AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

[H.A.S.C. No. 113–122]

AMPHIBIOUS FLEET REQUIREMENTS

HEARING

BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND
PROJECTION FORCES

OF THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

HEARING HELD
JULY 25, 2014

U.S. GOVERNMENT PRINTING OFFICE
89–515 WASHINGTON : 2015

For sale by the Superintendent of Documents, U.S. Government Printing Office,
http://bookstore.gpo.gov. For more information, contact the GPO Customer Contact Center,
U.S. Government Printing Office. Phone 202–512–1800, or 866–512–1800 (toll-free). E-mail, gpo@custhelp.com.

SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

J. RANDY FORBES, Virginia, *Chairman*

K. MICHAEL CONAWAY, Texas
DUNCAN HUNTER, California
E. SCOTT RIGELL, Virginia
STEVEN M. PALAZZO, Mississippi
ROBERT J. WITTMAN, Virginia
MIKE COFFMAN, Colorado
JON RUNYAN, New Jersey
KRISTI L. NOEM, South Dakota
PAUL COOK, California
BRADLEY BYRNE, Alabama

MIKE MCINTYRE, North Carolina
JOE COURTNEY, Connecticut
JAMES R. LANGEVIN, Rhode Island
RICK LARSEN, Washington
HENRY C. "HANK" JOHNSON, JR., Georgia
COLLEEN W. HANABUSA, Hawaii
DEREK KILMER, Washington
SCOTT H. PETERS, California

DAVID SIENICKI, *Professional Staff Member*
PHIL MACNAUGHTON, *Professional Staff Member*
KATIE REMBER, *Clerk*

CONTENTS

CHRONOLOGICAL LIST OF HEARINGS

2014

	Page
HEARING:	
Friday, July 25, 2014, Amphibious Fleet Requirements	1
APPENDIX:	
Friday, July 25, 2014	21

FRIDAY, JULY 25, 2014

AMPHIBIOUS FLEET REQUIREMENTS

STATEMENTS PRESENTED BY MEMBERS OF CONGRESS

Forbes, Hon. J. Randy, a Representative from Virginia, Chairman, Subcommittee on Seapower and Projection Forces 1
McIntyre, Hon. Mike, a Representative from North Carolina, Ranking Member, Subcommittee on Seapower and Projection Forces 2

WITNESSES

Aucoin, VADM Joseph P., USN, Deputy Chief of Naval Operations Warfare Systems (N9) 7
Paxton, Gen John M., Jr., USMC, Assistant Commandant of the Marine Corps 6
Stackley, Hon. Sean A., Assistant Secretary of the Navy for Research, Development and Acquisition 3

APPENDIX

PREPARED STATEMENTS:

Forbes, Hon. J. Randy 25
Stackley, Hon. Sean A., joint with Gen John M. Paxton, Jr., and VADM Joseph P. Aucoin 27

DOCUMENTS SUBMITTED FOR THE RECORD:

[There were no Documents submitted.]

WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING:

[There were no Questions submitted during the hearing.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING:

[There were no Questions submitted post hearing.]

AMPHIBIOUS FLEET REQUIREMENTS

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES,
Washington, DC, Friday, July 25, 2014.

The subcommittee met, pursuant to call, at 9:04 a.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. Today the subcommittee convenes to receive testimony on amphibious ship requirements. I want to welcome our distinguished witnesses and appreciate your time and efforts to this most important issue. Specifically, I want to welcome the Honorable Sean Stackley, Assistant Secretary of the Navy for Research, Development and Acquisition. Mr. Stackley, thank you so much for your service to the country, and thank you for continuing briefing this committee and testifying and giving us the benefit of your expertise.

General John M. Paxton, Jr., Assistant Commandant of the Marine Corps. General, thank you for your service and all the Marines do for us.

And Admiral Joseph P. Aucoin, Deputy Chief of Naval Operations, Office of Naval Operations Warfare Systems. Admiral, thank you so much for all that you do.

We thank you all for being with us today on this very important hearing. And as we continue what many of us believe to be the dismantling of the world's greatest fighting force, it is worth considering the critical role played by the U.S. Marine Corps in protecting and sustaining national interests far from our shores.

Alongside the other elements of American naval power—dominant surface and submarine forces, and the world's most mobile and lethal form of airpower—the Marines represent a middleweight force designed to project land power from the sea.

I continue to have reservations about the direction of the capacity and capabilities of our fleet, and specifically our amphibious power-projection capabilities. I would note that the Navy and Marine Corps have both agreed that the amphibious fleet of 38 ships is necessary to support two Marine Expeditionary Brigades, but because of fiscal constraints, this administration is planning to acquire 33 amphibious ships.

I would further note Secretary Stackley stated earlier this year before this subcommittee that a plan for 33 ships introduces some risk in terms of being able to provide the total lift for a major com-

bat operation. The Navy and Marine Corps have agreed that that is an acceptable risk.

I think that we need to provide the capabilities that our combatant commanders need and look forward to better understanding the risk that our Nation is accepting in not providing this full complement of amphibious ships.

I also understand that the Navy and Marine Corps team wants to build 11 LX(R) amphibious ships to replace the 12 *Whidbey Island* and *Harpers Ferry*-class Dock Landing Ships. An analysis of alternatives to consider various options is ongoing. I agree with Secretary Stackley that this next class of ships needs to be developed within an affordable budget top line, and look forward to better understanding the various options that the Navy is considering and the timeline for finalizing this newest class of ships.

Finally, I want to highlight that our committee authorized for appropriations $800 million and provided incremental funding authority to start construction of LPD–28 [landing platform/dock]. As I noted before, I think the amphibious fleet is an important capability for national security, and it appears that three of the four defense committees supported this effort. I look forward to understanding how the Department intends to move forward with this important project and take advantage of the incremental funding authority that appears to be provided by the Armed Services Committee.

I would be remiss if I did not acknowledge the challenges that the entire shipbuilding account will have with the development of *Ohio*-class replacement submarines that will be coming online concurrent with the LX(R) class ships. We need to work to see the development of the *Ohio*-class replacement submarine funded as a national strategic asset by the Department of Defense so that it does not crowd out important shipbuilding capabilities like the amphibious program.

With that, I turn to my good friend and colleague and the ranking member of the subcommittee, the gentleman from North Carolina.

[The prepared statement of Mr. Forbes can be found in the Appendix on page 25.]

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

Mr. MCINTYRE. Thank you, Mr. Chairman, and thanks to you gentlemen for your service to our country and for being with us on an early Friday morning, and taking the time to come share with us your thoughts on the topics today.

I know today we will be hearing testimony, Mr. Chairman, from both the Navy and Marine Corps, and as we look at the amphibious fleet, I want our gentlemen to know we want to know how we can best support the mission, that Congress can support what you are doing with our amphibious fleet. The Marine Corps represents our Nation's response force that does enable us to respond anywhere around the world on short notice, and there is no question that the Marines have been critical to our forces in our presence in both Iraq and Afghanistan.

We also want to make sure the Marines are not being seen as a second land force, but rather an amphibious-based expeditionary force true to the mission of the Marines. And in doing so, we want to carefully examine what that force should look like, whether the appropriate number of amphibious ships are available, and what is the most capable platform for moving marines ashore.

It has been established the Marine Corps requires 38 amphibious ships to conduct the two Marine Expeditionary Brigades' forcible entry mission. The Navy and Marine Corps have agreed they can meet this requirement with 33 ships with acceptable risk. What I would like to know is whether or not there are other ways to mitigate the risk of a smaller amphibious fleet? Does the Joint High Speed Vessel or Mobile Landing Platform help in that regard, or will the different design options for future amphibious ships have an impact on that number?

We know that there is support for a 12th LPD–17. It is important for this committee to have a clear understanding of how an additional LPD procurement may affect other shipbuilding programs.

We also want to understand the acquisition strategy for the LX(R) program and whether existing ship designs could meet that requirement while also reducing the overall cost, or if a completely new design is the best approach. It is important to maintain competition, and I am encouraged to see that the plan for the LX(R) program as well as the next LHA [Landing Helicopter Assault].

Whether it is a crisis response, or a disaster, or humanitarian relief, or forward presence, we know that our Navy and Marine Corps amphibious capability is a vital asset for the United States and one that we must continue to maintain. And I know the chairman and I share in our commitment to do everything we can to make sure you are provided with the equipment and the resources and the ships that you need to be able to fulfill that mission and do the great job that the United States Navy and the United States Marine Corps do.

Thank you for being here today. We look forward to hearing your testimony, and may God bless you and your families for their sacrifice and your service.

Thank you, Mr. Chairman.

Mr. FORBES. Thank you, Mike.

And, Mr. Secretary, it is my understanding you are going to start us off. So we look forward to your remarks.

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

Secretary STACKLEY. Yes, sir.

Chairman Forbes, Representative McIntyre, Representative Palazzo, thank you for the opportunity to appear before you today to address Navy and Marine Corps amphibious fleet requirements. And joining me today are General Paxton, the Assistant Commandant of the Marine Corps, and Vice Admiral Aucoin, the Deputy Chief of Naval Operations. With the permission of the subcommittee, I would propose to keep opening remarks brief and submit a formal statement for the record.

Mr. FORBES. Without objection, all of the written remarks will be made a part of record.

Secretary STACKLEY. Thank you, sir.

Today 99 ships, about one-third of our fleet, and over 75,000 sailors and marines are deployed around the world. Another 63 ships are underway conducting local operations, testing, training, and preparing to deploy. Five of our big-deck amphibious assault ships are underway, including the Navy's newest ship in the first of her class, the *America.* The sixth big-deck is forward-deployed in Japan, and 4,600 marines of the 22nd and 31st Marine Expeditionary Units are deployed aboard amphibious ships operating off coasts from Africa to Japan, conducting air operations, ship-to-shore operations, supporting Operation Enduring Freedom, building partnerships, deterring enemies, and responding to crises and contingencies.

They place in the hands of our Nation's leaders tools and options to respond to today's world events and shape future events. And to say that they are the best at what they do doesn't do them justice, for amongst the world's fighting forces, none other can do what they do.

It is our responsibility to Congresses and the Departments to place in their hands the best weapons this Nation can produce to shape, deter, defeat, and deny our enemies. Accordingly, the seamless maneuver of marines from the sea to conduct operations ashore, whether for training, humanitarian assistance, or combat, remains a key priority as the Department of the Navy shapes its future force. And to this end, from the STOVL [short take-off and vertical landing] version of the Joint Strike Fighter to modernized attack and utility helicopters, to the development of the heavy-lift helicopter CH–53K, we are recapitalizing critical Marine aviation capabilities.

From the Joint Light Tactical Vehicle to the Amphibious Combat Vehicle and upgrades to the legacy Amphibious Assault Vehicle, we are modernizing the Marine Corps' tactical vehicles. We have extended the service life of our landing craft and are developing the next ship-to-shore connectors, and we are fielding the next generation of Marine Corps expeditionary command, control, and communications capabilities, the G/ATOR [Ground/Air Task Oriented Radar] radar, Common Aviation Command and Control System, and Global Communication Support System.

Underpinning this expeditionary capability is our effort to sustain and build our force of amphibious ships. Our amphibious fleet requirements are defined in a report submitted to the Congress by the Chief of Naval Operations and the Commandant in 2009 stating, "The force structure to support 2.0 Marine Expeditionary Brigade lift is 38 amphibious assault ships." Understanding this requirement, and in light of the fiscal constraints with which the Navy is faced, the Department of the Navy will sustain a minimum of 33 amphibious ships in the assault echelon. This 33-ship force accepts risk in the arrival of combat support and combat service support elements of the Marine Expeditionary Brigade, but has been adjudged to be adequate in meeting the needs of the naval service within today's fiscal limitations.

With the recent deliveries of the *Somerset* and the *America,* today's amphibious force stands briefly at 32 ships: 10 big-deck amphibs [amphibious assault ships], 12 LSD 41/49 [Landing Ship, Dock] ships, and 10 LPD-class [Amphibious Transport Dock] ships. Numerically, with the retirement of the LPD–4 and LHA–5 in 2015, and delivery of ships currently under construction, LPDs 26 and 27, and LHA–7, we will reach 33 amphibs in 2018. However, a shortfall in big-deck amphibs will persist until we deliver LHA–8, which does not start construction until 2017 and delivers in 2024.

The LHD class and future LHA class are the backbone of the amphibious force, providing the capacity and command and control critical to the expeditionary group commander for ship-to-shore air and surface operations. The new LHA–6 and future LHA–7 add significant aviation capability to the force, appropriate to the introduction of the Joint Strike Fighter. Flight I to the LHA–6 class, commencing with LHA–8, will strike a greater balance between vertical and horizontal lift capabilities.

As you would expect, by every measure, lift, command and control, mobility, survivability, and quality of life, the LPD–17 class is vastly superior in capability to the LPD–4 class she replaces, and more so the LSD–41 class that the Navy is drawing plans to replace commencing in the 2020s.

Whether conducting missions in peacetime or combat, LPD–17 provides greater employment options to the operational commander, and now a requirement for 11 of these ships, 1 per amphibious ready group, provides the group commander greater flexibility to split these ships out to operate independently.

Meanwhile, we are currently evaluating alternatives for the future amphibious ship, LX(R), which we need to build in the decade of the 2020s and 2030s, in order to replace the LSD–41/49 class. In doing so, we are carefully weighing the lift capacity the force needs, arguably greater than the lift capacity of the LSD–41/49 class due to increased weight of today's more-armored vehicles; the combat capability the ship will require; and the cost with which the future Navy can realistically bear during a period that we all understand will bring great pressure to our shipbuilding budget.

And so when we weigh these factors, we are also mindful of the health of our industrial base and the pressures on our ship construction and modernization accounts. The fact is amphibious shipbuilding is in a valley during the gap between completion of the LPD–27 and start of construction of the LX(R). And as we struggle today with unfunded core requirements, issues well familiar to this subcommittee, the Navy does not have the headroom during this period of budget downturn to place ships above core on order to address the industrial base concerns.

That said, shipbuilding is a top priority for the Navy, and we, the Navy and Marine Corps, hope that in working with the Congress, which alone has the authority to provide and maintain a Navy, that our budget requirements, our operation requirements, and our industrial-base requirements will be carefully weighed as you consider the impact of the Budget Control Act caps on the future force.

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, General Paxton, and Admiral Aucoin can be found in the Appendix on page 27.]

Mr. FORBES. Mr. Secretary, thank you so much.

General.

STATEMENT OF GEN JOHN M. PAXTON, JR., USMC, ASSISTANT COMMANDANT OF THE MARINE CORPS

General PAXTON. Thank you, sir.

Chairman Forbes, Ranking Member McIntyre, and Congressmen Palazzo and Peters, thank you and all of the members of the subcommittee for the opportunity to address the Department of the Navy amphibious fleet requirements as it relates to your United States Marine Corps in our enduring requirement to remain our Nation's forward-deployed crisis response force. Sir, I will keep my remarks very brief given that we have a written statement that you have graciously accepted, and we thank you for that, sir.

So today, as always, your Marine Corps is committed to providing a balanced air-ground logistics team with the requisite qualities of responsiveness, scalability, and self-sustainment. Inherent in these traits is a synergy that is created from being both amphibious and expeditionary as components of a naval force.

The Navy and Marine Corps team provides a fundamental pillar of our Nation's power and security, and has done so since Thomas Jefferson sent marines and sailors to fight the Barbary pirates off North Africa in 1805, over 200 years ago.

As we look forward to the future we all realize that sea-based and forward-deployed naval forces provide day-to-day engagement, crisis response, and assured access to our global commons. A critical component in building, training, and maintaining an expeditionary forward presence is the quantity, availability, and readiness of our amphibious ships. This necessity has been demonstrated routinely with the advent of new security challenges as we collectively face new challenges around the globe.

In actuality, our need far exceeds our capacity. As testimony earlier this year indicates, our combatant commander requirements, as well as independent amphibious warship demands, greatly exceed the 38 ships that we have talked about as the assault element for the two MEBs [Marine Expeditionary Brigades], which is the stressing case for the operational plans. This day-to-day demand will not diminish. Instead we expect it will likely increase since amphibious ships and their expeditionary forces provide unmatched versatility and capability that is of much use to our combatant commanders.

Realizing this, the Marine Corps created a Special Purpose MAGTF, [Marine] Air-Ground Task Force, and has positioned that in key strategic areas in the European and African littorals. These forces, however, right now are land based, and they are not immune to the time and space realities, or what we call the tyranny of distance. An example of this was for the U.S. Embassy in Juba last December, and we had a special mission there, and in order to accomplish that, we launched MV–22 aircraft from allied nations in Southern Europe. We actually were able to execute a mission and extract some U.S. personnel and assist the embassy, but the

mission took 3,270 miles and over 15 hours. That MAGTF subsequently redeployed elsewhere on the African Continent.

While successful in the mission accomplishment, these forward-deployed elements, however, are necessarily limited in both operational reach and sustainability once they are on the objective. As we gather here today, crisis response forces are literally sitting on their packs elsewhere around the world to launch within hours of a mission tasking. They are postured this way in order to mitigate limiting factors of both time and distance throughout those multiple geographic combatant command areas of responsibilities.

The existence and the success of these forces, however, is a direct indicator of the paucity of our amphibious ships. With additional amphibious ship quantities and availability, the Navy and Marine Corps team will be able to rapidly respond to crises around the world, and the security will be greatly enhanced. For this reason we ask for continued congressional support for the Navy shipbuilding program. As Mr. Stackley said, that includes ship-to-shore connectors and the maintenance capability that we need to keep the modern fleet ready. Doing so will enable us to remain naval and expeditionary, and be able to project the United States power around the globe, and to secure our interests and the country whenever and wherever we need it.

I thank all of you for your faithfulness to our Nation and request that our written testimony be accepted. And I look forward to your questions, sir. Thank you.

[The joint prepared statement of General Paxton, Secretary Stackley, and Admiral Aucoin can be found in the Appendix on page 27.]

Mr. FORBES. Thank you, General.

Admiral.

STATEMENT OF VADM JOSEPH P. AUCOIN, USN, DEPUTY CHIEF OF NAVAL OPERATIONS WARFARE SYSTEMS (N9)

Admiral AUCOIN. Chairman Forbes, Congressman McIntyre, distinguished members of the HASC [House Armed Services Committee] Seapower committee, it is an honor to appear before you and testify on amphibious fleet requirements. I echo what Secretary Stackley said and also the ACMC [Assistant Commandant of the Marine Corps], so I will keep my opening remarks short, only to make two points first.

First, my job is relatively new, and my role as the Deputy Chief of Naval Operations for Warfare Systems, I am responsible to the Chief of Naval Operations for supporting and establishing, integrating and resourcing Navy warfighting requirements across the range of expeditionary, surface, undersea, and air warfare.

Second point is just to say we thank you very much. We appreciate the support Congress has shown in supporting the amphibious force. The PB15 [President's Budget for fiscal year 2015] plan represents the most responsible effort to balance resources with requirements, affordability, and the industrial base considerations. It attempts to balance shortfalls in amphibious warfare ships, large surface combatants, and attack submarines until the force structure assessment objectives are met.

Thank you.

[The joint prepared statement of Admiral Aucoin, Secretary Stackley, and General Paxton can be found in the Appendix on page 27.]

Mr. FORBES. Thank you, Admiral.

First of all, I want to say that I believe you probably have staff represented behind you that do such a good job, and to all of them, we want to thank you for your work in making sure all of this continues moving in the right direction. And thank you for the hours you put in doing that and serving your country.

This is an incredibly bipartisan subcommittee. We have good working relationships with each other. Mr. McIntyre, my ranking member, and I are very, very close partners in this. And so I want to yield to him to begin asking the questions, and I will defer my questions until the end.

Congressman McIntyre.

Mr. MCINTYRE. Thank you, Mr. Chairman, and thank you for your commitment and strong leadership of this subcommittee. I will be brief in light of the compressed time we have on a Friday morning.

Admiral, with LH–8 now being planned to include a well deck, can you explain some of the steps the Navy has taken to reduce the risks associated with a major design change like that?

Admiral AUCOIN. Well, I will speak briefly, and I am sure Secretary——

Mr. FORBES. Admiral, is your microphone on?

Admiral AUCOIN. Can you hear me?

Mr. FORBES. Yeah. Just keep that mike up kind of close.

Admiral AUCOIN. We know, Congressman McIntyre, that the Marines want the well deck put back in there, and design efforts are underway right now between the shipyards to incorporate that along with the large aviation requirements associated with that flight deck. But we still have got a ways to go on those design efforts, a couple more years, before we finalize the design.

Secretary STACKLEY. Let me just add several pieces to that. First is getting the requirements right and nailing down a technical baseline associated with that—those requirements that are feasible and you have got the right level of risk and maturity. You have got that balance down. And so that is what we are doing right now.

As you go to LHA–8 what we are actually doing is we are going back to a well deck. So the details associated with a well deck inside of that hull format are well understood. The requirements that we are pinning down in further detail today are the new capabilities that come with a Flight I to this new ship class. So we are being very careful to ensure we don't overreach in terms of those requirements, and to balance out both the aviation side and then the surface side, the well deck side, as we do that redesign. That is the requirement side.

We brought in industry into this early stage of design to help us go from defining the requirements to constructing what we would call a contract design, and that is the design that we would actually put on to contract. So we have both the two shipbuilders that would be competing for this at the table with us working through this next phase to take a look at feasibility, how best to complete

the contract design, and also how to go after some cost reduction initiatives in the process.

So we think we have it about right in terms of stable, realistic requirements; leveraging a mature prior class design, the LHD class; and then bringing industry in early before we push out the contract design for competition.

Mr. MCINTYRE. Thank you.

Thank you, Mr. Chairman.

Mr. FORBES. Thank you, Mike.

The gentleman from Mississippi is recognized for 5 minutes.

Mr. PALAZZO. Thank you, Mr. Chairman.

Gentlemen, thank you all for being here today. I want to thank you for your service to our Nation; also coming here, taking time out of your busy schedules to lend us your expertise on the amphibious force structure and to answer some of our questions.

I also want to thank your families for their sacrifices. I know that is sometimes overlooked and forgotten.

I think it is pretty clear to everybody in this room and to Congress that our intent is to fund the LPD–28, or an additional LPD–17-class ship. This committee authorized $800 million in multiyear procurement. I think the Senate authorizing committee did $650-, and the Senate Appropriations Committee did $800 million, so it is absolutely clear the intent is that Congress wants the 12th ship in the LPD–17 class.

I think it is extremely important as well, and the Commandant has expressed a huge amount of interest on these ships, calling these ships the Swiss Army knives of the fleet. And they are capable of doing multiple things, and, you know, not only just projecting force, but serving as a deterrent; also being able to providing humanitarian assistance, evacuations, and the list goes on.

So, General Paxton, could you kind of elaborate, and, in your view, what has the Marine Corps—what are the amphibious assault assets today, and what do you think they are going to need moving forward?

General PAXTON. Thank you, sir. And, again, great colleagues here beside us, so there is a good work amongst the Navy and Marine Corps team on the way ahead.

In this particular case, we happen to be the ones who are trying to articulate the requirements in order to do that power projection, knowing full well—and I will come back to this at the end—that we have some fiscal constraints and caps there, and I will defer to Secretary Stackley to articulate what this means in terms of the overall shipbuilding program.

In terms of the requirements, as I tried to allude to in the comments, 38 amphibious ships is the stressing case for the simultaneity of two operations plans, and we can talk about that in a more classified environment, but that represents the assault echelon of two expeditionary brigades, which is what we need for, again, the two operation plans. What we understand, though, is in the day-to-day environment, it is the currency and the simultaneity of the demands from the five geographic combatant commanders that stress our force on a day-to-day basis. So, sir, see if I can answer both of those.

There is a hard-fast requirement for 38 ships to do the two MEB assault echelon requirement. We agreed, at least in paper and as recently as 2009, that we can live within fiscal constraints for 33. Built into that, the math of that equation is a 90 percent availability of the ships; that there is always 10 percent that are in maintenance.

We struggle under the existing number of ships today, and the Navy, despite great work, is always challenged to get ships into the maintenance cycle. So as we have things go on around the world, in Yemen, in Libya, in Syria, in the hurricanes and tornadoes and super typhoons, and Haiyan in the Pacific, we are repeatedly asked to respond to those. We are ready to do that, but it breaks the maintenance cycle, and that is what stresses the force.

So when we responded last November to Super Typhoon Damayan in the Philippines, we had marines from the 3rd Marine Expeditionary Brigade on B–22s and en route to the Philippines in somewhere between 5 and 6 hours. But it took us several weeks to get two ships out of the maintenance cycle out there, and I want to be on the record that Admiral Harris and Admiral Thomas did great work to get them out of the yards and get them down there, but there were two others we couldn't get there. And we knew by doing that, though, we were going to break the maintenance cycle for those ships, and that would further degrade the responsiveness of the 31st MEU [Marine Expeditionary Unit] in the Western Pacific area.

So that is yet another case, just as the Special Purpose MAGTF and the move to Juba earlier that just shows the case there, the position now where not only the paucity in numbers, but the maintenance requirements in an aging fleet stresses the use of that. And consequently, the Navy and Marine team who was forward deployed and ready to do things is always challenged to get there fast enough, to stay long enough, and to be able to reset so that we can get the ships back into maintenance.

Mr. PALAZZO. I have another question, but I will probably run over my time if he tries to answer.

All right. Well, General Paxton, the recent Navy 30-year shipbuilding plan discusses the building of the LX(R). What capabilities do you need in this ship to best support the Marine Corps mission?

General PAXTON. Yeah, thank you, sir.

When we tried to articulate requirements, and I am sure all of the members of the committee, given your great experience and your fine support for us, understand, there is five fingerprints a lift, so we are looking about the number of individual marines you can put on a ship with their personal equipment, and that is fingerprint number one. We are looking at vehicle spots to get rolling stock on and off the ship. We are looking at cube and square for those vehicles and for cargo. And then, most importantly, looking for deck spots for aviation, for rotary-wing aircraft, and then well deck spots for connectors and ship-to-shore movers, whether it is an AAV [Assault Amphibious Vehicle] or LCU [Landing Craft Utility], LCAC [Landing Craft Air Cushioned].

We are trying to balance all five fingerprints of those lifts, and as Secretary Stackley said earlier, we have great design records from previous ships, and we understand the trade space between

a flight deck, a well deck, and number of people, but how we maximize those five capabilities, how we do it within existing cost constraints is the challenge for all of us.

So as the Marine Corps, we will try to articulate what we actually need, given changes in technology, to get the marines and their equipment ashore. We are trying to hold down the weight of our vehicles, but the weight of vehicles continues to increase. We are trying to hold down the size of the aircraft, but the wingspan continues to increase. As we get great capability from our V–22s, we are now trying to make sure the V–22, like the CH–46, is detachment capable, which means you have an independent maintenance capability with them.

So all of these create stressors on the design of the ship, and we are trying to make sure that the ability to project, launch, recover, and sustain the force can be done within the design capability of the ship and the cost that we are afforded or the moneys that we are given. So doing this within the challenge of *Virginia* and *Ohio*-class replacement and everything, even as marines, we understand the challenge the Department is under. So we are grateful for the support that you show.

But I will now defer here to Secretary Stackley. We know that we are probably going to need more money, to be honest with you, above TOA [Table of Allowance Requirements] to make sure the amphibious ship portfolio can sustain while we are doing submarines and surface-class combatants.

Thank you, sir.

Mr. FORBES. We thank the gentleman for his questions. His time is expired. I think that this subcommittee recognizes that that funding for the LPD would not have been in there without his hard work and also the gentleman from Virginia, chairman of the Readiness Subcommittee, who both worked very, very hard to make sure that was done.

The chair now recognizes the gentleman from California for 5 minutes, Mr. Peters.

Mr. PETERS. Thank you, Mr. Chairman.

I don't have a lot of questions. I just want to acknowledge that I appreciate the professionalism and the care you are taking to deal with the constraints of the financial circumstances, and I want to express my thanks for you doing that.

Also, I am conscious that we have another issue coming up next year with sequester, and I think that that is a fundamental thing that this body has to deal with to give you the support you need, and we have to avoid that again. So I want you to know that that is on my mind, and I appreciate all you are doing to deal with the constraints that—and I hope that we will inject more rationality from the congressional perspective into the budgeting in the future.

Thank you. I yield back.

Mr. FORBES. The gentleman yields back.

The gentleman from Virginia, chairman of the Readiness Subcommittee, Mr. Wittman is recognized for 5 minutes.

Mr. WITTMAN. Thank you, Mr. Chairman.

I thank all of our panelists today for joining us. Thank you so much for your service to our Nation.

Secretary Stackley, let me begin with you. I want to talk about the LX(R) program and get your perspective on that and how do we put in place both the efficiencies from a cost standpoint, but also operational efficiencies in making sure that we, as you stated earlier, put to task the lessons learned from the past.

Would it make sense for us to use the LPD hull form in extending the LX(R) into a faster operational phase, looking at LPD–28 as the bridge to that, and, obviously, the elements of maintaining the industrial base? But give me your perspective on using that as an existing hull form and the advantages that that would bring, or possibly the other challenges it might bring.

Secretary STACKLEY. Yes, sir. Let me try to wrap this all together, the advantages of reuse of the LPD hull form, the affordability issues that we are challenged with, and then the specific requirements that LX(R)—that we are drafting on LX(R).

As the ACMC described globally in discussing the LX(R) as a replacement for the LSD–41/49 class, we have to first and foremost ensure that the LX(R) provides the lift capacity that the Navy and Marine Corps team needs. And if you look at what the LSD–41/49 provide today, it is LCAC spots that we are going to have to replace. They bring a lot of cargo, a lot of cargo cubed, which is not a shortfall issue so much as vehicle square. So vehicle space, LCAC well deck spots, and then flight deck capacity. So if you look at that, that is exactly what the LPD–17 provides.

Now, the reality is LPD–17 provides a lot more of that than the ship class that she would potentially be replacing. So what we have got to do, then, is moderate between the capacity of an LPD–17 and the cost that comes with that, and then the true requirements that we need for the LX(R). And that is the debate, the tension that is going on right now inside the analysis of alternatives [AOA] is trying to temper down, temper down those capacities with cost in mind.

And so we are looking at several alternatives. The first clear alternative is you have a hot production line, you have a known entity in terms of LPD–17, so can you reuse it? The answer is the LPD–17 class will not be the LX(R), but the hull form does provide a well-known baseline that we are looking at a modified LPD–17 to see if we can drive that in the right direction in terms of affordability for the LX(R).

We also are looking at foreign designs. There are a number of foreign designs that fix—fit an LX(R) mission profile. So those are on the table as well. This would not be to repeat those designs. Frankly, it would require some sort of teaming agreement between our industrial base and a foreign navy that owns that design to see if, in fact, it could be adapted. We are doing that for thoroughness.

And then you look at clean-sheet designs. Now, the beauty of a clean-sheet design is you can do anything with it, and it can cost what you want it to cost. However, in going from that paper design to reality, we are very mindful of the risks that that introduces, and, frankly, the history that we have of underestimating the cost and complexity of going from a paper to digits, to steel.

So that is the trade space in the AOA. It is bringing those clean set of requirements in that the Marine Corps require for the lift capability, looking at those alternatives, and figuring out across that

family of alternatives how do we drive this into an affordability box that we set for the program.

Mr. WITTMAN. General Paxton, let me get your perspective on that, too. You talked about the requirement set; that is, space on board, what it would be used for. And give me your overall thought about, just as Secretary Stackley talked about, the whole scope of what you are looking at, existing hull forms, new hull forms. Kind of give me your thought about what you believe the LX(R) ought to resemble when it becomes a complete design.

General PAXTON. Thank you, sir.

Yeah, we are, we being the Marine Corps, are huge fans of the LPD–17. It has capability that we have not had before. It has capacity that we have not had before in terms of well deck, flight deck, marines, everything. So the opportunity to continue that hull form or something similar to it has great operational advantage to us. It gives us the ship-to-shore, sovereign launch and recovery capability that we need. It gives us maintenance capability that we need. It gives us command-and-control capability for disaggregated operations in case we have to split up that Marine Expeditionary Unit in two or three different locations.

So in terms of the responsiveness, the versatility, the sustainability, the LPD–17 is a great platform. So how we capture the value of that platform and some of those key either forcing functions or limiting factors. For example, the Secretary and I were talking earlier about just command and control, and we have greatly enhanced command-and-control capability with the LPD–17 that we didn't have before. So the ability to maintain that skill set and those capabilities on the LX(R) is important to us, sir.

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

Mr. FORBES. Thank you, Mr. Wittman.

Gentlemen, once again, thank you for being here. And, Mr. Secretary, you made a statement that I don't think I am paraphrasing incorrectly that Congress alone has ability to maintain a Navy. Did I misstate that, and if so, correct me on that.

Secretary STACKLEY. Sir, what I am quoting is article I, section 8.

Mr. FORBES. I am not disagreeing with you. I am with you.

Secretary STACKLEY. Yes, sir.

We can set our requirements forward to the Congress in terms of a budget request, but we rely on the Congress to bring the budget that——

Mr. FORBES. I am with you. And the reason I say that is not because I differ with you, but because I agree with you. Congress alone has that ability and that responsibility to maintain a Navy. We do not, I do not, intend to lighten that responsibility. I don't intend to delegate that responsibility, and I sure, by God, don't intend to fail in that responsibility. And to do that, we realize that you guys oftentimes have to look at your resources, you have to consider alternatives, you have to evaluate risk, and then you make a decision over there and come over here and say, this is the decision we made.

But since it is our responsibility, the reason we sometimes have to pound on you, as you have mentioned, like an anvil is because we have got to make those decisions ultimately, and we have got

to know those same risks that you evaluated, those same alternatives, those same budgetary things so that we make sure we are not failing in that responsibility. And so that is why sometimes we have to dig deep on these questions and ask them, and sometimes it is not a pleasant process any more than it is a pleasant process when you guys are having to deal with it over there.

But in light of that, I want to come back, if I can, and, General, you have stated this very articulately, but just to help me understand this a little bit better, to go from the 38 to the 33, it is my understanding that we have acceptable risk. I don't ever know what that term means, you know. And we can sometimes get caught in requirements and those kind of things, but it would be true if you had 38 of these ships, there would be times that you wouldn't have enough. I mean, you know, you could have a situation where you still wouldn't have enough. Obviously, with 33, there are going to be times that you won't have enough. So that I can tell my colleagues and share this with them in a better picture, give me the risk that we are accepting to go from 38 to 33.

General PAXTON. Thank you, sir.

It is always a challenge to articulate risk whether it is significant, moderate; whether it is acceptable or not. As I tried to say earlier, it is a dual challenge here. It is both—excuse me—the number of ships, the strict number of them, and then also their operational availability given the maintenance period that is in the yard.

Let's say we have accepted the requirement for 33 ships. That includes a search capability for coming out of the yards. It includes, as Secretary Stackley said, perhaps some new ships that may be in the process of commissioning or older ships decommissioning, so that the analogy would be sometimes we bank on seven consecutive miracles. So that if you do have a stressing scenario in one country, or, as I said earlier, the scourge of simultaneity in two countries, we are dependent upon getting a ship out of a maintenance cycle, bringing a newly commissioned ship into the fray early, keeping the ship that we are going to decommission longer into the fight.

So those are the stressors on the system. And they consequently stress our sailors and marines to get that ship ready to go into the fight, or to keep its maintenance capability up if it needed a long and sustained period in the yards.

So in a short answer, sir, the ships get there slower. We are not sure they can stay on station as long as they can. They go through Herculean efforts on the parts of individual marines and sailors to keep them operationally ready. And then there is an inherent and included risk that they can't stay on that station that long; that they have to get back, sir.

Mr. FORBES. That is a good synopsis.

Mr. Secretary, we've talked about the LPD, and you have been very clear on that. I think the gentleman from Mississippi has a little bit of an interest in that issue, too. And as he pointed out, we have anticipated an additional $800 million on that.

When does the Navy anticipate using that incremental funding authority if that ultimately passes both Houses, which I think it will, and can you address a little bit your concerns about the industrial base that we are looking at with amphibious ships now?

Secretary STACKLEY. Yes, sir. It is difficult to answer that first question because with the—I will call it advanced procurement and incremental funding that has been provided by Congress, either in 2014 or in the various versions of the bills in 2015, we are still a billion-plus short of the funding requirements for another LPD–17-class ship. And that billion-plus has to enter into a budget process where we have got other bills that are, frankly, higher priority.

And I will just use the carrier. We had a hearing where we talked about the refueling of the carrier. We are working that inside of that budget and others that are competing for that space. So we have got competition to go into the budget and add these priorities at the same time we have got all of the risk associated with sequestration on the back end.

So I cannot look at you today and give you a sense of confidence that the Navy is going to be able to budget that additional billion-plus in PB16. Now, we are halfway through the process, and there is going to be a lot more movement between now and when the budget comes over to the Hill. But the challenges are huge in terms of being able to fund the balance, and absent that full funding, not necessarily 1 year, but using the incremental authority, we can't move forward in terms of contracting for a ship. We have got to show the funding in the budget, and so that is the paradox that we have got today.

So we greatly appreciate your intent and the support for the ship, but we are still well short of the funding required to place that ship under contract.

Now, in terms of the industrial base—and here is where it is critical, because all of the points that the ACMC has made regarding 38 versus 33 and where we are today, the reality is if we put an LPD–28 under contract in 2016, it wouldn't enter the fleet until the 2022, 2023 timeframe. So that is not a near-term fix to a present shortfall to the 33 amphib requirement, but it is an immediate fix to a valley that the amphibious shipbuilding industrial base is marching into during this period, as I described, between the completion of the LPD–26 and 27, the last of those two lines, and the start of the LX(R) replacement, which isn't until the 2020s. So you are looking at a 5-, 6-, 7-year period where that industrial base is being drawn down to the only amphibious ships that will be in construction will be the LHA class, so specifically the LHA–7. It will be at its low point going back 25 to 30 years, and that is a concern for the Navy.

Mr. FORBES. And, Secretary, I appreciate your hard work in monitoring that industrial base because all too many people, you know, in Congress they believe this is like a faucet. We turn it on and turn it off whenever we want to. But if we don't have the industrial base there, we can't turn it back on if we need to down the road. Is that a fair statement?

Secretary STACKLEY. Absolutely. There are a couple of key points on this. One is the skilled labor. You have got to be concerned about skilled labor, losing the skilled labor during that valley and then imagining that it will be available when you need to climb back out of that valley.

The likelihood is that we will be dealing with green labor, new entrants to the shipbuilding workforce. That is going to require

training, and also going to have a lot of learning curve that goes along with that.

Mr. FORBES. So that can increase your cost and your time of production?

Secretary STACKLEY. Yes, sir.

And the other reality in terms of any major manufacturing process, facility, company is the impact on overheads. When you lose a business base like that, your overheads go up, and that makes it extremely difficult to invest back into your facilities, to recapitalize, to modernize, to go after the efficiencies that we all need.

Mr. FORBES. Good.

And I just have one more question, and I see Mr. Courtney has arrived, too. We know that the LX(R) is scheduled to replace some of our amphibious ships, and the LX(R) will have less capability than the LPD-class amphibs. The Navy has recently completed an analysis of alternatives, as I understand it, and cost is a significant driver in the threshold requirements for the LX(R).

Can you just provide the subcommittee with some of the options that were considered in the analysis of alternatives for the LX(R) program, and just a short, capsulized version of the pros and cons associated with the various options?

Secretary STACKLEY. Yes, sir. First, I wouldn't say that the AOA is complete. This is an iterative process. The team has come forward with—I will call it—first pass on details. And we sit down, we hammer them with questions, go back for a second pass. We are about on the third pass right now.

The alternatives that we looked at, as I was describing earlier, the first clear one is using the hot production line, and starting with an LPD–17 hull form, and then looking at how you can effectively descope some of the capabilities and also some of the cost drivers, go after the cost drivers, to get the LPD–17 hull form with the lift capacities that we need for LX(R) inside of affordability box that we have set for the program.

The second is a clean-sheet design. All AOAs include a clean-sheet design. So you would start with a list of lift capabilities that you need, and then other enabling capabilities, speed, command-and-control capabilities, that need to be added to the platform. And then now you are dealing with a more parametric approach towards determining what size, what shape, what cost you would be in for a new design LX(R). And that does bring with it all of the risks associated with a new start program in terms of how well do you understand the requirements that you just put down on paper? What does that carry forward in terms of risk regarding either the technology that you are planning on employing or the costs that come with that?

And then the third is to take a look at other existing designs or concepts. And I described the foreign designs, and we are going through those dutifully to understand—you know, we have got all of the glossies. Now we are digging down into the details in terms of, okay, are they really designed for the level of survivability that we would plan on including in our future LX(R)?

And then you have the hybrids. You start to take a look at—well, honestly, we took a look at does an MLP, which has incredible lift

capacity, does that potentially play for the roles and missions of an LX(R)?

So there has been a very broad field of alternatives that we have looked at and all of the trades that go with what degree, what level of capability, what are the risks either in terms of operational risks or in terms of cost or technology that you are anticipating, and then what are the costs that come with that, and necking down to a smaller number of alternatives that we are, again, trying to drive into that affordability box that we have got to hit.

Mr. FORBES. Thank you, Mr. Secretary.

Mr. Courtney is recognized for 5 minutes.

Mr. COURTNEY. Thank you, Mr. Chairman, and thank you to the witnesses for being here.

Secretary Stackley, can you clarify the intent behind the 2002 MOU [memorandum of understanding] and the more recent 2009 MOA [memorandum of agreement], commonly referred to as swap 1 and swap 2, and how the procurement of LPD–28 could impact those two agreements?

Secretary STACKLEY. Yes, sir. So in 2002, the industrial partners associated with the LPD–17 program were effectively split apart as a result of various mergers and acquisitions. So Bath Iron Works and Avondale Shipyard were teamed on LPD–17. Avondale was acquired by Litton, which was acquired by Northrop Grumman, and then all of a sudden we found ourselves with two competitors inside of one program, and it wasn't working out well.

So we looked at what we referred to as "the swap." And with then Northrop Grumman and General Dynamics, we swapped workload across contracts where Bath Iron Works permanently exited the LPD–17 program in exchange for the LPD–17 ships that it was awarded under contract and within its teaming agreement, which were four—they were going to build four LPD–17-class ships. So they permanently exited, and then there was a one-for-one swap. An LPD–17 would go down to Northrop Grumman, and in exchange a DDG–51 would go to Bath Iron Works in the simplest of terms.

So in executing that swap agreement, three LPD–17s have been placed under contract at Avondale and Ingalls, and in exchange, an additional three DDG–51s went to Bath Iron Works. And the language describes that if a fourth LPD goes to—is awarded to Avondale Ingalls, then a fourth DDG–51 would go to Bath Iron Works. That is as simply as I can put it.

In 2009, there was a separate similar type of swap agreement, but in that case it was reorganization of the DDG–1000 program, and it restated that that swap agreement did not impact the existing 2002 swap agreement. So what that would mean, frankly, is if another LPD–17-class ship was awarded to Huntington Ingalls Industries [HII], then there is an equivalent balancer that would be due to Bath Iron Works.

That agreement is between the Navy, General Dynamics, and HII, and if it came down to another LPD–17 being awarded, then we would sit down with industry to figure out how to best make it right.

Mr. COURTNEY. Thank you. That is all.

Mr. FORBES. Gentlemen, thank you once again for being here. As I said in our meeting before this meeting, I want to make sure you get everything you need on the record. There may be some questions that you think are important to have on the record that none of our Members have asked at this time, or perhaps some things that you think might have been mischaracterized so far. So if I can give you what time you need to sum up in those comments now, and, Admiral, if you don't mind, we will start with you and work our way back—give the Secretary just a minute to pause. He has been talking a lot here, so——

Admiral AUCOIN. Yes, Mr. Chairman, I appreciate the opportunity.

As was mentioned, there is an AOA ongoing. We are doing this iteratively. And it is no surprise, the LPD–17 is something the Marines would like, the Commandant's been on the record for saying that, and we would like to accommodate that. But cost is a major driver, and the LPD–17 is cost-prohibitive at $2 billion.

But there is money in there for advanced procurement. There is some money there for incremental funding. If we could use some of that advanced procurement to look at ways to bring down the cost, as seed money to help bring down the design cost, to use that hull form, similar to what we did with the *Virginia*-class submarine—we put seed money in there, and the cost and the schedule both have profited from those inputs to bring it below cost and on schedule for a *Virginia*-class submarine. If we could do that for this, I think it would go a long way. The CNO mentioned that when he was here in March, and I think that would help us a lot. That is all, sir.

Mr. FORBES. Thank you, Admiral.

General.

General PAXTON. Thank you, Chairman. Just two points if I may, sir. First is we talked about the 38 and 33, and I talked about the demand signal and the driver being the simultaneous operations plans. I would just like to reiterate again for the record the challenge of what we now call the new norm, which is the various hot spots around the world.

The utility of any amphibious ship and in particular the LPD–17, as we said, the Swiss Army knife, it is even more important in the new norm because of the disaggregated ops and the way we ask either a split ARG/MEU [Amphibious Ready Group/Marine Expeditionary Unit] or a single ship steamer to go out and respond. So things like day-to-day and currency and improvements of command and control, the C2 sweep, perhaps an ISR [intelligence, surveillance, and reconnaissance] capability, those are the stressors in the day-to-day environment.

And using that as a segue, the second point is, and I believe it was Mr. McIntyre before he left talked about a use of the JHSV [*Spearhead*-class Joint High Speed Vessel] and the MLP [Mobile Landing Platforms], and those are great platforms with great capability, and we are amenable to taking a look at how they may be used in certain circumstances. But if you go back to the stressor and the op plan, we are fairly adamant that those are in addition to as opposed to in lieu of capabilities just because of their survivability and the stressors of a fight. So more than amenable to look-

ing at those, and we appreciate Congress' funding of those, but we are always a little bit reluctant to introduce those into a stressing operation plan.

Thank you, sir.

Mr. FORBES. General, you also mentioned, I think, earlier about the COCOM [combatant command] requirements and where they were. And there is always a gap between our COCOM validating requirements and what we can meet. Is that gap growing or decreasing?

General PAXTON. Sir, due to the nature of the world, the demand signal is indeed growing, and we are trying to figure out how we can keep pace with that. And that is, of course, one of the stressors on all of the services and on all of our programs of record, if you will.

Mr. FORBES. If you looked at that gap, is it increasing because of the increased demands from the COCOM, or is it increasing because we can't meet as many of the requirements as we were meeting before, or a combination of both?

General PAXTON. I believe it is a combination of both, sir. As some of the fragile nation states devolve, and as the global war on terrorism increases, then there is a higher demand signal up there.

And then in addition, as Secretary Stackley said, because of the age of our platforms, and because of the maintenance requirements in getting them back in, we are either unable to respond as quickly, or unable to stay as long. Or if we do, because we are in the habit of saying yes and meeting operational requirements, so if we go early and stay the same length, then we know we have degraded capability and extended our maintenance period that we are going to have to do later, sir.

Mr. FORBES. Thank you, General.

Secretary, once again, thank you for all your help with the subcommittee. We depend on you a great deal for your input, and we would love to hear any closing comments you might have.

Secretary STACKLEY. Yes, sir, very briefly. We are spending a great deal of time on requirements today in terms of amphibious force requirements, but, more broadly, shipbuilding. We have three major programs that are going through analysis of alternatives and getting ready to go on to the next phase of design contract and leading to construction. T–AO(X) is first in the line, followed by LHA–8 and LX(R). That is good for the shipbuilding industrial base. In fact, we are balancing those programs across, frankly, our two major builders of amphibs and auxiliaries in a competitive environment.

Today it is designed, we have got to get to production, but there is a valley in between. And of the eight Tier 1 shipyards that are building U.S. Navy ships, seven of the eight are going into a valley over that period of the next 6 to 7 years. It is straight math, and it is something the Members have to understand. So as we try to fix issues that cross from the shipbuilding program to shipbuilding industrial base, if it is going to be a zero sum, then we are basically using shipbuilding to fix shipbuilding, and that is a net negative.

With regards to affordability, we have always been focused on affordability, but we do have this period of the *Ohio* replacement

coming our way where the total shipbuilding program is not affordable. And we have tried to describe that very clearly in report to Congress.

In that period, the 2020s out to the mid-2030s, our program is not affordable with the *Ohio* replacement laid on top, and that gives us problems on the "eaches" of each of the programs. But, more importantly, no one today can stare at that plan and predict where we will be 10, 15 years from now, except that if we do not fix that picture, then we will be a much smaller Navy.

Mr. FORBES. Mr. Secretary, if I could just ask you one more elaboration not limited to the subject matter we are talking about today. But one of the things that I know, since you wrestled with this for so many years, oftentimes the public and policymakers believe we can ramp this up very quickly if we have a crisis in the world.

With the Navy, what is unique about that, why that bothers you? Because I know you talked about the 2030s for our subs if we don't continue building what we are looking at with *Ohio* class. What message would you have that we could deliver to them about the difficulty of ramping things up when you talk about the Navy?

Secretary STACKLEY. Yes, sir. On average it takes about 5 years to build a ship, carriers longer, smaller ships less. But 5 years is a good, solid number. When you are building, say, 10 ships a year, it takes 30 years to build a Navy, and so you can't—we are living off of the ship construction of the 1980s, we really are. That is running to the end of its service life, so we have to recapitalize ships that were built—in the 1980s, we were building ships at about a 20-ship-per-year rate. Now, we are not trying to achieve the force level that we had in the 1980s, but to sustain a 300-ship Navy, we have to recapitalize at a rate near what it was built at back in the 1980s. That is a very difficult problem financially with regards to the industrial base and with regards to the trades that we have got to make inside of our program.

You cannot wait until you need ships to start to crank up the machinery. We have got to look far ahead. And, frankly, this is one of the beauties of the 30-year shipbuilding report that we turn in to the Congress. It forces everybody to look far ahead and recognize that decisions in shipbuilding that are 5 to 10 years away are in front of us today.

We have to make those decisions today to influence events 5 to 10 years from now. And 5 to 10 years from now is that period of the *Ohio* replacement program. If we aren't making those decisions today, then the folks who are sitting in this hearing room 5 or 10 years from now, they are going to be in an extraordinarily different place than we are today with regards to our force structure, our capabilities, our ability to provide presence, and our ability to respond to crises.

Mr. FORBES. Mr. Secretary, General, Admiral, thank you so much. Thank all your staff members for their support and help here. With that, we are adjourned.

[Whereupon, at 10:12 a.m., the subcommittee was adjourned.]

A P P E N D I X

JULY 25, 2014

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

JULY 25, 2014

Opening Remarks of the Honorable J. Randy Forbes,
Chairman of the Seapower and Projection Forces Subcommittee,
for a hearing on
Amphibious Fleet Requirements
July 25, 2014

Today the subcommittee convenes to receive testimony on Amphibious Ship Requirements. I want to welcome our distinguished witnesses and appreciate your time and efforts to this most important issue. Specifically, I want to welcome:

- The Honorable Sean Stackley, Assistant Secretary of the Navy for Research, Development, and Acquisition
- General John M. Paxton, Jr., Assistant Commandant of the Marine Corps; and
- VADM Joseph P. Aucoin, Deputy Chief of Naval Operations, Office of Naval Operations Warfare Systems (N9)

Gentlemen, thank you for being with us today.

As we continue to dismantle the world's greatest fighting force, it is worth considering the critical role played by the U.S. Marine Corps in protecting and sustaining national interests far from our shores. Alongside the other elements of American naval power —dominant surface and submarine forces, and the world's most mobile and lethal form of air power— the Marines represent a middleweight force designed to project land power from the sea.

I continue to have reservations about the direction of the capacity and capabilities of our fleet and specifically our amphibious power projection capabilities.

I would note that the Navy and Marine Corps have both agreed that the amphibious fleet of 38 ships is necessary to support two Marine Expeditionary Brigades but because of fiscal constraints, this administration is planning to acquire 33 amphibious ships. I would further note that Secretary Stackley stated early this year, before this subcommittee, that a plan for 33 ships "introduces some risk in terms of being able to provide the total lift for a major combat operation. But Navy-Marine Corps have agreed that that's acceptable risk." I think that we need to provide the capabilities that our combatant commanders need and look

forward to better understanding the risk that our nation is accepting in not providing this full complement of amphibious ships.

I also understand that the Navy and Marine Corps team wants to build 11 LX(R) amphibious ships to replace the 12 Whidbey Island and Harpers Ferry Class Dock Landing Ships. An analysis of alternatives to consider various options is ongoing. I agree with Secretary Stackley that this next class of ships needs to be developed "within an affordable [budget] top line" and look forward to better understanding the various options that the Navy is considering and the timeline for finalizing this newest class of ships.

Finally, I want to highlight that our committee authorized for appropriations $800 million and provided incremental funding authority to start construction of LPD-28. As I noted before, I think the amphibious fleet is an important capability for national security and it appears that three of the four defense committees supported this effort. I look forward to understanding how the Department intends to move forward with this important project and take advantage of the incremental funding authority that appears to be provided by the Armed Services Committees.

I would be remiss if I did not acknowledge the challenges that the entire shipbuilding account will have with the development of Ohio-class replacement submarine that will be coming on line concurrent with the LX(R) class ships. We need to work to see the development of the Ohio class replacement submarine funded as a national strategic asset by Department of Defense so that it does not crowd out important shipbuilding capabilities like the amphibious program.

With that, I turn to my good friend and ranking member, the gentleman from North Carolina.

NOT FOR PUBLICATION UNTIL RELEASED
BY THE HOUSE ARMED SERVICES
COMMITTEE SUBCOMMITTEE ON
SEAPOWER AND PROJECTION FORCES

STATEMENT

OF

THE HONORABLE SEAN J. STACKLEY
ASSISTANT SECRETARY OF THE NAVY
(RESEARCH, DEVELOPMENT AND ACQUISITION)

AND

GENERAL JOHN M. PAXTON, JR
ASSISTANT COMMANDANT OF THE MARINE CORPS

AND

VICE ADMIRAL JOSEPH P. AUCOIN
DEPUTY CHIEF OF NAVAL OPERATIONS FOR WARFARE SYSTEMS

BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

AMPHIBIOUS FLEET REQUIREMENTS

JULY 25, 2014

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE
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's Amphibious Fleet Requirements. The future security environment requires a robust capability to project forces ashore from amphibious platforms and to maneuver over land to positions of advantage. Amphibious ships and their expeditionary forces provide Combatant Commanders with unmatched versatility and capability, and consequently there is a great demand for these forces. It is clear that our Navy and Marine Corps would like more Amphibious Ships, yet we must balance war-fighting risk across the spectrum of required capabilities and capacity.

Amphibious Ships

Amphibious ships operate forward to provide the Nation's best means of projecting sustainable power ashore, responding to crises, deterring potential adversaries, and supporting allies; they also provide an exceptional means for delivering humanitarian assistance and disaster relief. Amphibious forces comprised of Sailors, Marines, ships, aircraft, landing craft and surface connectors provide the ability to rapidly and decisively respond to global crises in an expeditionary environment or for temporary duties without establishing a permanent footprint ashore that could place unnecessary political or logistical burdens upon our allies or potential partners. There are two main drivers of the amphibious ship requirement: maintaining our persistent forward presence, enabling engagement and crisis response, and delivering the assault echelons of up to two Marine Expeditionary Brigades (MEB) for joint forcible entry operations.

Amphibious Battle Force Requirements and Inventory

The Chief of Naval Operations (CNO) and Commandant of the Marine Corps (CMC) have determined that the force structure required to support a 2.0 MEB assault echelon lift is 38 amphibious assault ships. The 38 ship requirement was communicated to the chairmen of the House and Senate Appropriations and Armed Services committees by a joint Secretary of the Navy, CNO and CMC letter dated January 7, 2009. This requirement, initially established during a 2007 Navy/Marine Corps working group has been fully analyzed and was last revalidated in March of 2011. Understanding this requirement, and in light of current fiscal

constraints, the Department of the Navy can sustain a minimum of 33 amphibious ships in the assault echelon. Balancing the total naval force structure requirements against fiscal projections imposes risk in meeting this requirement. Based on the footprint of a 2.0 MEB assault echelon force, a minimum of 30 operationally available ships is 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.

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. A total force of 33 ships will be achieved in FY 2018, although the required mix of 11 LHA/LHD, 11 LPD, and 11 LSD will not be achieved until the delivery of LHA 8 in FY 2024. Eleven LPDs will be achieved in FY 2017 with the delivery of LPD 27. Twelve LSDs will be maintained by the CG/LSD Phased Modernization Plan, retaining eleven deployable LSDs in the battle force until LX(R) delivers. The FY 2015 shipbuilding plan will result in a projected amphibious ship force structure of at least 30 ships in the near-term and maintains 33 ships throughout the 2020s and most of the 2030s. The FY 2015 shipbuilding plan's amphibious battle force inventory across the entire 30 years is depicted in the below Table A.

Table A – FY 2015-2044 Amphibious Battle Force Inventory

	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
LHA/LHD	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	11	10	9	9
LPD	9	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
LSD/LX(R)	12	12	12	12	12	12	12	12	12	12	12	14	13	14	13	13	12	12	13	12	10	10	11	11	11	11	11	11	11	11
Total	30	31	32	33	33	33	33	33	33	34	34	36	35	36	35	35	34	34	35	34	32	32	33	33	33	32	33	32	31	31

LSD Phased Modernization Plan

The Navy plans to maintain eleven deployable LSDs in the active force until LX(R) delivers by rotating three LSDs, one at a time, into a four-year phased modernization period and then placing them back in service. *USS TORTUGA* (LSD 46) would be inducted into its phased modernization beginning in 2016, and will achieve the expected 40-year operational service. The phased modernization of *USS WHIDBEY ISLAND* (LSD 41) and *USS GERMANTOWN* (LSD 42) will begin in 2020 and 2024 respectively. This will extend LSD 41 and LSD 42 (with midlife complete) to 45 operational years of service. This plan mitigates presence shortfalls and 2.0 MEB Assault Echelon shipping requirements.

Mitigating Amphibious Lift Shortfall

In the short-term, we are accepting risk to aviation, vehicle lift capacity, and surface assault capacity in the event of a 2.0 MEB forcible entry operation. Major combat operations may require all LSDs and careful management of maintenance cycles to avoid delay of forcible entry timelines. The LSD Phased Modernization Plan will maintain LSD inventory at the required eleven ships. Ten operational LSDs are sufficient to source Amphibious Ready Group (ARG)/Marine Expeditionary Unit (MEU) deployments at current levels. However, the capacity to support any additional independent amphibious ship demands, such as maritime security operations, theater security cooperation, or other forward presence missions, will require employment of alternate maritime vessels.

Risk may be reduced through the greater use of carrier tactical aviation for close air support and by delivering additional ground maneuver support vehicles via the Mobile Landing Platform (MLP)/Large, Medium-Speed Roll-On/Roll-Off (LMSR) and/or the Joint High Speed Vessel (JHSV), and sustainment from the Dry Cargo & Ammunition Ship (T-AKE). Innovative approaches and employment models are also under consideration to mitigate impacts to presence missions caused by reduced ship quantities. With increased investment in the capabilities of JHSV, MLP/LMSR and T-AKE, the risk associated with missions in permissive environments may be reduced. These new ships can take on potentially valuable roles in security cooperation, humanitarian assistance and disaster response, freeing up the amphibious warships to meet global warfighting demands.

Connectors

Surface connectors such as Landing Craft, Air Cushion (LCAC) and Landing Craft Utility (LCU) provide amphibious capability to lift all weapons systems, cargo, equipment and personnel of the assault element of a Marine Air/Ground Task Force from amphibious ships and mobile landing platforms to the shore. The LCACs and LCUs have reached their useful service life and are being replaced. The Ship to Shore Connector (SSC) program will replace the aging LCACs, and the Surface Connector Replacement (SC(X)(R)) program will replace the LCUs. The LCAC inventory, including those LCACs which have undergone a Service Life Extension Program (SLEP), begins to degrade below the Required Operational Capability/Projected

Operational Environment (ROC/POE) requirement beginning in 2015. Ensuring that both the LCAC SLEP program, which has 14 planned SLEPs in the FY 2015-2018 timeframe, and the SSC, which will begin ordering SCN funded craft in FY 2015, stays fully funded and on-track is imperative in addressing the projected air cushioned connector capability gap. Similarly, keeping the SC(X)(R) program on track to replace the LCUs is also important. LCUs were designed for a 25-year service life, but the existing LCUs have been operational for an average of 43 years, and are experiencing increasing maintenance costs associated with aged, corroded and obsolete systems.

Amphibious Ship Acquisition and the Industrial Base

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 long design and construction schedules, and each individual ship makes up a significant portion of not only the Navy's shipbuilding budget, but also industry's workload and regional employment numbers. Consequently, the timing and stability for planning for funding of ship procurements is a critical matter to the Department as well as to the health and sustainment of U.S. shipbuilding, combat system industries, and their suppliers.

While the Department is ever mindful of the effect of its decisions on the industrial base, our ability to mitigate adverse impacts on the shipbuilding industrial base from constrained resources is not without limits. The reduced BCA levels starting in FY 2016 and fiscal realities associated with funding of the Ohio Replacement Submarine program 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 Defense Strategic Guidance, and inevitable reductions in the shipbuilding and combat system industrial base, with potential for further long term impacts on platform affordability and force size. During the Future Years Defense Plan, 2015-2019, construction continues on three previously-awarded amphibious ships, one additional ship will be awarded in FY 2017, and the design for the replacement of the LSD 41/49 Classes will complete. A summary of the FY 2015 shipbuilding acquisition plan for the LHA/LHD, LPD, and LSD programs follows.

LHA/LHD Class

LHA/LHD 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. The LHA replacement program, called LHA(R), will be 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. The LHA(R) program began with two Flight 0 ships, *America* (LHA 6), delivered in April 2014, and *Tripoli* (LHA 7), scheduled for delivery in 2018. These ships are optimized for aviation capability in lieu of a well deck. LHA 8, the first Flight 1 ship, reincorporates the well deck to provide increased connector capability along with a reduced flight deck island to increase flight deck space and retain an aviation capability similar to the Flight 0 ships. Both features improve the ship's essential dual surface and vertical assault capabilities. LHA 8 design activities are underway, and the ship procurement will be split funded in FY 2017 and FY 2018 with delivery scheduled 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. FY 2014 funding enables affordability efforts that foster an interactive competition with industry partners in developing an affordable, producible detail design and build strategy, and help drive towards more affordable ships. Beginning in FY 2024, the Navy plans to begin building LHA(R) Flight 1 ships every four years.

LX(R)

LX(R) is the replacement program for the LSD 41 WHIDBEY ISLAND and LSD 49 HARPERS FERRY Classes, which will begin reaching their expected service lives in the mid-2020s. The Navy has completed the LX(R) Analysis of Alternatives (AoA) and is currently determining the ship's key performance parameters (KPP) and refining design and construction options. Navy anticipates the program will begin technology development in early FY 2015. Affordability will be a key focus for this ship class. Industry will be involved in identifying cost drivers and proposing cost reduction initiatives to drive affordability into the design, production, operation, and maintenance of this ship class. 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 remaining ten ships will be procured in the FY 2022 through FY 2034 timeframe. This build profile will help maintain the inventory for amphibious ships at or above 33 ships until the mid-2030s.

LPD 17 Class

The LPD 17 SAN ANTONIO Class 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 2016 and 2017 respectively. The FY 2015 President's Budget requests SCN funding for cost-to-complete, outfitting, post-delivery, and program close-out costs.

The FY 2015 Shipbuilding Plan does not include a request for a 12th LPD. The Navy's Force Structure Assessment (FSA), completed in 2012, identified a requirement for an eleven LPD 17 Ship Class. Additionally, the Navy's 30-Year Shipbuilding Plan currently supports an eleven-ship class profile. If fully funded, the Navy can execute the acquisition of a 12th LPD, but the requirement cannot be supported at the expense of other items in the PB-15 request.

The FY 2013 Continuing and Furthering Appropriations Bill (P.L. 113-6) added $263 million of Advanced Procurement (AP) funding for a 12th LPD 17 amphibious transport dock ship. With the sequestration mark of approximately $20 million, the net FY13 appropriation for the 12th ship is $243 million. The end cost of a fully scoped 12th LPD is estimated at $2.023 billion. If the 12th ship were to be constructed, the Navy would build it as a bridge to LX(R), implementing some of the affordability initiatives identified during the recent design studies effort.

Connectors:

The Ship to Shore Connector (SSC) program will have its Critical Design Review in August 2014, followed by a Production Readiness Review in September. Fabrication of the first two craft will follow, and they are scheduled for delivery and operational testing in FY 2018. The program is planned to deliver a total of 73 SSC craft. In order to mitigate the LCAC connector gap, SCN funded craft orders begin in FY15, ramping up from 2 craft per year to a

more economical production rate of 8-11 craft per year by the end of the FYDP.

The SC(X)(R) program to replace the aging LCUs is completing its Analysis of Alternatives, and detail design and construction of these craft will begin in FY 2018. A total of 32 SC(X)(R) craft are planned.

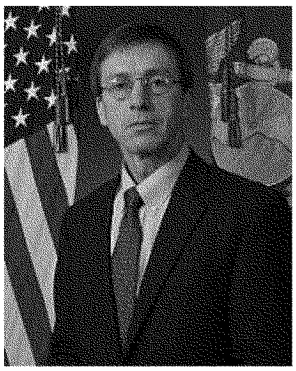
Summary

The DON remains committed to providing sufficient amphibious lift for day to day presence as well as large-scale expeditionary operations and will reach the required 33 amphibious ships in the near-term. The 33-ship amphibious force will eventually be comprised of 11 LHA/Ds, 11 LPDs and 11 LSDs/LX(R)s. Our proposed delivery and decommissioning profiles will meet historical sourcing for Amphibious Ready Groups. The Navy remains committed to providing 30 operationally available amphibious ships to meet global amphibious warship demand.

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



Assistant Commandant of the Marine Corps

Headquarters Marine Corps

Assistant Commandant of the Marine Corps

General Paxton was promoted to General and assumed the duties of Assistant Commandant of the Marine Corps on December 15, 2012. A native of Pennsylvania, he graduated from Cornell University with a Bachelor and Master of Science in Civil Engineering and was commissioned through Officer Candidate School in 1974.

General Paxton's assignments in the operating forces include Rifle and Weapons Platoon Commander and Company Executive Officer, Co. B, 1st Battalion, 3d Marines; Training Officer, 4th Marine Regiment; Executive Officer, Co. G, 2d Battalion, 4th Marines; Company Commander, Co. L and Operations Officer, 3d Battalion, 5th Marines; GCE Operations Officer, II MEF, and Assistant Chief of Staff, G-3, 1st Marine Division. He commanded the 1st Battalion, 8th Marines in support of operations in Bosnia and Somalia and later the 1stMarine Regiment.

Other assignments include Company Commander, Co. B, Marine Barracks Washington and Commanding Officer of Marine Corps Recruiting Station New York. He served as a Plans Division Officer, Plans, Policies and Operations, HQMC; the Executive Assistant to the Undersecretary of the Navy; and Amphibious Operations Officer/Crisis Action Team Executive Officer, Combined Forces Command, Republic of Korea.

As a general officer, he has served as the Director, Programs Division, Programs and Resources, HQMC; the Commanding General of Marine Corps Recruit Depot San Diego/Western Recruiting Region; Commanding General, 1st Marine Division; Chief of Staff, Multi-National Forces – Iraq; Director for Operations, J-3, The Joint Staff; and Commanding General, II Marine Expeditionary Force and Commander Marine Forces Africa. Most recently he served as the Commander, Marine Corps Forces Command; Commanding General, Fleet Marine Force Atlantic; and Commander, Marine Forces Europe.

General Paxton is a graduate of the U.S. Army Infantry Officer Advanced Course and Marine Corps Command and Staff College. He has also served as a Commandant's Fellow at the Brookings Institute as well as at the Council on Foreign Relations.

United States Navy
Biography

Vice Admiral Joseph P. Aucoin
Deputy Chief of Naval Operations Warfare Systems (N9)



Vice Adm. Aucoin graduated from North Carolina State University with a Bachelor of Science in Electrical Engineering and received his commission through the University of North Carolina Naval Reserve Officers Training Corps program in 1980. He was designated a naval flight officer in 1981 and reported to Fighter Squadron (VF) 101 for initial training in the F-14 Tomcat.

Aucoin served in VF-33 "Tarsiers" embarked aboard USS America (CV 66); VF-101 as an instructor; VF-84 "Jolly Rogers" embarked aboard USS *Nimitz* (CVN 68); and, VF-41 "Black Aces" embarked aboard USS *Theodore Roosevelt* (CVN 71). He served as Carrier Air Wing Eight operations officer embarked aboard Theodore Roosevelt and returned to VF-41 as commanding officer embarked aboard USS John F. Kennedy (CV 67) and Theodore Roosevelt. He commanded Carrier Air Wing Five forward deployed in Japan and embarked aboard USS *Kitty Hawk* (CV 63). He commanded Carrier Strike Group Three homeported in Bremerton, Wash., and embarked aboard USS *John C. Stennis* (CVN 74).

Ashore, he has served in the Program Planning and Development Branch (OPNAV N801); Programming and Budget Division Joint Staff (J8 PBAD); Aviation Strike Warfare Requirements (OPNAV N880); head, Program Planning and Development Branch (OPNAV N801); head, Maritime, Unmanned Aircraft Systems, Aviation Training Plans and Programs (OPNAV N882); deputy director, Air Warfare (OPNAV N88B); and director, Programming Division (OPNAV N80). He assumed his current responsibilities as Deputy Chief of Naval Operations for Warfare Systems (OPNAV N9) in May 2013.

Aucoin has accumulated more than 4,700 hours and more than 1,300 carrier-arrested landings. His personal awards include the Distinguished Service Medal, the Silver Star, the Legion of Merit, the Distinguished Flying Cross with "V" and Bronze Stars. He is an Arthur S. Moreau Scholar and holds master's degrees in Public Administration from Harvard University and in National Security Studies and Strategic Affairs from the Naval War College.

Updated: 26 June 2013

○