

**HEARING TO RECEIVE TESTIMONY ON NAVY  
SHIPBUILDING PROGRAMS IN REVIEW OF  
THE DEFENSE AUTHORIZATION REQUEST  
FOR FISCAL YEAR 2010 AND THE FUTURE  
YEARS DEFENSE PROGRAM**

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**TUESDAY, JUNE 16, 2009**

U.S. SENATE,  
SUBCOMMITTEE ON SEAPOWER,  
COMMITTEE ON ARMED SERVICES,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 2:33 p.m. in room SR-232A, Russell Senate Office Building, Senator Carl Levin, presiding.

Committee members present: Senators Levin, Reed, Sessions, Martinez, Wicker, and Collins.

Committee staff member present: Richard D. DeBobes, staff director.

Majority staff member present: Creighton Greene, professional staff member.

Minority staff members present: Pablo E. Carrillo, minority investigative counsel; Richard H. Fontaine, Jr., deputy Republican staff director; and Christopher J. Paul, professional staff member.

Staff assistants present: Kevin A. Cronin and Christine G. Lang.

Committee members' assistants present: Jay Maroney, assistant to Senator Kennedy; Carolyn A. Chuhta, assistant to Senator Reed; Gordon I. Peterson, assistant to Senator Webb; Brian W. Walsh, assistant to Senator Martinez; Erskine W. Wells III, assistant to Senator Wicker; and Rob Epplin, assistant to Senator Collins.

**OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN**

Senator LEVIN. Good afternoon, everybody.

I want to welcome Secretary Stackley and Admiral McCullough to the subcommittee this afternoon. We're grateful to you for your service to the Nation, for the truly professional men and women in the whole Navy and Marine Corps team, for their valorous service.

Secretary, I think this may be your first appearance before the committee since your confirmation hearing, so special welcome to you.

Mr. STACKLEY. Thank you, sir.

Senator LEVIN. I'm in a somewhat unusual situation here today, trying to substitute for Senator Kennedy at a Seapower Subcommittee hearing. We keep Senator Kennedy very much in our thoughts and in our prayers. We wish him a complete recovery. We

miss him and wish him a speedy return to the Senate. I know I speak for all the members of the committee, much less the subcommittee, in saying that.

You are faced, in the Navy, with a number of critical issues in balancing your modernization needs against the cost of supporting ongoing operations. We have a number of specific concerns. One of those is in the prospects for meeting future force-structure requirements. We're facing the prospect that the current Department of the Navy program will lead to potentially large gaps between the forces that the Chief of Naval Operations, the CNO, and the Commandant of the Marine Corps have said that they need, on the one hand, and the forces that will be available to their successors.

In overall terms, the Navy leadership has consistently said that the Navy needs 313 ships in the fleet. The fleet today stands at roughly 287 ships, well below the stated requirement and with little or no prospect in sight to achieve that goal.

The story is potentially even worse when it comes to naval aviation. The Chief of Naval Operations has said that the Navy and Marine Corps could be facing a shortfall of tactical aircraft forces as high as 250 tactical fighters in the middle of the next decade, compared to the number needed to outfit our active air wings—ten aircraft carrier air wings and three Marine Corps air wings. With shortfalls that large, we'd be faced—or, could be faced with drastically reducing the number of aircraft available on short notice to the combatant commanders, either because we have deployed understrength air wings or because we did not deploy the carrier at all because of these aircraft shortages.

I mentioned the aviation situation, not because we will deal with it in detail at this subcommittee, but to point out that there is no magic billpayer in that area of the Navy budget.

Other challenges face the Navy, centering on acquisition programs. We've had special concerns about the littoral combat ship program, the LCS. And this was intended to be a ship that the Navy could acquire relatively inexpensively and relatively quickly. It started out supposedly costing \$220 million per ship, and now there are serious questions about whether the Navy and contractor team will be able to buy the fiscal year 2010 ships that are priced at the cost-cap level, \$460 million per copy. And we'd be interested in hearing from Secretary Stackley about what actions the Department is taking to strengthen acquisition oversight and to restore confidence in the Navy's ability to manage major acquisition programs.

We've also witnessed some other major changes in shipbuilding. After 15 years of support for the fire-support requirement that the DDG-1000 is intended to meet—that is, the gunfire support for Marine Corps or Army forces ashore—the Navy, in the middle of last year, decided to stop the DDG-1000 program and buy DDG-51 destroyers, which don't have as much fire-support capability.

This change of heart on the DDG-1000 program is at odds with the Navy's own consistent testimony that stability in these shipbuilding programs is fundamental to controlling costs and protecting the industrial base.

The military services should always have the ability to change course as long-term solutions require. However, since we're talking

about the long term and hundreds of billions of dollars of development and production costs for major defense acquisition programs, the Defense Department needs to exercise great care in ensuring that such course corrections are made with full understanding of the implications of such decisions.

Another area where the Department of the Navy has had trouble defining the requirements has been a problem in the Maritime Pre-positioning Force Future, or MPFF, program. While, the subcommittee has heard for several years about the contribution that such a force could make to the Marine Corps and Navy operations, we have seen the procurement of certain ships within that objective being delayed each year as the resolution of questions about the requirements and capabilities keep being deferred.

Those are some of the concerns that we have. We look forward to hearing from our witnesses this afternoon on other issues facing the Department of the Navy.

Now let me call on Senator Martinez.

#### **STATEMENT OF SENATOR MEL MARTINEZ**

Senator MARTINEZ. Mr. Chairman, thank you very, very much.

I, too, want to welcome Secretary Stackley to our first hearing together, and commend you for your service in the past and going forward, as well. And, Admiral McCullough, it's also a pleasure to have you here, sir.

Admiral McCullough: Sure.

Senator MARTINEZ. I also want to acknowledge the absence of Senator Kennedy. Doesn't seem quite right not to have him here, but I do appreciate, Mr. Chairman, you being here today, and certain our prayers continue to be with him and his family as he recovers.

Our witnesses are here today to discuss the Navy's shipbuilding programs and the President's budget request for fiscal year 2010.

First, let me say that I'm pleased by the budget, in one important respect; it is clear emphasis on stabilizing this shipbuilding portfolio. Over the past decade, the Navy has introduced 11 new ship designs and significantly modified several ship classes. By requesting ships that are already in serial production, this budget focuses on getting those platforms on track. In light of longstanding concerns about the Navy's shipbuilding plan, this is a move in the right direction.

On the other hand, I continue to be concerned about the lack of a 30-year shipbuilding plan. Without a 30-year plan, it is difficult for Congress to judge the sufficiency of the Navy's shipbuilding proposal or afford the proper level of oversight. Failing to include the plan in this budget is a missed opportunity.

I'm also concerned about how the Navy's budget addresses its standing requirement for a 313-ship fleet. In January of last year, CNO Admiral Gary Roughead told this committee, and I quote, "The Navy must build more ships this year and deliver a balanced fleet of at least 313 ships. At some point, quantity becomes capability."

My concern with President Obama's request to fund only eight new ships—and you can see this budget moves us in the wrong direction—meeting the Navy's requirement for a 313-ship—will re-

quire more than simply buying and building more ships, it will require, as Admiral Roughead recently pointed out, retaining existing assets.

For too long, the Navy has been decommissioning ships faster than it can replace them, retiring ships early to avoid costly upgrades and repairs. That practice puts us in a bad position, and it needs to stop. We need a more robust service-life extension-and-maintenance program for our ships. We need programs to ensure we extract the maximum life from our existing ships and reduce the number of ships decommissioned each year.

I also support the Navy's efforts to design new weapon systems in a way that will help and manage operations-and- support costs more effectively downstream. These efforts include the reduction of total ownership cost programs the Navy is using on all of its NAVSEA and PEO submarine initiatives.

Other questions I have about the budget addresses shipbuilding programs, include the Navy's power projection role commissioned by its legislative proposals to lower the number of aircraft carriers to 10 from the Navy's current posture of 11, which would be the lowest number since 1942. Will the Navy be able to buy 55 littoral combat ships within the ship—the cost cap and on a schedule to meet evolving threats? Are we seeing a systemic problem with the readiness of the Navy's ships? Readiness accounts are not fully funded, and the Navy has requested \$400 million for depot maintenance.

Serious engineering problems on LPD-17-class ships and electrical malfunctions on the USS Ronald Reagan give rise to concerns about broader readiness problems.

And finally, are we seeing a systemic decline in seamanship in the Navy, as evidenced by a recent Navy IG report completed this past March? Some of this decline is an outcome of recent ship casualties, include the grounding of a Pearl Harbor-based cruiser in February and a recent collision between a submarine and an amphibious ship in the Straits of Hormuz.

I look forward to our witnesses' testimony today on these and other shipbuilding challenges that our Navy faces today.

And, Mr. Chairman, I thank you.

[The prepared statement of Senator Martinez follows:]

[SUBCOMMITTEE INSERT]

Senator LEVIN. Thank you so much, Senator Martinez. And I apologize for that telephone. It was—

Senator MARTINEZ. That's okay.

Senator LEVIN.—supposed to be turned off.

Senator MARTINEZ. I'm glad it wasn't me.

Senator LEVIN. Secretary, welcome.

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

Mr. STACKLEY. Thank you, sir.

Mr. Chairman, Senator Martinez, and distinguished members of the subcommittee, thank you for this opportunity, and indeed this honor, to appear before you today to address Navy shipbuilding.

If it's acceptable to the committee, I would propose to keep my opening remarks brief and submit a formal statement for the record.

Senator LEVIN. That would be fine. It will be part of the record.

Mr. STACKLEY. Yes, sir.

Today's Navy is, as you say, a fleet of 287 battleforce ships. As many as half of these may be underway on any given day, supporting combat operations, building global partnerships, providing international security, performing humanitarian assistance, prosecuting piracy, testing future capabilities, and training for future operations. Beyond numbers, the quality of the force—our ships, aircraft, and weapon systems, and, most importantly, our sailors and marines—are unmatched at sea. And so, it would be easy to take comfort in knowing that, for the next decade, and certainly beyond, the Navy and Marine Corps stand ready to respond to major conflict with the most capable naval warfare systems in the world today.

The events of this century point towards a future that must increasingly contend with irregular and asymmetric threats. And, two, we must pace the capability of rogue states and emerging naval powers that would intend to challenge our influence and the regional security of friends and allies.

So, in the face of these growing challenges, the Chief of Naval Operations has outlined requirements for the future force, better known today as the 313-ship Navy. The fiscal year-10 budget requests funds for eight ships, a modest step towards, but short of, the rate required to meet that requirement. And, beyond numbers, the Navy is seeking to close gaps in our capabilities.

To this end, the shipbuilding program requests funds to restart DDG-51 construction in 2010 to meet the demand signal from combatant commanders for increased air and missile defense. The success of the Aegis system against ballistic missiles demonstrated through at-sea testing and, two, through performance against an earthbound satellite, provides a solid foundation for this mission.

As well, and as part of the fiscal year-09 Virginia-class multiyear procurement, we're requesting funding for the 12th Virginia fast-attack submarine with advance procurement to increase production to two submarines per year, starting in fiscal year-11.

At the other end of the warfare spectrum, we're seeking your support to increase production of the littoral combat ship to deliver this needed capability to the fleet. We know there are many challenges ahead as we ramp up construction, tackle affordability, and learn how to best operate and support this new class. The Navy is confident that the utility and flexibility of this ship will prove its worth in future naval operations.

This year's request also includes two T-AKE dry cargo and ammunition ships, a program that has performed strongly since reaching steady production. And then, the eighth ship in our request is one joint highspeed vessel. In fact, two of these vessels will be procured this year, one each for the Navy and the Army.

Further, the budget request includes advance procurement for seven future ships and funds the balance of LP-26 and DDG-1002.

Regarding the DDG-1000 and DDG-51 programs, as noted by the Secretary of Defense, the Department has worked with the Na-

tion's two major shipbuilders to arrive at a plan which provides critical stability to the industrial base in order to most affordably build the three DDG-1000s in the program while restarting the DDG-51 production.

Inarguably, the underlying challenge—indeed, the pressing requirement—before us today in shipbuilding is affordability. It's not a new challenge, but it's taken on new dimensions. The fact is that ship costs are rising faster than our top line. Per-ship costs have risen, due to such factors as low-rate production, reduced competition, increased system complexity, build-rate volatility, instability in ship class size, and challenges with introducing new technologies in new platforms.

Perhaps most significantly over the past decade, we have introduced 11 new designs. That's 11 lead ships. Each a highly complex prototype bringing its own unique challenges.

And compounding these issues, particularly in the case of lead ships, where there is greater risk and uncertainty, we have fallen short on our ship cost estimates or, in certain cases, on our willingness and ability to fully fund to the estimate. All of these factors lead to inefficient ship production and cost growth.

We have learned, or, in certain cases, relearned, the lessons of this experience. Accordingly, the Navy understands and agrees with the objectives of the Weapon Systems Acquisition Reform Act, and we strive to meet its spirit and intent in our ongoing initiatives to raise the standards, to improve the processes, to instill necessary discipline, and to strengthen the professional core that manages our major defense programs.

To this end, the 2010 Navy shipbuilding plan strives to provide stability, building in ship programs which are currently in serial production. There is renewed emphasis on ensuring design is mature prior to starting production, on minimizing changes to requirements and minimizing change to design, and improving our estimates for follow-ship costs, all of which should lead to improving industry performance, reducing risk, and expanding the use of fixed-price-type contracts.

We're working to increase competition from the prime down through the subcontractors. We're implementing affordability initiatives, including relaxing excessive requirements, pursuing produceability, commonality, and reuse in designs, while providing incentives for special selected capital improvements to improve shipyard performances.

And we are pursuing open architecture, which promises to arm us with a powerful cost-avoidance tool, as well as a process for improving warfighting capability. The challenge before us is great, but so is the need. And in meeting the need, the subcommittee has been steadfast and unwavering in support for a strong Navy and Marine Corps. And, of course, we thank you for that.

And, again, I thank you for your time today and look forward to answering your questions.

[The prepared statement of Mr. Stackley follows:]

Senator LEVIN. Thank you, Secretary.  
Admiral McCullough?

**STATEMENT OF VICE ADMIRAL BERNARD J. McCULLOUGH III,  
USN, DEPUTY CHIEF OF NAVAL OPERATIONS FOR INTEGRA-  
TION OF CAPABILITIES AND RESOURCES**

Admiral McCULLOUGH. Yes, sir.

Mr. Chairman, Senator Martinez, distinguished members of the subcommittee, I'm honored to appear before you with Mr. Stackley today to discuss Navy shipbuilding.

Before I begin, I'd like to mention, in addition to our role in seapower, the Navy currently has over 14,000 sailors serving on the ground in Iraq and Afghanistan. They serve in traditional roles with the Marine Corps, but also in land-service combat support and combat service support, missions to support the joint commander in the Army. We provide these sailors, in addition to fulfilling our commitments to our country and our allies, to provide persistent forward presence, incredible combat power, and support of the maritime strategy.

Today, we have a balanced fleet capable of meeting most combatant commander demands, from persistent presence to counter-piracy to ballistic missile defense. However, as we look ahead in the balance of capability and capacity, we see emerging warfighting requirements in open-ocean antisubmarine warfare, antiship cruise-missile, and theater ballistic-missile defense. Gaps in these warfare areas pose increased risk to our forces.

State and nonstate actors who, in the past, have only posed limited threats in the littoral are expanding their reach beyond the shores with improved warfighting capabilities. A number of countries who, historically, have only possessed regional military capabilities are investing in their navy and do it to extend their reach and influence as they compete in global markets. Our Navy will need to outpace other navies' capabilities as they extend their reach. The Navy must be able to assure access in undeveloped theaters. We have routinely had access to forward staging bases in the past; this may not always be the case in the future. And in order to align our service combatant investment strategy to meet evolving warfighting gaps, the Navy plans to truncate the DDG-1000 program and reopen the DDG-51 production line, as I testified to Congress last summer. This plan best aligns our surface combatant investment strategy to meet Navy and combatant commander demands and warfighting needs.

The reason for the change to the Navy's DDG plan is to prioritize relevant combat capability. Modernizing the fleet's cruisers and destroyers, and executing an affordable shipbuilding plan, are crucial to constructing and maintaining a 313-ship Navy with the capacity and capability to meet our country's global maritime needs.

The Navy must have the right capacity to meet combatant commander warfighting requirements and remain a global deterrent. Combatant commanders continue to request more ships and increased presence to expand cooperation with new partners in Africa, the Black Sea, the Baltic region, and the Indian Ocean. This is in addition to the presence required to maintain our relationships with current allies and partners. Therefore, the Navy must increase capacity to meet combatant commander demands today for ballistic missile defense, theater security cooperation, and steady-

state security posture, simultaneously developing our fleet to meet future demands.

While the Navy can always be present persistently in areas of our choosing, we lack the capacity to be persistently present globally. This creates a presence deficit, if you will, where we are unable to meet combatant commander demands. Africa Command capacity demands will not mitigate the growing European Command requirement. And Southern Command capacity has consistently required more presence that largely goes unfilled.

The Navy remains committed to 55 littoral combat ships. The LCS program will deliver capabilities to close validated warfighting gaps. LCS's inherent speed, agility, shallow draft, payload capacity, and reconfigurable mission spaces provides an ideal platform for conducting additional missions in support of the maritime strategy, to include irregular warfare and maritime security operations, such as counterpiracy operations.

The Navy remains committed to an 11-carrier force for the next several decades, which is necessary to ensure that we can respond to national crises within the currently prescribed timelines. Our carrier force provides the Nation the unique ability to overcome political and geographical barriers to access for all missions and project power ashore without the need for host-nation ports and airfields.

The Ohio-class ballistic missile submarine, originally designed for 30-year service life, will start retiring in 2027, after nearly 40 years of life. The Navy commenced an analysis of alternatives in fiscal year 2008 for a replacement SSBN. Early research and development will set the stage for this first ship to begin construction in fiscal year 2019.

The *Virginia*-class submarine is a multimission platform that fulfills full-spectrum requirements. *Virginia* was designed to dominate the undersea domain in the littorals, as well as in the open ocean, in today's challenging international environment, and is replacing our aging 688-class submarines. Now in its 10th year of construction, the *Virginia* program is demonstrating that this critical capability can be delivered affordably and on time.

Commandant of the Marine Corps has determined that a minimum 33 assault echelon amphibious-ship capacity is necessary to support their lift requirements, specifically has requested a force of 11 aviation-capable ships, 11 LPD-17s, and 11 LSDs. The Chief of Naval Operations supports this determination.

The Navy must maintain its carrier submarine and amphibious forces. In addition, we need to increase our surface-combating capacity through additional destroyers and LCS to meet combatant commander demands today for ballistic missile defense, theater security cooperation, and the steady-state security posture.

I thank you for this opportunity to discuss the Navy's shipbuilding program and for this subcommittee's support of our Navy. I look forward to answering your questions.

Thank you very much.

[The prepared statement of Admiral McCullough follows:]

Senator LEVIN. Thank you, Admiral.

Let's try a 8-minute first round.

Mr. Secretary, proceeding with the LCS program, we ignored many lessons on how to buy, and how not to buy, major weapon systems. For example, we picked the ship platform without having conducted adequate analysis to see whether there were other more capable or less expensive solutions to the problem we face. We changed requirements after we signed the contract. We didn't have an adequate number of people with the right acquisition experience in the program office or at the shipyards to oversee that work.

Secretary, give us some more specifics. You made reference to this in your opening statement, but give us some specifics on what steps you have taken, or you're planning to take, to improve the Navy's ability to acquire major systems on time and on cost.

Mr. STACKLEY. Yes, sir. Let me start with requirements. And, as simple as it seems, the first step was to freeze the requirements. There's always a push and pull to bring a new capability, particularly to a new class of ships. So, step one, working with OPNAV, was, the Navy has frozen requirements on that ship so we don't suffer growth and instability that will bring.

Step two was, now that we've frozen requirements, let's take a look at requirements and specifications and see if we have over-spec'd the ship, and see if there are some requirements that we could back off on that would lead to reducing the cost for the platform, going forward.

But, perhaps most importantly was cleaning up design. So, as you described, the program got off to a very rapid start. The—shortly after signing contracts, there was a significant change to the specifications associated with naval vessel rules, and the—frankly, the shipyards are playing catchup from that day forward. And with any lead ship, there is a lot of design activity associated with going from paper to steel, and a lot of drawing deficiencies and things of that nature that need to be cleaned up. And so, we have put a very concerted effort to ensuring that, as we go into follow-ship production, that we're getting the drawings cleaned up to support stable production, going forward. As simple as it seems, those are perhaps the two most fundamental tools that we can do across shipbuilding to ensure stable performance.

The third and fourth tools, frankly, are items that, in shipbuilding, we grab as soon as we can get hands on. One is competition. A number of our shipbuilding programs, as you're aware, have very limited competition. So, in this very unique program, in terms of two different versions, we are still able to provide competition between the two prime contractors. And that's, frankly, critical to driving cost control into the program—keeping them focused. And in terms of the 2009 and 2010 ships, we've done something rather unique, which is combine the 2009 and 2010 ships into a single competition for quantity between the contractors. And, on top of that, we've overlaid fixed-price-type contracts.

So, earlier on in the program, the first six ships were steering towards cost-plus. As you're aware, ships three and four were terminated. Ships five and six were never put under contract. And now, the 2009 ships, which now represent ships three and four, are, in fact, fixed-price competed; and ten and out will continue down that pattern.

You also mentioned, correctly, that the Navy was undersized, in terms of program office and onsite oversight. And we've tackled both of those, going into the program office and basically beefing up the organization, as well as putting onsite presence—stronger onsite presence both on the Gulf Coast and at Marinette, up on the Great Lakes, to supervise—provide a supervisory function, if you will.

When we look longer term, we look beyond buying ships 1 year at a time. And we're going to start looking towards, working with the Congress, trying to couple longer procurements so we can start to get the benefits that you like to see in a production run associated with, not just stability, but volume, so that the prime contractors have greater ability to work with their vendors to get economic breaks, if you will, in ordering material. And we're also pushing them to drive competition down at that lower level, which is going to be key towards moving towards the cost cap.

These are some of the fundamental things. I touched on the produceability aspect regarding design, separate from what the government is doing. Working with the contractor is—his own investment—both contractors' shipyards are pursuing facility investments which will help their performance on this contract, both at Austal and Marinette, they're—they have plans laid out for significant increase, not just in capacity, but also in tooling, layout, production planning, that will lead to a more efficient construction for LCS ships, going forward.

Senator LEVIN. Okay, thank you, Secretary.

Admiral, we don't have a Future Years Defense Program, a fiscal year DP, before us, but the Navy is going to be buying some ships after 2011 that are referred to as future surface combatants. Now, can you describe the process which the uniformed Navy is going to be following to define the requirements for this program?

Admiral MCCULLOUGH. Yes, sir, I can. Future surface combatant was an agreement the Navy reached with the Office of Secretary of Defense as we restarted the DDG-51 program, and it was to look at ships, fiscal year-12 and out, to look at the applicability of improved combat systems and which hull forms they best fit in, whether that be a DDG-51 hull form or a DDG-1000 hull form, and what size radar capacity that we could put in those ships. Along with the Secretary and OSD, we've embarked on a study, that's being led by Johns Hopkins University, that's addressing that right now. And from that study, we will see what capability is achievable to get us at the heart of the threat with limited technical risk, and where that best fits with respect to hull form, and then what the best path for the replacement cruiser is to come out of that study, sir.

Senator LEVIN. Admiral, relative to the littoral combat ship, or the LCS, Admiral Clark, who was then the CNO, said he wanted the—it was supposed to be a relatively inexpensive ship, in a hurry, to meet the projected threat in the littorals. Now, we find that we're not going to get these ships in a hurry, and they're not going to be as inexpensive as we had expected. So, my question is, What is the Navy doing to meet the urgent need—or the urgent threat that the LCS was intended to address with the LCS program, since it's been delayed?

Admiral MCCULLOUGH. Yes, sir. As you know, there are three mission modules that go with the LCS program—an antisubmarine warfare module, an antisurface module, and a mine countermeasures mission module. We currently have dedicated mine ships that provide us mine warfare capability in the mine countermeasures arena. And LCS is to come on to replace those ships as they phase out, as well as the, you know, airborne antimine countermeasures that are provided by the MH-53 helicopters. So, we have capability in that arena now.

In the area of antisubmarine warfare in the littoral, we have capability, not to the degree that we'd like to have with the LCS, but we do have some systems, both compartmented and GENSER, that the Navy's working on to address that threat, to include sonobuoys, nonacoustic prosecutions, and other such assets.

In the area of swarming small boats or antisurface warfare, the Navy's taken great strides to upgrade the capability of its current combatant fleet with the addition of Mark 38 Mod 2 stabilized 25 millimeter chain guns that are resident in most of our surface combatants. I think we make the 100th install next month. We've also modified the ammunition that our 5-inch guns shoot to have more of a disperse-type ammunition that can take out swarming small boats, and we can mitigate the risk that is posed by those threats. We'd like to have those ships to pursue other activities. And that's what we need the LCS for. But, we can mitigate the threat for the near term, sir.

Senator LEVIN. Admiral, thank you.

Senator Martinez?

Senator MARTINEZ. Well, Admiral, if I might follow up on that very line, I am equally concerned, as the Chairman is, about not having the LCSs in being able to meet our mission and the current threat situation, which continues to be more diverse. And particularly in the littoral area. What would be the role of the frigates as a replacement to the LCS until they could come into service? In other words, extending the life of the frigates. We have seen a pattern where we've been decommissioning ships before their full service life, we're decommissioning faster than we are commissioning.

Admiral MCCULLOUGH. Sure.

Senator MARTINEZ. So, the 313-ship goal becomes more elusive every year. It seems to me that one way that we could overcome this problem, and also fill the gap of the LCSs being delayed, would be by extending the life of the frigates. What's the view from your perspective?

Admiral MCCULLOUGH. Thanks for the question, sir.

Currently, the decommissioning plan for the frigates takes those ships out at the end of their estimated service lives, at about 30 years. We have modernized those ships, with the addition of reverse osmosis water distillation units, single-arm boat davits, and improvements or replacements of the diesel-electric generators. And so, we did midlife those ships to get them with capability to the end of their service lives.

As you know, they're—they currently perform missions in Southern Command's AO in counternarcoterrorism, and they're doing a good job.

As we look at the older ships—for instance, McInerney and a couple others—as we get ready to take them out of service, those ships are experiencing hull thinning that we haven't anticipated. Additionally, all but about three of the ships we currently have are critically weight limited, so we'd be unable to add any additional capability to those ships, from a displacement standpoint. And the very few that are not critically weight limited are high-addition weight limited, so they're center-of-gravity limited. So, our ability to put other things high in the ship is very limited.

We took the missile systems off of the ship, because they were unique with the SM-1 MR missile, and didn't adequately address the threat, so we removed that.

Also, the SH-60 Romeo helicopters are sundowning in about 2016 or 2017, and these ships are not upgraded to take the—I'm sorry, the SH-60 Bravo helicopters are sundowning in 2016 or 2017, and the ships are not currently planned to be upgraded to take the 60 Romeo helicopters.

I've looked at what the Australians have tried to do with modernization of their frigates, and it's to get them to their estimated service lives, which is about 30 years. The last of their ships was commissioned in 1989. The last—or, I'm sorry, 1983—the last of ours was commissioned in 1989. The Australian program is currently estimated at about 300 million U.S. dollars per unit, and that depends on the conversion of the Australian dollar at a given time. And their program is currently 4 years behind schedule.

So, in summation, sir, I guess I'd tell you those ships have been great ships; they've served a useful purpose, but they are at the end of their service lives when we take 'em out. To upgrade them, I believe, would be very little return on investment to extent them until we get the LCSs onboard.

Senator MARTINEZ. Secretary, would you care to comment on that?

Mr. STACKLEY. Admiral McCullough mentioned some of the maintenance challenges that we've got right now with keeping that platform going forward, approaching their 30-year life. In fact, earlier in the frig-7-class life, they did go through a major upgrade to take care of cracking issues that were identified earlier on in the life of the class. As we get towards the 30-year point, beyond the hull strengthening, you do start to run into some corrosion issues, tankage, areas of the hull—he identified hull thinning, where you start to get into some pretty heavy depot maintenance in order to extend that service life. So, the return on investment is the issue that starts to come into view when you take a 30-year-old platform and look to extend it for an additional 10 years.

I don't believe the Navy has taken a hard look at the details associated with that type of service-life extension, but we'd be leveraging off of experience from other ship classes of a similar age. We'd have to go into a far more extensive look to give you refined numbers.

Senator MARTINEZ. Mr. Secretary, do we still—do you still ascribe to the goal of a 313-ship Navy? And, assuming so, how are we going to get there, budgetwise?

Mr. STACKLEY. Yes, sir, 313 is a—you know, CNO Mullen, back in 2006, identified a 313-ship Navy—laid out what the mix of ships

are that comprise that. CNO Roughead has further endorsed it. In fact, he's come out and stated, flat out, that that's the floor. And when he makes that statement, he's looking at the range of missions, not today, but looking ahead at 2020 and beyond.

The challenges that that brings, that the committee is well aware of, are the funding and affordability to support the 313-ship Navy. And, while we did not submit a 30-year plan this year, you can go back to the 2009 30-year plan and take a look at the funding requirements, and you can see it becomes pretty significant, in terms of percent of TOA that goes to shipbuilding. So, while we wrestle with affordability—and we've got to do everything we can to get the per-ship costs down—we still have a significant budgeting challenge to hit the 313-ship goal.

So, the decision to not submit a 30-year plan this year reflects Secretary of Defense's determination that we're going to come to grips through the QDR process over the full range of requirements. And when we get back with the completion of the QDR, which should be timed with the 2011 budget coming forward, we'll have had the opportunity to really wrestle with the trades between budget requirements, affordability, and the mix of ships.

But, I think you're well familiar with the pressure that that requirement is under when you take a look at the funding requirements and match that against the budget.

Senator MARTINEZ. On a more parochial note, I suppose, the House Armed Services Committee, in their markup this week, proposed removing from the budget funding for the dredging of Mayport's channel, as requested in the President's budget, and I was just wondering, Admiral and Secretary, if you could comment on the importance of that dredging operation as it relates to our East Coast carrier fleet being able to find alternate home porting or—if not permanent home porting, certainly, in an emergency, to be able to go into an East Coast port.

Admiral MCCULLOUGH. Yes, sir. As we looked at this, if you look to the West Coast, there's several ports where you can put a nuclear-powered aircraft carrier—San Diego, Bremerton, Everett—you can put a carrier into Pearl. And we've got the Washington homeport at [inaudible]. When you come to the east coast, currently our only carrier homeport or facility to put a carrier in—a nuclear-powered carrier—is Norfolk, Virginia. We believe it's in the Navy's and the Nation's best interest to have an alternate carrier facility on the East Coast. And we looked at several alternatives, and Mayport is clearly the best alternative.

Having been homeported in Mayport as a group commander for Kennedy Carrier Strike Group, to be able to adequately put a Nimitz-class carrier into Mayport for any length of time requires dredging, and not only the channel, but the entire turning basin, and that's to provide adequate bottom clearance for the intakes for various components in the propulsion plant. So, the mark on the dredging will impact our ability to put a Nimitz-class carrier in that basin, and constrain our ability to maneuver that ship inside of the basin. And that was the piece that was in the fiscal year-10 request.

There's also some money in the fiscal year-10 request for pier work in Mayport, but that was not associated with the carrier

homeport. If you chose—and we believe it's in the Nation's interest to choose—to have Mayport as an alternate carrier facility, you also need to upgrade the pier facilities and provide some maintenance infrastructure for both the ship, as a whole, and the nuclear power plant, in particular. And that's significantly more money than the money for the dredging, which is about \$46.3 million.

Now, people have asked us why we think we need to do this. If anything would happen to preclude a returning carrier from returning to Norfolk—natural disaster, manmade disaster, what have you—and having been homeported in Norfolk for a majority of my career, the channel going from the ocean into the base, Thimble Shoals, is about 30,000 yards long, so it's about 15 miles long, and it's barely wide enough for a large container ship and an aircraft carrier to pass each other in the channel. The carrier has to cross over the Chesapeake Bay Bridge-Tunnel and then over to Hampton Roads Bridge-Tunnel. We have had a carrier go aground in the turn that goes from Thimble Shoals into Norfolk Spit, and we've also had a minor collision.

If Norfolk was closed, you'd have to send a carrier to the West Coast for any maintenance that was required to be performed on that carrier when she came home. Carriers are not Panamax, and they'd have to go around South America to get to a facility on the West Coast. And we just think it's wise, from our perspective, to have that alternative capability on the East Coast.

Senator MARTINEZ. Thank you, Admiral.

Admiral MCCULLOUGH. Yes, sir.

Senator LEVIN. Thank you, Senator Martinez.

Senator Reed?

Senator REED. Thank you very much, Mr. Chairman.

Thank you, gentlemen.

Admiral, I understand that the JROC validated a requirement for the *Ohio* missile—ballistic missile submarine, going forward. Could you give us an update on where it is? I know there's some R&D money. And also, I understand it's coordinated with the British efforts, also.

Admiral MCCULLOUGH. Yes, sir. There's—I believe it's \$495 million in the fiscal year 2010 budget request for R&D for *Ohio*-class replacement. The Joint Requirements Oversight Council did validate the initial capabilities document for a replacement sea-based strategic deterrent. We are currently going through the analysis-of-alternatives process to look at what type submarine is necessary for a strategic deterrent for the Nation. And it revolves on what size hull, how many missile tubes, et cetera. So, that process is ongoing, and we just received and updated on it last week.

We are in a bilateral agreement with the Brits for development of a common missile compartment, and they have a significant monetary outlay to help us develop the submarine.

We're in a different environment. Usually, the U.S. is the lead in this type of arrangement, all the way back to the signing of the initial Polaris agreement with the U.K. In this particular instance, the Brits' *Vanguard* class is going to go out of service before the *Ohio*s. So, in designing a common missile compartment with the British at this time, we're taking advantage of their investment, where, in other cases, they usually take advantage of our invest-

ment. So, this design effort is on a very similar timeline for what we did when we designed the *Ohio* as the replacement of the "41 for Freedom." And so, we think we're on the right path, and we appreciate the Congress's support for the RDT&E for that submarine that's in the President's budget request.

Senator REED. Thank you very much, Admiral.

Mr. Secretary or Admiral, or both, the DDG-1000 has been terminated, three ships, but there was a great deal of research and effort, in terms of systems software, and indeed, this was suggested to the Congress that this would be sort of the—a transition to the next surface combatant, the cruiser-class, principally.

So, Mr. Secretary, can you commend on how we're going to retain in—some of the investment we've already made in DDG-1000, even though we are going to terminate the hulls of three?

Mr. STACKLEY. Yes, sir. Let me start by bringing back—Admiral McCullough mentioned a study that we have kicked off. And the study starts with the threat, the requirement to meet the threat in terms of missile defense, and it moves from there to the capabilities and the systems that are required to meet the threat. And that study will include the work that's been done on DDG-1000, as well as the S-band radar capabilities from the Aegis program. So, it is in the foundation of that study, as we look at pulling those capabilities forward, and how they would potentially apply for that future capability.

Beyond that, we also—the requirements, in terms of software development for DDG-1000, open system requirements, and so, we do look to leverage some of that development, where the opportunity arises, in the future.

You're probably quite familiar, there are ten different engineering development models that were launched for the program. Some of those are very specific and unique to the DDG-1000, and some of them will have other applicability. So, if you were to go to Wallops Island today, for instance, the dualband radar is up and operating, both X and S bands, and that radar system will, in fact, first be installed on the CVN-78 before it gets to the DDG-1000. So, that's, again, another example of technology reuse.

So, I think we're looking at every opportunity to reuse these type of developments, applied to the threat, applied to the requirements.

And the study that Admiral McCullough referred to is not simply the topside capability. We would include the platform, as well, because we have to look at how much radar needs to go onto a platform to support the mission. And after you determine how much radar, then you have to figure out what the best platform is to support that capability.

And then, of course, on top of all of that, we've got to put affordability, because we have to—we basically have to temper our appetite, when it comes to the amount of capability that we design up front, if we can't afford it downstream.

Senator REED. Any comments, Admiral?

Admiral MCCULLOUGH. As the Secretary said, we're looking at every way we can to take advantage of the research-and-development effort that was put into the DDG-1000. And there's a multitude of things that we, not only need to figure out how to take forward, but how to backfit. When you look at fire suppression sys-

tems, specifically, the fire suppression system inside the ship, as well as the flight-deck fire suppression system, I think can be put in other ship classes we have.

As you go forward, how do we leverage the volume search radar, the S-band radar that the Secretary referred to, and where do we put that in future ships, and what capability do we gather to put there? And so, I think there's ample opportunity to take advantage of the research-and-development money and effort that we put into DDG-1000, both in backfit and as we go forward.

Senator REED. Thank you.

There is a growing recognition of the value of unmanned aerial vehicles, unmanned undersea vehicles. I wonder if there's a concerted effort to see how the unmanned aerial vehicles can be launched and deployed by submarines, which have the advantage of stealth, approaching the coast, and operating in places other ships can't go. I don't know if—is there anything on tap, Mr. Secretary or Admiral?

Mr. STACKLEY. Let me—

Admiral McCULLOUGH. I—

Mr. STACKLEY. I'm going to probably end up passing to the Admiral, but let me just talk about unmanned vehicles.

First, Secretary Mabus has come onboard, and he's set a few top priorities, if you will. And one of 'em is to take the lead in unmanned vehicles. And by that, I mean there are a lot of initiatives, but the Navy needs to focus initiatives and good ideas into a concerted program to make some, you know, progress in an area where that's just ripe.

Inside of acquisition, I've got three different PEOs that are developing and implementing some form or fashion of unmanned vehicle under, on, or over the sea. And so, from a procurement side and, as well, the CNO, from his side, we're looking to bring together these initiatives, leverage technologies, but focus them so that we're not simply developing capability, but we're actually delivering capability to the force.

I—through that, thus far, I can honestly say I haven't been approached with an initiative to launch an unmanned air vehicles from a submarine, but I'd welcome that to join the fold, if you will.

Senator REED. Admiral, any comments? I mean—

Admiral McCULLOUGH. I'll second the Secretary's statement on—I've heard of no initiative or program to launch an unmanned aerial vehicle from a submarine. We have, as you all well know, the vertical takeoff unmanned aerial vehicle, Fire Scout, that's being op-tested on McInerney. We've got money on broad-area maritime surveillance unmanned aircraft. We've got money in Navy unmanned combat aerial system, N-UCAS. And that's a development effort to both fly and recover that vehicle from an aircraft carrier, as well as demonstrate in-flight refueling capability.

We've got several variants of unmanned surface craft and several variants of unmanned undersea vehicles that we're looking at in a roadmap that the CNO calls his "unmanned vehicle roadmap," and that's managed by a one-star that works in my organization.

But, I'll take, for the record, launching an unmanned aerial from a submarine, sir.

Senator REED. [Laughing.] Yeah, I guess I'll take credit for imagination.

[Laughter.]

Senator LEVIN. Can't wait to see that record, either, as a matter of fact.

[laughter]

Senator LEVIN. Senator Wicker is nice enough to yield to Senator Collins.

Senator COLLINS. Thank—

Senator LEVIN. Senator Collins?

Senator COLLINS.—you. Thank you so much, Mr. Chairman.

And I want to thank my colleague from Mississippi for his thoughtfulness, given my schedule.

Secretary Stackley, speaking of Maine-Mississippi cooperation, my first question to you has to do with an agreement that you were instrumental in helping to bring about that involved an April agreement with the Navy, with Northrop Grumman, and with Bath Iron Works. And essentially you arrived at a plan that is intended to help ensure stability in the workload of the shipyards to minimize the cost risk for the DDG-1000 program, efficiently restart the DDG-51 construction, and maintain two sources of supply for future surface combatants. Now, this plan, which I think was very well thought out, it's obviously dependent on congressional support for the funding elements. Could you comment on the importance of both the authorizing and appropriations committees fulfilling the funding parts of this plan in order for its promise to be realized?

Mr. STACKLEY. Yes, ma'am. Let me start with the three DDG-1000s. With the decision that the Navy would stop at three DDG-1000s and restart the DDG-51, the first thing that emerges is that you cannot efficiently build two lead ships and one follow ship at two different yards, if you will, and that if we're going to build three, that the only way to affordably build them would be at one shipyard.

Similarly, you don't want to restart construction of the DDG-51, where you're introducing a new combat system baseline, at the same yard that you are building those three DDG-1000s.

So, the Navy, working with OSD and with industry, took a look at alternatives and proposed, and reached an agreement, where Bath Iron Works would build the three DDG-1000s and Northrop Grumman would take the lead on the DDG-51 restart. That way, you can leverage learning for those three ships. Frankly, Bath Iron Works had been focused on the lead ship, and had done significant investment to retire risk and to improve their facilities to support the DDG-1000 construction. And we look today at a program where they've done a very, very good job at ensuring the design is complete and of high quality before starting construction, and they have prepared themselves for an efficient start. And, thus far, in fact, we're off to a good start.

So, we're looking to continue to ride that for the three DDG-1000s, and then, separately, have Northrop Grumman focus on the 51 restart, while Northrop Grumman also continues to play a role with the composite deckhouse on the DDG-1000 program. So, we'll have both yards building surface combatants, both yards have a

hand in both programs, but you get single production line, if you will, at both yards, one each—for each of the programs.

Senator COLLINS. And the funding's essential, correct—

Mr. STACKLEY. Yes, ma'am.

Senator COLLINS.—to bring this about?

Mr. STACKLEY. To get to the punch line, yes, ma'am.

[Laughter.]

Mr. STACKLEY. Absent—in fact, Secretary Gates was point blank on this, and I'm—you know, I was trying to occupy the same space with him—

Senator COLLINS. Right.

Mr. STACKLEY.—that, absent this agreement, we cannot afford to build three DDG-1000s at two yards, and then we cannot afford to build two DDG-1000s at two yards, and we will go down to a one-ship demonstrator and suffer a gap, in terms of surface combatant shipbuilding, and we'd suffer a gap in the industrial base, and we'd lose that capability and capacity in our surface force.

Senator COLLINS. Thank you.

Admiral, speaking of affordability, I'm concerned about the congressional mandate that large future combatants be nuclear powered. That obviously has an impact on affordability; the up-front cost is considerably more, the hull has to be larger, as I understand it. Shouldn't we be leaving the decision on the appropriate power source for a future surface combatant, or for anything that is being built, any ship or sub—shouldn't we be leaving that up to the Navy, rather than having Congress establish it?

Admiral MCCULLOUGH. Thank you for the question, Senator.

As you indicate, up-front acquisition cost for a nuclear power plant in any type vessel has a significant up-front cost, \$600 to \$800 million, depending on the power plant and what you try to do with it. There are currently no designed nuclear power plants that would adequately fit in any surface combatant ship hulls that we have.

Now, that said, when you look at whether a ship should or should not be nuclear powered, absent what was written in the National Defense Authorization Act of 2008, I would tell you it comes down to power density. So, what power demand do you need to both propel the ship and essentially run the combat system? And when you get to a very—to very large radars or very high-powered electric weapons—lasers, rail guns, et cetera—and you want to run the ship at relatively high speed, then there may be an adequate tradeoff between a nuclear power plant and a conventional power plant. But, I believe, absent what's written in the law, that it should be left up to the shipbuilder and the Navy to decide what type power plant to put in a ship to best suit our needs. Now, I understand what the law says, and we'll comply with the law.

Senator COLLINS. Thank you.

Admiral MCCULLOUGH. Yes, ma'am.

Senator COLLINS. I think that's a real affordability issue that we should take another look at.

Finally, Mr. Chairman, I just want to point out, since there's been so much discussion of the cost growth in the littoral combat ship program, and that cost growth has been disturbing to all of us, that it's instructive to read the Defense Science Board's report

on the causes of the cost growth. And it's astonishing to know that, after the design had been completed for the LCS and building had been initiated, that the number of technical requirements nearly doubled from 15,261 to 29,435. And it goes back to Secretary Stackley's point about the importance of freezing the requirements. There's certainly fault by the contractors, as well, but this is a case where the Navy had a very hard time deciding what it wanted, and when the changes were added, that upped the cost. And I think we have to remember that in the discussions. And the Navy, the contractors, and the Congress have all learned from that experience. But, that is just extraordinary, when you look at the number of technical requirements that changed after the design was supposedly completed.

So, thank you, Mr. Chairman.

And thank you, Mr. Senator.

Senator LEVIN. It's a good example of why we attempted, in the reform bill—

Senator COLLINS. Exactly.

Senator LEVIN.—to try to freeze those requirements.

Senator WICKER?

Senator WICKER. Thank you. Am I on?

I appreciate the testimony. And let's talk about LHDs and LHAs, Mr. Secretary. I recently visited a shipyard in Pascagoula, Northrop Grumman, and the last LHD-8, the USS *Macon Island*, looked pretty good to me. And I think they're very proud of it down there. We're impressed with the capabilities and with the flexibility. Now, the replacement for that will be the LHA. And Northrop Grumman is in the early stages of the LHA-6.

Let me ask you—first, fiscal year 2009 defense authorization and appropriation bills provided 178 million for advance procurement of LHA-7. That money is not under contract, and word is that it will not be, until December of this year, at the earliest. Can you tell us what's going on there? Why are we not going ahead with the advance procurement, which had been provided by the Congress and by the appropriations process?

Mr. STACKLEY. Yes, sir. Let me start with LHA-6, if I could.

Senator WICKER. Okay.

Mr. STACKLEY. LHA-6, basically, has just started construction, and, prior to starting construction, we held a production readiness review to ensure everything was—met the standard for design completion, material on hand, production planning products complete, so they can go into production and continue uninterrupted. And I'll just call this part of the lessons learned from the LCS program—was that we don't rush into production; we ensure everything's ready to go. And, in fact, the production readiness review reported out to me in December, and I put them on hold. I basically sent the team back and said, "We need to complete these following planning products to ensure that we're ready to proceed uninterrupted." And those were lessons learned from the LHA—LHD-8 that was just completing. So, that go-round on the production readiness review has wrapped up, and we're putting together a report to come to Congress to describe those results.

The LHA-7 advance procurement, in an ideal world, in a steady run of production, you'd be able to couple procurement so that you

get some—you leverage some economic order quantity, if you will, from a steady production run. The big-deck amphibians are spread too far apart to be able to do that. So, when you look at trying to leverage savings from quantity, et cetera, we don't have that opportunity on the big decks. So, then we look towards commonality, where we can buy material that's common to other programs. And for Northrop Grumman, they're pretty good at doing this, particularly when it comes to commodities. And we also look at long-lead-time material, ensuring that the long-lead material supports the start of construction. And then lastly is, we'll use advance procurement for planning products.

So, we work with Northrop Grumman, first looking for material that provides some savings, looking at long lead time material, and then planning products. Based on their proposal to us, after we've had an opportunity to review the proposal, we'd be putting that under contract.

I can tell you that I've worked directly with Northrop Grumman, in terms of submitting proposals for the AP, and when they're ready, we're ready.

One—I should add on to that—for long-lead material, when the AP was authorized in 2009, there was a big deck in 2010 associated with the maritime pre-positioning future force, and that—and Admiral McCullough will probably take over at some point here—but, in terms of reviewing the requirements and going back to the discussion with the Commandant and his requirement for 11- 11-11 big decks, LPDs, and LSDs, in order to meet the 11 big-deck requirement the big deck in the maritime pre-positioning force future is being redesignated to be a part of the assault echelon, which does involve some requirements changes, in order to warship versus pre-positioning ship, but with that move, the big deck was moved to 2011, so, in fact, all of the AP provided in 2009 is early to need, in terms of long-lead-time material.

Senator WICKER. Does the debate about well decks have anything to do with this timing, Mr. Secretary?

Mr. STACKLEY. I will give you the—I will give you my position, and then—understand that this is a requirements issue. But, for LHA-6, it was a significant shift from well deck to no well deck to provide increased aviation capability for the LHA replacement program. When the discussion and debate opened back up, in terms of LHA-7, whether it would have a well deck or whether it would be aviationcentric, the reality is that we cannot make that shift onto LHA-7 in any reasonable fashion. So, from a procurement/aquisition standpoint, I'm driving the argument towards stability—

Senator WICKER. The reality—pardon me for interrupting—the reality is that you cannot make the shift back to a well deck on number 7?

Mr. STACKLEY. In the timeframe that she's scheduled. We'd basically have to go in and do significant redesign of the LHA replacement, and we don't have time to do that to support the procurement schedule. It would also bring increased cost and destruction at this point in the big-deck program.

Senator WICKER. Would you like to weigh in, Admiral?

Admiral MCCULLOUGH. Yes, sir. As the Secretary said, when we went from LHD-8 to LHA-6, and LHA-6 was envisioned to be part

of the maritime pre-positioning force future, the Marine Corps wanted to concentrate on aviation capability and capacity off of that ship, both associated with—specifically with the V-22 Osprey.

To put that additional aviation capability in that ship resulted in a compromise in removal of the well deck, and that was understood as we went forward.

Now, as the Marine Corps looks at their surface transport capability, I would tell you that the Commandant would like to get back to a well-deck capability in the big-deck amphibs. But, as the Secretary said, to do it in LHA-7, I think, if you had a Marine Corps general sitting here with me, he'd tell you that he believes, in consideration of cost, schedule, and design disruption, that that's nearly impossible to do for LHA-7—

Senator WICKER. And you would agree with that.

Admiral MCCULLOUGH. Yes, sir, I would. Now—

Senator WICKER. So, is there any debate?

Admiral MCCULLOUGH. Yes, sir. They would like, as we go forward with the next LHA-D, that we review putting the well deck back in that ship. In the discussions I've had with Lieutenant General Flynn, who's commanding general of Marine Concept Development Command, is—he's like to do that as soon as possible, and we believe it's in the next LH, if you will—

Senator WICKER. And perhaps an LHA-8.

Admiral MCCULLOUGH. Yes, sir.

Senator WICKER. So, Mr. Chairman, what I think I'm hearing is that the decision is past us, in the opinion of these two witnesses, as to adding back in a well deck on LHA-7. That—

Admiral MCCULLOUGH. Yes, sir.

Senator WICKER.—that decision, in your opinion, is over with, and we're beyond that.

Mr. STACKLEY. Yes, sir.

Admiral MCCULLOUGH. Yes, sir.

Senator WICKER. Do you know of any discussions ongoing there, regardless of your opinion? Even though your opinion is very emphatic, are there still discussions about that issue, or is it settled? Would the Marine Corps agree that this is settled?

Admiral MCCULLOUGH. I believe yes, they would. They would—I'm sure they'd tell you they'd like to get a well back—well deck back in an aviation—large-deck aviation-capable—

Senator WICKER. Oh.

Admiral MCCULLOUGH.—ship as soon as they could—

Senator WICKER. But—

Admiral MCCULLOUGH. But, I believe the discussion on the 7 is concluded, yes, sir.

Senator WICKER. Okay. Well, that's very interesting.

Thank you, Mr. Chairman.

Senator LEVIN. I just have a couple of additional questions, just on the well deck. If you have one, then you don't have one, and now you're looking at it again, what does that say about stable requirements?

Mr. STACKLEY. Sir, this is why I go back to the position on LHA-7, that we have—we shifted the requirement towards greater aviation capability for the big decks, and we have to be careful, in going

back to increasing the well decks, that we don't do this—change so quickly that we disrupt the procurement of the big deck amphibs.

Senator LEVIN. Secretary Gates has announced that the long-term carrier force structure is going to be ten carriers. Have the combatant commanders' requirements changed? Have they gone down? Is that the reason for the long-term drop from 11 to 10, Admiral?

Admiral MCCULLOUGH. Currently, the combatant commanders' desire for carriers is filled by the 11-carrier force. We have made mitigations in the near term, with respect to Enterprise going out of commission and when Ford comes in commission, to be able to live within a ten-carrier force constraint and meet the operational commitments we have to the combatant commanders.

The Secretary of Defense recommended that we put the carriers on 5-year centers, and that's what he said we were going to do, and that's what we do. And I would tell you that we're—we go to a ten-carrier force in about 2040. So, based on that, sir, I think we have adequate capability and capacity in the Navy to meet the combatant commanders' demands in the next three decades.

Senator LEVIN. Okay, thank you.

Senator Martinez?

Senator MARTINEZ. Quickly. Moving to the area of modernizing the fleet and fleet readiness—

Admiral MCCULLOUGH. Yes, sir.

Senator MARTINEZ.—Admiral, in order to get out of our 313-ship Navy, it looks like maintaining and preserving what we have is a big priority. So, does the 2010 budget request fully fund the ship depot and other maintenance accounts? And what percentage of the total requirements are you seeking funding for? And are we taking on any risk there?

Admiral MCCULLOUGH. Yes, sir. In the submittal for fiscal year 2010, which includes the overseas contingency operation fund, formally known as the supplemental, we requested, in the President's budget, about 96 percent of our surface ship maintenance requirement. And given the fiscal constraints that the country and the Department are under, we thought that was adequate risk in the surface ship maintenance account when we looked at balance and procurement, personnel, and ops and maintenance. So, when the Department submitted its unfunded requirements list, the CNO said, if he had another dollar to spend, he'd spend it in ship and aircraft maintenance. And so, we have about \$200 million in the unfundeds for ship depot maintenance, and about \$185 million in the unfunded requests for aviation depot maintenance. But, we believe, given that—our top line and the balance between the competing accounts, that that was acceptable risk in surface ship maintenance.

Senator MARTINEZ. Secretary, any comment on that, or—

Mr. STACKLEY. Yes, sir. The—we looked at the number of availabilities that are going to be impacted—potentially impacted—and there would be a need, during execution in 2010, to manage that impact, in terms of either rescheduling work that's in 2010 or reprioritizing funding in 2010 to either accomplish the availabilities or the work intended for those availabilities.

Senator MARTINEZ. Thank you, Mr. Chairman. That's all I have.

Senator LEVIN. Thank you, Senator Martinez.

Senator Wicker?

Senator WICKER. Yes. Gentlemen, on the 313-ship fleet, we're really just giving lipservice to that, aren't we? I mean, there's been no proposal to achieve a rate that would get us there. As a matter of fact, it seems that we're actually falling away from that, based on the rate of ships being decommissioned outpacing the rate of production. And I believe your testimony was that the 313—that you agreed, Mr. Secretary, 313-ship Navy is a minimum. How do we have any credibility and—in actually continuing to say that, in light of the proposed rate of production and rate of decommissioning?

Mr. STACKLEY. Yes, sir. The term “the floor” is the description that the CNO uses for the 313. And in deriving the requirement, dating back, again, to CNO Mullen, but endorsed by CNO Roughead, the requirement was derived without budget constraints. We was just factually laid out what capability, in terms of numbers and mix of ships, are required to meet both presence and major combat operations and—

Senator WICKER. Required?

Mr. STACKLEY. Yes, sir. The full range of missions that the Navy is called upon to meet. So, when you go to the years since, and you just generically say that a 313- ship Navy, you would be needing to build—procure at least ten ships per year, and you can see that we've fallen short on a pretty consistent basis. And when you look ahead, and you look at the challenges, in terms of the budget required to hit the numbers, then, in fact, we have some difficult decisions to make in the QDR regarding the mix of the force, what we can afford, and what—where the trades may need to be made. But, going into that discussion, you start with what your requirements are. And so, CNO Roughead has been consistent in identifying the requirements, entering that discussion. We need to—on the procurement side, we need to figure out, How do we support that, in terms of buying ships more affordably? Within the mix of ships, how do we, again, temper the requirements so that we don't allow cost per ship to escape us? And then understand what's the delta between what that 313-ship Navy would cost and budget available to drive prioritized trades.

Senator WICKER. Well, it would be interesting to see a plan unfold as to how we're going—not so much when we're going to actually get to 313, but when the rate is going to change that might get us there.

Let me just say one last thing, Mr. Chairman. I do want to congratulate the Navy on the decision to stick with the electromagnetic aircraft launch systems, EMALS, on the new Gerald R. Ford. My State of Mississippi will have a great deal to do with the manufacture of this technology, and we're excited about it. I know there are three, sort of, advanced technologies involved in this new Gerald R. Ford, and one of the things—that might have caused us cost and schedule problems; the EMALS was only one of them. And I—seems to me, as someone who's not an expert, but understands that—we need to move away from the old technology there, and into the electromagnets. It seems to me that, long range, that is the correct decision, and I want to congratulate you on that.

Do you have any comment, Mr. Secretary, on the considerations, as far as the cost?

Mr. STACKLEY. Yes, sir.

Senator WICKER. Sticker shock with regard to the EMALS.

Mr. STACKLEY. Let me start with the steam catapults. Steam catapults are the number-one maintenance issues for carriers on deployment today. So, that's a known issue that—one of the benefits that EMALS tries to improve upon is improving reliability of the system. And we're going through testing to demonstrate that. Second is manpower. EMALS system is designed to reduce manpower on the carriers. And so, we look at reducing 39 sailors from a CVN-78, and you look out over the CVN-78 class and the life cycle, and, in fact, it's estimated that there's a \$250-million opportunity there to avoid cost, going from steam to EMALS.

So, that's the benefit side. You get improved performance of the system, you get some improved reliability, and you get lifecycle cost savings.

On the upfront side, what we've run into is cost growth in development and cost growth in procurement. So, we took a hard look. We—basically, it's not its own program, but we treated it as though it were its own program and ran it through a Nunn-McCurdy-like type of an assessment, where we look at the requirement—took a hard look at the requirement, we took a look at the costs, made sure that we had them properly estimated, and then take—took a look at the management structure that we had in place to make sure it is adequate to ensure that we don't see further cost growth, and that the system is delivered to the ship on schedule.

In reality, today EMALS, even though it's late in its development, there is sufficient margin between development and production that, today, it is not driving delays to the CVN-78 program. And our challenge is to ensure that that does not occur.

We, in fact, have a very robust test program going on up at Lakehurst, where, this summer sometime, if you have the time, I'd like to take you up there and walk you through; you'll see the—you'll see one entire catapult system being laid into the ground where, this time next year, we hope to be launching aircraft.

A lot of technical challenges. We're putting a team together to attack the technical challenges.

Through all this discussion, we have moved from a cost-plus contract with a contractor to a fixed-price contract that's under negotiation today. So, part of the decision to go forward, in terms of tackling the management issues, was, we're not going to go forward on a cost-plus contract, where we, the government, own the cost risk, but we're going to a fixed-price contract, where he's effectively warranting his development efforts in the production of the shipboard sets.

So, I think we've taken a pretty thorough look at this.

There has been difficulties and issues associated with cost growth. We will be coming back to fund that—request funding for that cost growth, at the right point in time, but, when we look at the net, and when we look at the capability that EMALS brings to the table, and we look at its importance to future naval aviation, we've decided to press on with the system.

Senator WICKER. Thank you.

Senator LEVIN. Thank you very much, Senator Wicker.  
Senator Martinez?

We're all set. Thank you both. Terrific hearing, great testimony.  
Appreciate it.

We'll stand adjourned.

[Whereupon, at 3:57 p.m., the subcommittee adjourned.]