track for the first quarter of FY 2015, fielding the NIFC-CA Increment I capability which integrates aircraft sensor and ship weapon capabilities, improving lethality against advanced air and missile threats.

The Department of the Navy will continue development of improved E-2D capabilities during FY 2015. These capability improvements include, In-Flight Refueling, Tactical Targeting Network Technology, Secret Internet Protocol Router Chat, and the Advanced Mid-Term Interoperability Improvement Program. Additionally, we plan to continue Full Rate Production (FRP) of Lot 3 aircraft (the second year of a 25 aircraft MYP contract covering from FY 2014 to

FY 2018) and utilize Advance Procurement for FY 2016 FRP Lot 4 aircraft and Economic Ordering Quantity (EOQ) funding for the MYP (FY 2017 and FY 2018).

#### **Maritime Patrol Aircraft**

The P-8A Poseidon recapitalizes the Maritime Patrol ASW, Anti-Surface Warfare (ASUW) and armed ISR capability currently resident in the P-3C Orion. The P-8A combines the proven reliability of the commercial 737 airframe with avionics that enables integration of modern sensors and robust communications. P-8A achieved IOC when the first Fleet squadron (VP-16) deployed to the Western Pacific with six aircraft in December 2013. As of February 2014, three Fleet squadrons have completed transition to P-8A. All Fleet squadrons are scheduled to complete transition by the end of FY 2019. The P-8A program is meeting all cost, schedule and performance parameters in accordance with the approved Acquisition Program Baseline.

We have delivered 13 aircraft (LRIP I/II) to the Fleet as of February 2014. LRIP III (11 aircraft) and LRIP IV (13 aircraft), and FRP I (16 aircraft) are under contract. The FY 2015 President's budget procures 56 P-8As over the FYDP and sustains the P-3C to P-8A transition in the Fleet, but it reduces the FY 2015 procurement by eight aircraft due to the BBA cap in FY 2015. Across the FYDP, we are driven by fiscal constraints to lower the final P-8A inventory objective from 117 to 109 aircraft and adjust the annual procurement targets. The warfighting requirement remains 117 aircraft; however the revised inventory objective for 109 aircraft will provide adequate capacity at acceptable levels of risk.

As fleet deliveries of the Increment 1 configuration accelerate, integration and testing of P-8A Increment 2 capability upgrades continues. In particular, Phase I of P-8A Increment 2 Multi-Static Active Coherent ASW capability is on-track for flight testing in late 2014. The 2015 request also continues the prototyping and development of the more extensive P-8A Increment 3 upgrades, which expand the P-8A evolutionary acquisition strategy to deliver the next level of required P-8A capability.

In FY 2015, we are requesting resources for P-3C airframe and mission systems sustainment. This funding is for continued wing modifications and mission systems sustainment for special mission P-3 aircraft that will remain in service until the end of the decade. The legacy P-3C fleet continues to provide ASW, ASUW, and ISR support for Joint and Naval operations worldwide. The P-3C is being sustained to maintain warfighting capability and

capacity until completion of P-8A transition in FY 2019.

The P-3C aircraft is well beyond the original planned fatigue life of 7,500 hours for critical components, with an average airframe usage of over 18,000 hours. Since February 2005, 174 aircraft grounding bulletins have impacted 136 P-3 aircraft. In December 2007, the Navy's Fatigue Life Management Program determined that in addition to existing structural fatigue issues associated with the forward lower wing section (Zones 2-4), the lower aft wing surface (Zone 5) of P-3 aircraft showed fatigue damage beyond acceptable risk resulting in the grounding of 39 P-3 aircraft. As of February 2014, a total of 93 aircraft have been grounded for Zone 5 fatigue. P-3 groundings due to known material fatigue will continue for the remainder of the P-3 program, and unknown fatigue issues will continue to present persistent risk until P-8A transition is complete. To date, \$1.3 billion has been invested in P-3 wing sustainment, which has improved the overall structural health of the P-3 fleet. As of February 2014, there are currently 84 P-3C mission aircraft available. Preserving funding for Zone 5 and outer wing installations is critical to sustaining the minimum number of P-3Cs and other special mission variants required to meet warfighting requirements.

In the President's FY 2015 budget is a request for EP-3 Aries Replacement and Sustainment funding. The request supports the installation and sustainment of multi-intelligence capabilities and modifications necessary to meet emergent classified requirements. These efforts are necessary to keep the platform viable until the EP-3 capabilities are recapitalized.

The EP-3E Aries is the Navy's premier manned Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR&T) platform. The Joint Airborne Signals intelligence (SIGINT) Common Configuration includes SIGINT spiral upgrades. These upgrades, in conjunction with Secretary of Defense and the ISR Task Force (ISR TF) surge efforts, are fielding a robust Multi-Intelligence (INT) capability inside the FYDP. Multi-INT sensors, robust communication, and data links employed by the flexible and dependable P-3 air vehicle help ensure effective MISR&T support to conventional and non-conventional warfare across the current Range of Military Operations. Operating around the globe, the EP-3E continues to satisfy critical Joint, Combatant Commander, and Service airborne ISR priorities and requirements.

The Navy is in the process of developing the MISR&T Family of Systems construct to recapitalize the EP-3 MISR&T capabilities within existing Programs of Record. The strategy

has been further refined to focus on modular systems and payloads required for the Navy to conduct MISR&T on a variety of vehicles, providing Combatant Commanders with scalable capability and capacity. The inclusive full-spectrum approach will deliver increased ISR persistence by the end of FY 2018 and exceed the aggregate capability and capacity of our legacy platforms by the end of FY 2020. However, as we transition from legacy platforms like the EP-3E Aries II, fiscal constraints will compel us to take moderate risk in some collection capabilities over the next few years.

#### **Fixed Wing Aircraft**

The Department of the Navy plans to procure one KC-130J included in the second year of the multi-service MYP request and continued product improvements. Targeted improvements include aircraft survivability through advanced electronic countermeasure modernization, and obsolescence upgrades to the Harvest HAWK ISR/Weapon Mission Kit.

Fielded throughout our active force, the Marine Corps declared IOC for the KC-130J transition in 2005; bringing increased capability, performance and survivability with lower operating and sustainment costs to the MAGTF. Forward deployed in support of ongoing operations since 2005, the KC-130J continues to deliver Marines, fuel and cargo whenever and wherever needed. In 2014 the KC-130J remains in high demand, providing tactical air-to-air refueling, assault support, close air support and Multi-sensor Imagery Reconnaissance (MIR) in support of OEF, Special Purpose MAGTF Crisis Response, and deployed Marine Expeditionary Units.

Deployed in support of OEF since fielding in 2010, the bolt-on/bolt-off Harvest HAWK ISR/Weapon Mission Kit for the KC-130J continues to provide the extended MIR and CAS required by Marine forces in Afghanistan. Three mission kits have been fielded to date, with three more kits on contract to deliver in FY 2014. Funding included in the FY 2015 Budget request will be used to maintain operational relevance of this mission system through Hellfire P4 compatibility and the addition of a full motion video transmit and receive capability.

The Marine Corps funded 52 of the 79 KC-130J program of record. The three aircraft included in the FY 2013 budget will complete the Active Component (AC) requirement of 51 aircraft. The Marine Corps will use the AC backup aircraft to accelerate the Reserve Component (RC) transition from the legacy KC-130T aircraft to the more capable, more efficient, KC-130J beginning in FY 2014. The aircraft requested in the FY 2015 President's Budget will continue to

increase KC-130J inventory as we strive to achieve Full Operational Capability (FOC) in the RC. Delays in procurement would force the Marine Corps to sustain the KC-130T aircraft longer than planned at an increased cost.

#### **Expeditionary Warfare**

History demonstrates that when fiscal austerity reduces the size of available forces, the Nation must rely on the persistent presence and power projection capabilities of the Navy and Marine Corps. Ensuring the Nation retains its critical amphibious capability remains a top Department of the Navy priority. The Marine Corps remains first and foremost a naval service, operating in close partnership with the United States Navy. Together, the two naval services leverage the seas, not only to protect the vast global commons, but also to project our national power and influence events ashore.

The future security environment requires a robust capability to operate from the sea and maneuver over land to positions of advantage. A core capability of expeditionary forces is the ability to project forces ashore from amphibious platforms and to maneuver once ashore. Their flexibility and adaptability provide unmatched capability to Combatant Commanders, and their demand for these forces always exceeds our existing capacity.

#### **Amphibious Combat Vehicle (ACV)**

The ACV is the Marine Corps' top ground modernization priority to replace the aging Amphibious Assault Vehicle (AAV) which Marines have utilized since 1972. The legacy AAV faces multiple component obsolescence issues that affect readiness, sustainment costs, safety, and our ability to respond from the sea. In response to the AAV fleet approaching obsolescence, the Marine Corps established an Amphibious Capabilities Working Group in 2011 that examined current and emerging ISR capabilities, strike capabilities, and their integration into potential adversaries' approaches of anti-access, area denial. The working group was worried about the impact of future loitering top-attack munitions and the proliferation of guided rockets, artillery, missiles, and mortars.

Based on this threat assessment, Marine Corps determined to expand the scope, speed and duration of our shaping operations and littoral maneuver, or apply some combination of these actions. Additionally, this approach may require the launch of initial forces from farther offshore ranges.

Next, the Marine Personnel Carrier (MPC) program examined commercial off-the-shelf/non-developmental wheeled combat vehicles and discovered several important points. First, modern wheeled vehicles closed the maneuver performance gap with improved cross country performance and shore-to-shore swimming capability. Second, current wheeled vehicle technology contributes to improved protection against mines and improvised explosive devices. Marine Corps concluded that the concepts for operational maneuver from the sea and ship-to-objective maneuver remain valid, and will continue to refine our complimentary portfolio of capabilities to meet the evolving threats.

The current ACV program has been refined to reflect a systems approach to the military problem – the necessity to conduct amphibious operations rapidly from further offshore while enhancing protected mobility for the mission on land. It leverages experience gained in the Expeditionary Fighting Vehicle program, the MPC program, threat analysis, and combat experience. It will be procured on a phased approach in concert with a revision to our concept of operations for littoral maneuver. ACV, Phase I will provide an amphibious wheeled vehicle that complements the existing AAV and provides enhanced protected mobility ashore. The ACV will conduct most of its ship-to-shore movement via existing and programmed high-speed connectors. Our long-term Phase II effort will continue the research and development to explore capabilities that better enable us to conduct extended range littoral maneuver from ship to shore. The fruits of this phased effort are aimed at producing an amphibious vehicle capable of deploying from greater distances and speeds that ensure greater stand-off distances for the Naval Forces. Given continuing advancements in applicable technologies, the Marine Corps believes that further investment in these technologies will lead to the envisioned high water speed capability. While high-speed technology exists today, it currently requires too many capability tradeoffs to be an acceptable solution.

#### **AAV Enhancements**

AAV must be enhanced to serve as an effective bridge until it is replaced by the ACV Phase II. To maintain capacity while maximizing affordability, the Marine Corps is conducting on limited vehicles essential survivability and sustainment upgrades to improve force protection. An additional initiative to mitigate obsolescence issues and improve reliability is in development.

### **Connectors**

The Navy Marine Corps team will continue its investment in future connectors. These connectors with enhanced speed and range, both aviation and surface, will provide future expeditionary force commanders greater flexibility to operate in contested environments. The President's Budget includes the Ship to Shore Connector (SSC) air-cushioned vehicles and the Surface Connector Replacement (SC(X)(R)) program that will replace the aging Landing Craft Utilities. These platforms are essential in connecting the combat power and logistical sustainment that the sea base provides, with the forces that are operating in the littorals and inland for all missions. We will continue to explore future connector options that will increase our ability to exploit the sea as maneuver space by increasing range, speed, and capacity.

### **Other Ground Programs**

While the ACV remains the Marine Corps' number one priority, it will be part of a broader acquisition strategy aimed at providing the Marine Corps with balanced maneuver and mobility capabilities and capacities. This strategy involves retaining and recapitalizing portions of our Mine Resistant Ambush Protected (MRAP) vehicle and High Mobility Multi Wheeled Vehicle (HMMWV) fleets. We remain firmly partnered with the U.S. Army in fielding a Joint Light Tactical Vehicle (JLTV) that lives up to its name, while also being affordable. The JLTV is essential to provide the Marine Corps with modern, expeditionary, light-combat and tactical mobility while increasing the protection of our light vehicle fleet. By replacing only a portion of our HMMWV fleet, the JLTV will help to preserve our expeditionary capability with a modern level of protected mobility.

### **Summary**

The Department of the Navy continues to instill affordability, stability, and capacity into the shipbuilding, aviation, and combat vehicle plans and to advance capabilities to become a more agile, lethal and flexible force to address the challenges and opportunities facing the nation. The ships requested in the President's Budget request for FY 2015 are required to support the National Security Strategy. These ships are keeping with the Force Structure Assessment which calls for 306-ship Navy. Naval Aviation is aligned to meet our international responsibilities and national imperatives. Our force is focused on global reach and access with investments to enable global presence, sea-control, mission flexibility, and when necessary, interdiction. Naval

Aviation will continue to focus on balancing the challenges of national defense within the margins of tighter budget constraints. As America's Expeditionary Force in Readiness, the Marine Corps modernization investments will ensure continued capability to project power from the sea and provide a powerful response and credible deterrent to aggression anywhere in the Littorals. A modern survivable ACV is a critical component of our amphibious capability and the Department of the Navy is committed to embarking on this program with well-defined required capabilities, technical maturity, and affordability of this once in a generation acquisition program.

Budget uncertainties may slow progress towards our goals, but the tenets which guide our decisions remain firm. The Navy and Marine Corps stand ready to answer the call of the Nation. We thank you for your continued support of the Navy and Marine Corps and request your approval of the FY 2015 President's Budget request for the Department of the Navy's program.



**Assistant Secretary of the Navy  
(Research, Development and Acquisition)**

**7/28/2008 - Present**

**The Honorable Sean J. Stackley**

Sean J. Stackley assumed the duties of assistant secretary of the Navy (ASN) (Research, Development & Acquisition (RDA)) following his confirmation by the Senate in July 2008. As the Navy's acquisition executive, Mr. Stackley is responsible for the research, development and acquisition of Navy and Marine Corps platforms and warfare systems which includes oversight of more than 100,000 people and an annual budget in excess of \$50 billion.

Prior to his appointment to ASN (RDA), Mr. Stackley served as a professional staff member of the Senate Armed Services Committee. During his tenure with the Committee, he was responsible for overseeing Navy and Marine Corps programs, U.S. Transportation Command matters and related policy for the Seapower Subcommittee. He also advised on Navy and Marine Corps operations & maintenance, science & technology and acquisition policy.

Mr. Stackley began his career as a Navy surface warfare officer, serving in engineering and combat systems assignments aboard USS *John Young* (DD 973). Upon completing his warfare qualifications, he was designated as an engineering duty officer and served in a series of industrial, fleet, program office and headquarters assignments in ship design and construction, maintenance, logistics and acquisition policy.

From 2001 to 2005, Mr. Stackley served as the Navy's LPD 17 program manager, with responsibility for all aspects of procurement for this major ship program. Having served earlier in his career as production officer for the USS *Arleigh Burke* (DDG 51) and project Naval architect overseeing structural design for the Canadian Patrol Frigate, HMCS *Halifax* (FFH 330), he had the unique experience of having performed a principal role in the design, construction, test and delivery of three first-of-class warships.

Mr. Stackley was commissioned and graduated with distinction from the United States Naval Academy in 1979, with a Bachelor of Science in Mechanical Engineering. He holds the degrees of Ocean Engineer and Master of Science, Mechanical Engineering from the Massachusetts Institute of Technology. Mr. Stackley earned certification as professional engineer, Commonwealth of Virginia, in 1994.



*Updated: 14 January 2011*



## United States Navy Biography

**Vice Admiral Joseph P. Mulloy**  
**UNITED STATES NAVY**  
**DEPUTY CHIEF OF NAVAL OPERATIONS,**  
**INTEGRATION OF CAPABILITIES AND RESOURCES**

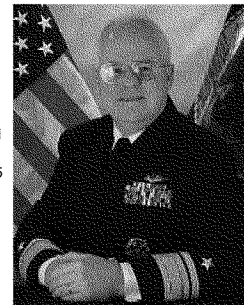
Born in New York City, Rear Adm. Mulloy grew up moving about America as the son of a naval officer. He graduated with distinction from the U.S. Naval Academy in 1979 with a Bachelor of Science degree in Marine Engineering. He also attended Harvard Graduate School of Business, graduating in 1987 with a Master of Business Administration.

His operational submarine assignments were aboard USS Trepang (SSN 674), PCU Miami (SSN 755) as engineer officer, USS Puffer (SSN 652) as executive officer. He served as commanding officer of USS San Juan (SSN 751) and commander Submarine Squadron 15 in Apra Harbor, Guam. In addition to the normal SSN deployments, Mulloy has twice deployed to the Arctic and has surfaced at the North Pole.

Mulloy's significant shore assignments include tours as Plans and Briefing officer and the Special Operations assistant to the Special Operations Division of the Office of Naval Intelligence (ONI-009G), Financial officer at the Pentagon in Operations Division, Office of Budget and Reports (NAVCOMPT), deputy commander of Submarine Squadron 4, executive assistant to the director, Submarine Warfare Division for the Deputy Chief of Naval Operations (DCNO N7/N8), Division chief of the Program, Budget and Analysis Division (PBAD) for Chairman of Joint Chiefs (JCS J8). Mulloy's first flag assignment was as deputy chief of staff for Plans, Policies and Requirements, U.S. Pacific Fleet (N5N8), followed by a short tour as director, Programming Division, OPNAV (N80). Mulloy's most recent assignment was as the Deputy Assistant Secretary of the Navy for Budget (FMB) / Director, Fiscal Management Division, OPNAV (N82) from October 2009 to December 2013.

Mulloy is currently assigned as Deputy Chief of Naval Operations, Integration of Capabilities and Resources (OPNAV N8) in Washington, DC.

Mulloy's personal decorations include the Defense Superior Service Medal (two awards), Legion of Merit (three awards), Meritorious Service Medal (four awards), the Navy and Marine Corps Commendation Medal (three awards), and the Navy and Marine Corps Achievement Medal (two awards).



*Updated: 24 February 2014*

Lieutenant General Kenneth J. Glueck, Jr.

**Deputy Commandant, Combat Development and Integration, and the Commanding General, Marine Corps Combat Development Command**

Lieutenant General Glueck was designated a Naval Aviator in May 1976 and reported to Marine Attack Helicopter Squadron (HMA) 169 at Camp Pendleton, California. During this tour he deployed both with HMA-369 to Okinawa, Japan and with Marine Medium Helicopter Squadron-265. In February 1980 he was reassigned as a Primary Flight Instructor at Training Squadron Three, NAS Whiting Field, Milton, Florida. In July 1983, Lieutenant General Glueck reported to Marine Helicopter One (HMX-1) at Quantico, Virginia where he was designated a Presidential Command Pilot.



Following Marine Corps Command and Staff College in August 1987, Lieutenant General Glueck was assigned to Okinawa, Japan for duty as Air Officer with the Special Operations Training Group, III Marine Expeditionary Force. In June 1989, Lieutenant General Glueck reported as Executive Officer for Marine Light/Attack Helicopter Squadron-269, MCAS New River, North Carolina. In June 1990, he was reassigned as Executive Officer for Marine Medium Helicopter Squadron-365 (HMM-365) participating in Operations Desert Shield and Desert Storm. In June 1991, Lieutenant General Glueck assumed command of HMM-365 and deployed in support of Operation Provide Promise in the Balkans.

Lieutenant General Glueck relinquished command in February 1993 and attended NATO Defense College in Rome, Italy. He was subsequently assigned to Allied Forces Southern Europe as Amphibious Planner in February 1994. In February 1997, Lieutenant General Glueck reported to Headquarters Marine Corps, Programs and Resources. In August 1998, he assumed command of the 26th Marine Expeditionary Unit and deployed for Landing Forces Sixth Fleet deployments 2-99 and 3-00. His units participated in the NATO bombing campaign (Noble Anvil), provided security to refugee camps in Albania (JTF Shining Hope), conducted peace support operations in Kosovo (Joint Guardian), and provided disaster relief following the earthquake in Turkey (Aid Response).

In June 2001, Lieutenant General Glueck reported to Marine Corps Combat Development Command as Director, Expeditionary Force Development Center in Quantico, Virginia. In July 2003, he served

as the Commanding General, 3d Marine Expeditionary Brigade and Deputy Commanding General, III Marine Expeditionary Force in Okinawa, Japan, participating in tsunami relief efforts with CTF-536 and FHA and disaster relief efforts in the Philippines as Commander JTF-535.

In April 2005, Lieutenant General Glueck served as the Chief of Staff, United States Southern Command. In June 2006, he assumed command of the 2d Marine Aircraft Wing, II MEF at MCAS Cherry Point, North Carolina. In April 2008, Lieutenant General Glueck was designated the Chief of Staff for Multi-National Force Iraq in Baghdad. In August 2009, he reported to U.S. Africa Command where he served as Director of Operations and Logistics until 1 January 2011. In January 2011, he reported to Okinawa Japan where he assumed command of III Marine Expeditionary Force and U.S. Marine Forces Japan. In March 2011, he also commanded JTF-505 in support of Operation Tomodachi. Lieutenant General Glueck assumed command of Marine Corps Combat Development Command on 8 August 2013.

Lieutenant General Glueck holds a Bachelor of Science degree from MacMurray College, Jacksonville, Illinois and a Master of Science degree in Business Management from Troy State University, Alabama.

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**WITNESS RESPONSES TO QUESTIONS ASKED DURING  
THE HEARING**

MARCH 26, 2014

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## **RESPONSE TO QUESTIONS SUBMITTED BY MR. FORBES**

Secretary STACKLEY and Admiral MULLOY. The Department of the Navy (DON) wants to retain CVN 73 if funding allows, as she remains critical to maintaining presence, surge capacity, the condition and service life of our other carriers, and the industrial base. The President's budget (PB) request for 2015 maintains the option to refuel or inactivate CVN 73. The Department noted a decision regarding inactivation or conducting a refueling complex overhaul (RCOH) is deferred to PB 2016. As the Navy begins development of PB 2016 estimates, alternatives regarding plans to commence RCOH planning are under consideration, influenced by Congressional action in FY 2015. The Navy has proceeded with "next steps" associated with the CVN 73 RCOH; specifically, the allocation of 2014 funding to expand planning efforts in support of the RCOH.

In developing PB 2015, the fiscal uncertainty challenged and continues to challenge our ability to plan and budget over the long term. As we developed the Program Objective Memorandum (POM) for the FY 2015–2019 Future Years Defense Program during calendar year 2013, the DON was faced with FY 2013 sequestration, civilian furloughs, a government shutdown, and continuing resolutions. The Secretary of Defense directed a Strategic Choices and Management Review to produce options and identify choices necessary to comply with the revised discretionary caps of the Budget Control Act of 2011 (BCA). Until the Bipartisan Budget Act of 2013 (BBA) was passed in December 2013, the DON was preparing for sequestration in FY 2014 and beyond.

Due to this uncertainty, the DON was directed to produce several POM 2015 budget options, including one at the PB 2014 level (the higher caps of the BCA), one at the lower caps of the BCA (referred to as Alternative POM), and one at the PB 2015 level. The PB 2014 level provides the resources necessary to meet the Defense Strategic Guidance (DSG) and included the refueling of CVN 73. Under sequestration, we would not be able to meet the DSG and were compelled to inactivate CVN 73 in the Alternative POM scenario.

While the BBA provides some relief from sequestration in FY 2014 and FY 2015, the funding level is lower than our PB 2014 request and sequestration remains the law in FY 2016 and beyond. Because of the time necessary to plan and execute such a significant force structure reduction while preserving capability in the process, the Secretary of Defense made the strategic decision to program for sequestration levels in the later years of our PB 2015 submission for large force cuts, including carrier strike groups. Past drawdowns have reduced force structure too fast with too little planning. The resulting problems required significant amounts of time and money to fix. [See page 30.]





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**QUESTIONS SUBMITTED BY MEMBERS POST HEARING**

MARCH 26, 2014

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## QUESTIONS SUBMITTED BY MR. FORBES

Mr. FORBES. The budget request included funding to support the inactivation of the USS *George Washington* but did not include funding request to support the complex overhaul or the investment requirements for the associated aviation wing. If the House of Representatives moves to restore funds associated with the proposal, will the Navy initiate the requisite contracts to obligate funds previously appropriated for the USS *George Washington*'s complex overhaul? What is the tipping point for Navy to begin investment in this critical resource? What is the damage in terms of cost and schedule in delaying the award of the USS *George Washington* complex overhaul?

Secretary STACKLEY and Admiral MULLOY. The President's budget (PB) request for 2015 maintains the option to refuel or inactivate CVN 73. The Department noted a decision regarding inactivation or conducting a refueling complex overhaul (RCOH) is deferred to PB 2016. As the Navy begins development of PB 2016 estimates, alternatives regarding plans to commence RCOH planning are under consideration, influenced by Congressional action in FY 2015. As discussed in recent testimony regarding the 2015 Budget request, the Navy has proceeded with "next steps" associated with the CVN 72 RCOH; specifically, the allocation of 2014 funding to expand planning efforts in support of the RCOH.

Mr. FORBES. The Chief of Naval Operations approved a program of record decrease to the total aircraft procurement quantity for only 109 P-8 aircraft, despite the validated steady-state rotational and warfighting contingency requirement for 117 P-8 aircraft. Please describe the risk incurred by this decision, and how does the Navy plan to mitigate the increased risk by procuring less P-8 aircraft than the validated requirement?

Secretary STACKLEY and Admiral MULLOY. The Navy was compelled by fiscal constraints to lower the final P-8A inventory objective from 117 to 109 aircraft. This change in the Program of Record does not alter the P-3C-to-P-8A transition. With 109 P-8A aircraft, the Navy can meet warfighting contingency requirements for major combat operations and assumes acceptable risk in maritime homeland defense. To mitigate this risk, the Navy will maintain an appropriate capacity of non-deployed aircraft carriers, surface combatants, amphibious ships, and other aircraft for homeland defense missions. Further, this decision is clearly "reversible" as P-8A production continues through this decade. If the calculus associated with this decision changes due to either a change to security requirements or a change to the budget outlook, then the Navy has many opportunities to appropriately revise the P-8A inventory objective.

Mr. FORBES. There has been much debate over the past several months, primarily within the Department of Defense, to characterize and codify what the air vehicle attributes of the UCLASS system requirements should be as an unmanned, fixed-wing, carrier-based aircraft. Can you describe for us some of the primary Key Performance Parameters of the UCLASS air vehicle and how you expect some of those KPP's to mature over time after source-selection and after the aircraft is fielded?

Secretary STACKLEY and Admiral MULLOY. All UCLASS requirements have been fully vetted and stable since the Capabilities Development Document was approved by the Chief of Naval Operations in April 2013. The Key Performance Parameters (KPPs) and Key System Attributes (KSAs), as reviewed and concurred with by the Vice Chairman of the Joint Chiefs of Staff (VCJCS), address endurance, sensor payload, weapons payload (including mandatory future growth capability), survivability (including mandatory future growth capability), aerial refueling (give & receive), affordability, and schedule. The Navy and industry have conducted extensive trade studies based on the latest and evolving threat intelligence to ensure the threshold to objective growth in those KPPs and KSAs are obtainable with the current fiscal constraints. The resulting UCLASS acquisition strategy leverages industry's ability to deliver, within 4-5 years from contract award, a capable and survivable air vehicle while achieving the \$150M cost per orbit KPP and preserves the ability to incrementally increase future Air Vehicle (AV) capability to match evolving threats. The in-depth technical interchange that has been ongoing between the Navy and industry has been instrumental in developing a comprehensive draft Request for Proposal

(RFP) presently under review. Once early operational deployments are conducted and fleet inputs have been obtained on the UCLASS concept of operations, the KPPs and KSAs in the Capabilities Development Document will be updated to support the next acquisition Milestone Decision.

Mr. FORBES. The committee understands that the Navy is embarking on two separate analysis of alternative assessments to potentially develop a Next-Generation Land Attack Weapon (NGLAW), and to develop a surface-launched Offensive Anti-Surface Warfare (OASuW) weapon. Can you describe for us why two separate analyses are being performed to essentially fulfill what appears to be similar requirements, and what risk is there involved in terminating Tomahawk Block IV production after fiscal year 2015 while the analyses is on-going?

Secretary STACKLEY and Admiral MULLOY. The Department has two separate mission areas that require assessment: 1. The follow-on to the Tomahawk Weapon System (land-attack) and 2. Long-term OASuW (anti-surface warfare). The Navy has commenced study efforts that will lead to a material development decision (MDD) in Fiscal Year 2015 to determine whether the Department will enter the Material Solution Analysis Phase for two separate weapon systems (one land-attack weapon and one anti-surface warfare weapon) or one weapon that performs both missions. The analyses in progress take into account multiple factors, to include launch platforms, target sets, warfighting scenarios, CONOPS, kill-chains, technology maturity, and cost. These analytical efforts place the Department on a path to address both mission areas.

Separately, the Navy has programmed for continued modernization of the current inventory of Tomahawk weapons to improve their effectiveness against the challenges posed by the increasingly capable A2/AD threat environment. Ultimately however, although our Tomahawk inventory is more than sufficient to address worst case operational planning scenarios, the limits to our ability to modernize Tomahawk dictate that we develop and deliver the next generation at sufficient rate to replace the current Tomahawk inventory before it proves obsolete.

Mr. FORBES. The Navy decided to procure 7 less E-2D aircraft in the 5-year multi-year procurement authorized in the FY14 National Defense Authorization Act. Why did the Navy make this decision and what is the impact of procuring 7 less aircraft during the 5-year multi-year contract?

Secretary STACKLEY and Admiral MULLOY. The Navy's budget across the Future Years' Defense Plan (FYDP) was reduced by \$38 billion compared to the FYDP submitted to the Congress when the higher levels of E-2D procurement were planned within the multiyear procurement (MYP). This budget reduction drove reduced procurement quantities across virtually every program and resulted in the decision to delay the purchase of seven E-2D aircraft into years outside of the current MYP contract (FY 2014–2018). The impact of delaying the procurement of these aircraft—a cost increase per MYP aircraft of \$7.4M due to reduction of economies of scale and delay to Full Operational Capability from FY 2023 to FY 2025—is poignant example of the negative impact and inefficiencies caused by the Budget Control Act reductions.

Mr. FORBES. The Director of Operational Test and Evaluation for the Secretary of Defense has recently been critical of the P-8's initial operational capability as only being equivalent to what the P-3 provides the Navy today. Will the P-8's capability remain at P-3 levels during its service-life, or does the Navy have plans to increase its capability above what the P-3 currently provides? If so, what capability increases will occur as compared to the P-3 today?

Secretary STACKLEY. The P-8A Poseidon program is structured as an evolutionary acquisition program delivering capability in three separate increments. The overarching purpose of Increment 1, as defined in the program's requirements documentation, is to replace the aging P-3 airframe with a mission system that is at least equivalent to its P-3 predecessor. The Increment 1 configuration successfully completed Initial Operational Test & Evaluation (IOT&E) in 2013 and has subsequently deployed operationally. Though Increment 1 relied primarily upon NDI sensor technology and evolutionary upgrades to existing P-3 systems in order to minimize cost, schedule and technical risk, the Increment 1 baseline still delivers significantly greater mission capability than the P-3 in several important regards. First, the basic airframe's significantly greater speed, range, and endurance relative to the P-3 are of great operational benefit especially across the broad areas encompassed by the Pacific Fleet's Area of Responsibility. Second, both the basic airframe and the installed mission systems are substantially more reliable than their predecessor systems, especially in the case of the acoustic ASW subsystem. Finally, several key mission systems improve on the performance of their predecessors as a consequence of the continuous advancement of basic mission computing and sensor technologies. Consequently, though only required to equal the capability of the P-3's acoustic sys-

tem, the P-8's acoustic system can monitor twice the number of sonobuoys as the P-3, and can display acoustic data using twice the available display area, to a larger number of operators, and with far better integration to the aircraft's other sensors. These P-8A Increment 1 improvements to the P-3 baseline result in larger search areas while improving the operator's ability to recognize ASW contacts when they are detected. Similar Increment 1 improvements vs. the P-3 baseline exist for the P-8's ESM and Self Protection systems. Collectively, these integrated Increment 1 systems provide an excellent foundation upon which the P-8 Increment 2 and Increment 3 efforts will build.

P-8A Increment 2 begins a series of pre-planned upgrades that deliver new capability to the Fleet on a recurring periodic cycle. The first of these capability upgrades are on-track to deliver in 2015, when the broad area Multi-static Active Coherent (MAC) acoustic ASW capability is fielded as part of the first of three planned Increment 2 software deliveries. Following this delivery, Increment 2 will deliver a high-altitude ASW search capability, an integrated Automatic Identification System (AIS) to interrogate shipboard transponders, enhanced MAC processing techniques to further increase the detection performance of the baseline MAC system, a portfolio of other acoustic signal processing upgrades vetted through the Maritime Patrol and Reconnaissance community's Rapid Capability Insertion (RCI) process, and a High Altitude ASW Weapon Capability (HAAWC). The air-to-air refueling capability already resident in the basic airframe will also be tested and certified for fleet use during this period. All of these capabilities, which exceed the capabilities of the P-3 baseline, will be fielded prior to the end of 2017.

Finally, Increment 3 is a critical piece of the P-8A evolutionary strategy which will continue following the final Increment 2 software release and which is designed to introduce the most extensive of all currently planned P-8A capability upgrades. Elements of Increment 3 include the integration of Higher-Than-Secret (HTS) data processing architectures, a fully Net Enabled ASuW Weapon, and extensive upgrades to the following sensors and communications systems: Radar, Acoustics, Link-16, Common Data Link, and SATCOM. Increment 3 also provides extensive Net Centric capabilities through an Applications Based Architecture (ABA) that is optimized to promote participation and competition by 3rd party vendors and small businesses. Increment 3 is currently conducting pre-EMD activities with a scheduled IOC for this complete capability package of 2021.

Mr. FORBES. The fiscal year 2014 National Defense Authorization Act limited to six the number of air vehicles the UCLASS program could acquire prior to Milestone B to limit the cost and risk exposure of the taxpayer until the Navy could determine how it was going to use the UCLASS aircraft system. Do you anticipate any challenges associated with limiting the UCLASS aircraft to six prior to achieving Milestone B in the program?

Secretary STACKLEY. The 2014 NDAA language associated with limiting the quantity to six prior to Milestone B does present challenges to the UCLASS program's ability to meet schedule and Early Operational Capability (EOC). The Department intends to develop a UCLASS system and associated CONOPS to achieve the JROC (JROCM 196-12) directed capability of sustaining two unrefueled orbits (defined as 24/7 constant coverage) at 600nm radius per CVN. Under the current plan, the Department will use these developed CONOPS to refine the system requirements to ensure affordability and continue to limit taxpayer exposure during procurement.

Based upon information obtained during Preliminary Design Reviews, the Department estimates that six air vehicles per CVN will be necessary to achieve the unrefueled orbit requirement. At least two dedicated test air vehicles (non-deployable) are needed to complete the required UCLASS test and certification events to fully verify the flight, weapons release, and sensor performance envelopes of the UCLASS system. The limit of six air vehicles prior to Milestone B will leave only four air vehicles for the EOC deployments, which will be insufficient to fully evaluate the system's intended capability and develop the associated CONOPS.

Based on the need to support the EOC deployments with a full UCLASS system while simultaneously conducting post-EOC testing, the Department recommends that the number of air vehicles that may be procured prior to Milestone B be increased to eight. We will continue to work with the respective Committee staffs to address all concerns associated with requirements, technical maturity, and acquisition strategy with the intent of gaining concurrence on the substantive issues in order to successfully deliver this needed capability.

Mr. FORBES. I understand the Marine Corps has restructured the ACV program, to include a wheeled armored personnel carrier, and that this vehicle will be fielded before the high water speed amphibious assault vehicle variant. Will the wheeled vehicle that will be procured prior to the high water speed solution be a commercial-off-the shelf solution? How many of these wheeled vehicles do you plan to procure?

Secretary STACKLEY. No, the wheeled armored personnel carrier will not be a commercial-off-the-shelf solution. Given the maturity of this type of vehicle in the combat market and because of the engineering and requirements work we have done with the industry over the last 8 years, we believe that a solution that meets our essential operational requirements will be available without significant research and development costs that have to be borne by the taxpayer. We intend to field this vehicle in phases, ultimately outfitting at least six of our ten Assault Amphibian companies. This will require approximately 700 vehicles. We will refine the requirement for future phases as we determine the capacity of each individual vehicle.

Mr. FORBES. CBO has estimated that an average of \$19.3 billion per year over the next 30 years is required to meet the 306-ship goal. Is your sense that 306 ships is a realistic goal? With the programming average of \$16.8 billion over the next 5 years, has the Navy invested sufficient resources to meet the 306-ship goal?

Admiral MULLOY. The 306 ship battle force is not a goal but rather a requirement. The 2012 Force Structure Assessment (FSA), a comprehensive and rigorous analytical assessment, determined a post-2020 requirement for 306 ships in the battle force and emphasized forward presence while re-examining resourcing requirements for operational plans and defense planning scenarios.

Yes, the FY2015 President's Budget invests sufficient resources to meet the FSA requirement as the battle force will increase to 309 ships by the end of FY2019.

While we can meet today's resourcing needs, the impact of funding the Ohio Replacement SSBN, which is what drives the CBO average so high, will be dramatic. Moving the Navy SCN funding to an average of \$19.3B per year for the next 30 years, without shorting Navy account of readiness, manpower, and modernization funding, is not possible without outside support.

Mr. FORBES. Admiral Locklear provided testimony earlier this month to the House Armed Services Committee and provided the following information with regards to the potential reduction of an aircraft carrier, "You have about 10 [aircraft carriers] now. We can't support the global demand." He went on and said "One thing for sure, in my experience is that—that part of the U.S. global leadership is maritime dominance, where we choose to have it. And at the front of that maritime dominance, which starts to become very important, particularly in the world we're in today, are the capabilities that aircraft carriers bring." What is your assessment about a potential reduction in aircraft carrier force structure and the impact to the supporting combatant commander requirements?

Admiral MULLOY. With an 11-carrier force the Navy has met, on average, 50% of Combatant Commander (COCOM) demand for aircraft carriers since FY13. A permanent force structure reduction to 10 aircraft carriers would further impact Navy's ability to meet COCOM presence requirements. The impact of not meeting the COCOM demand and presence requirements resides primarily in managing risk. That risk is defined by uncertainty in Navy's ability to meet some portion of security objectives and prompt response to a crisis with forces already in theater. As mitigation, the Department of Defense would continue to employ the Global Force Management process to most effectively allocate Naval forces to the highest priority COCOM requirements.

Mr. FORBES. I understand the Marine Corps has restructured the ACV program, to include a wheeled armored personnel carrier, and that this vehicle will be fielded before the high water speed amphibious assault vehicle variant. Will the wheeled vehicle that will be procured prior to the high water speed solution be a commercial-off-the-shelf solution? How many of these wheeled vehicles do you plan to procure?

General GLUECK. It will not be a commercial-off-the-shelf solution. However, given the maturity of this type of variant in the combat vehicle market and in light of the engineering and requirements work we have done with the industry over the last eight years, we believe that a wheeled solution that meets our essential operational requirements will be available without significant development. We intend to procure approximately 700 of these vehicles in phases. We will refine the requirement for future phases as we determine the capacity and capabilities of each individual variant.

Mr. FORBES. Will the wheeled vehicle that will be procured prior to a high water speed solution use ACV funding lines?

General GLUECK. Yes. We intend to test and procure these vehicles in phases. It is our desire to use ACV funding lines for necessary RDT&E now and for procurement to provide an initial operational capability in the early 2020s.

Mr. FORBES. Based on this new ACV acquisition strategy, does this mean the Marine Corps will plan to look more at ship-to-shore connector solutions for high water speed requirements?

General GLUECK. Yes. Due to Expeditionary Force 21, our new capstone concept, as well as threat capabilities, our operating forces, in coordination with the Navy,

must be prepared to operate from a sea base established at distances greater than 50 nautical miles from the shore. For high speed, we will be dependent upon multiple and flexible ship-to-shore connector solutions to support closing that gap as rapidly as possible. As a result connectors such as the LCAC and LCU, their planned replacements, and their complementary effects with the ACV become required critical capabilities to support maneuvering combat and combat support forces and equipment ashore at relatively high speeds.

Mr. FORBES. How is the wheeled vehicle that will be procured as part of the ACV program different from that of current Marine Corps Light Armored Vehicles? Why not modified those existing vehicles to meet the phase 1 requirements?

General GLUECK. The Marine Corps Light Armored Vehicle (LAV-25) is a reconnaissance vehicle designed to support the Light Armored Reconnaissance (LAR) Battalion Mission and is designed to be employed by a 3-Marine crew and carries a 4-Marine reconnaissance scout section. The LAV-25 has been in the Marine Corps inventory since 1983 and has reached the end of its growth margin due to several modifications made over its lifespan. We intend to continue to employ our LAVs in LAR Battalions well into the 2030s until we can replace them. The ACV is required to equip the Marine Assault Amphibian Battalions who have the mission to provide amphibious and armored mobility to Marine Corps infantry and selected other elements of the Marine Air Ground Task Force. The ACV will have the basic requirement to carry at least 10 infantrymen in addition to a three Marine crew and multiple days' supply of food, water, munitions, etc. In addition to this expanded carry requirement, it must be highly mobile on land under load and with significant ballistic and underbelly IED protection. It will also need a robust swim capability to operate effectively in the littorals, with a shore-to-shore capability, to permit seamless maneuver through rivers, lakes, and in the ocean with the capability of safely negotiating surf zones. The LAV is not capable of these requirements. The ACV will provide a balanced protection, payload and performance capability to embarked infantry with improved armor-protected mobility to the objective.

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#### QUESTIONS SUBMITTED BY MR. CONAWAY

Mr. CONAWAY. Given the current state of combatant ship numbers, how significant is the "risk" to mission for maintaining security for freedom of navigation and commerce? What is the breaking point for not being able to fulfill this capability?

Secretary STACKLEY and Admiral MULLOY. Freedom of Navigation (FoN) operations involve naval units transiting disputed areas to avoid setting the precedent that the international community has accepted these unlawful claims. Since these FoN operations typically involve only a few ships, as long as the Navy continues routine overseas deployments, our ability to provide forces for this mission is not at risk with our current force structure.

Freedom of commerce is similarly assured by our ships on routine deployments, through both normal presence and periodic transit of strategic chokepoints and high threat areas (such as areas subject to threat of piracy).

Current Navy force structure provides assurance to our allies of our resolve to support freedom of navigation including transit of disputed or high-threat areas, and signals to potential adversaries that the U.S. is committed to maintaining freedom of navigation and the unimpeded flow of maritime commerce.

Mr. CONAWAY. In the frame of capacity building with regional partners in combination with a lowered U.S. naval capacity to provide sustained forward presence, how will the U.S. dependence increase for partner-nations for providing regional maritime security and ensure safe sea lanes for U.S. commerce?

Secretary STACKLEY and Admiral MULLOY. Navy's adoption of the Optimized Fleet Response Plan (O-FRP) and increased use of forward deployed Navy assets has stabilized Navy's ability to continue providing forward presence at approximately the same level as in recent years. By 2020, ship presence in the Asia-Pacific region will increase to about 67 ships, up from about 50 on average today. Presence in the Middle East will increase from about 30 ships on average today to about 41. Efforts to partner in maritime security missions are desired and encouraged as they build confidence and interoperability between nations.

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#### QUESTIONS SUBMITTED BY MR. HUNTER

Mr. HUNTER. Please address the benefits that timely AP funding can have especially in successful shipbuilding programs like the ongoing Mobile Landing Platform/Afloat Forward Staging Base shipbuilding program?

Secretary STACKLEY. Advanced Procurement (AP) funding for advanced planning efforts and procurement of long lead time material (LLTM) has been successfully employed on a number of shipbuilding programs to meet ship construction schedules. Further, such funding provides critical stability across the shipbuilding industrial base—from key vendors manufacturing unique equipment and components to our shipbuilders—by enabling workload stability and level loading, thus avoiding debilitating production breaks that threaten layoffs, loss of skilled labor, and cost growth. In addition, some shipbuilding programs have employed economic order quantities (EOQ) associated with multiyear procurement contracts to achieve increased savings.

With respect to the Mobile Landing Platform (MLP) program, advanced planning and the procurement of LLTM components occurred on MLP 3 AFSB. The Navy requested AP funds for detail design efforts for MLP 4 AFSB in the FY 2013 President's Budget Submission. However, no AP funds were appropriated, and the ship was fully funded in FY 2014.

Mr. HUNTER. Since a determination was made that having a third Afloat Forward Staging Base ship is required, and since funds were sought, authorized and appropriated in FY14 to procure the second Afloat Forward Staging Base ship, wouldn't it make sense to work to allocate some meaningful level of AP funding this coming fiscal year, FY15, or certainly no later than next fiscal year, FY16, in order to support the cost-efficient and timely production of this required ship with the specialized supplier base and shipbuilder?

Secretary STACKLEY. Advanced Procurement (AP) funding is budgeted on a lead-time basis for material and design efforts necessary to meet ship construction schedules. FY 2015 AP is not required for the FY 2017 ship. The Department will take the matter of FY 2016 AP for the FY 2017 ship into consideration during development of the FY 2016 budget submission. However, past efforts to budget for AP for the purpose of efficiencies and to avoid production gaps have not historically been supported by the Appropriations Committee and are therefore considered high risk by the Department.

Mr. HUNTER. Given that your recent testimony and PB15 budget exhibits confirm that there would be a 3-year interval between start-of-construction of the FY14 funded AFSB ship and start-of-construction of the budgeted FY17 AFSB ship, what actions could the Navy and Congress take—including but not limited to the allocation of timely AP funding—to minimize a production gap between these two urgently required ships?

Secretary STACKLEY. Upon its award, the fourth Mobile Landing Platform (MLP 4) will provide new construction workload for the shipyard through 2017. A production gap would exist between the completion of MLP 4 and start of construction of MLP 5 (if awarded in FY 2017). While FY 2016 Advanced Procurement (AP) funding could possibly help to mitigate the gap, FY 2015 AP is not required for the FY 2017 ship. The Navy will take the matter into consideration during development of the FY 2016 budget submission. However, despite the benefits provided by Advanced Procurement in terms of cost efficiency and production stability, the historical lack of support for AP by the Appropriations Committee is a significant factor in the Department's determination of whether or not to request such funds in our budget submission.

Mr. HUNTER. Additionally in relation to the TAO(X) fleet oiler recapitalization program, wouldn't it make sense to work to allocate some AP funding in the FY17 timeframe for the second TAO(X) fleet oiler slated for FY18 procurement in order to help achieve desired programmatic and acquisition objectives and in the industrial base?

Secretary STACKLEY. Advanced Procurement (AP) funding for advanced planning and procurement of long lead time material (LLTM) may be appropriate in FY 2017 to support the timely and efficient production of the second T-AO(X) ship in FY 2018. On more complex war ship designs, the Navy typically includes a "gap" year following award of the lead ship to properly allow the design to reach sufficient maturity, and to avoid "two" lead ships. T-AO(X) is planned as a commercial-oriented, non-developmental design, and would likely benefit from AP funding in FY 2017 and the resulting improvement in production efficiency. The Navy will take AP into consideration during the development of the FY 2017 budget. However, despite the benefits provided by Advanced Procurement in terms of cost efficiency and production stability, the historical lack of support for AP by the Appropriations Committee is a significant factor in the Department's determination of whether or not to request such funds in our budget submission.