

[H.A.S.C. No. 111-61]

HEARING

ON

NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2010

AND

OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS

BEFORE THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

SEAPOWER AND EXPEDITIONARY FORCES
SUBCOMMITTEE HEARING

ON

**BUDGET REQUEST FOR DEPARTMENT
OF THE NAVY SHIPBUILDING
ACQUISITION PROGRAMS**

HEARING HELD
MAY 15, 2009



U.S. GOVERNMENT PRINTING OFFICE

57-219

WASHINGTON : 2010

SEAPOWER AND EXPEDITIONARY FORCES SUBCOMMITTEE

GENE TAYLOR, Mississippi, *Chairman*

SOLOMON P. ORTIZ, Texas	W. TODD AKIN, Missouri
JAMES R. LANGEVIN, Rhode Island	ROB WITTMAN, Virginia
RICK LARSEN, Washington	ROSCOE G. BARTLETT, Maryland
BRAD ELLSWORTH, Indiana	J. RANDY FORBES, Virginia
JOE COURTNEY, Connecticut	DUNCAN HUNTER, California
JOE SESTAK, Pennsylvania	MIKE COFFMAN, Colorado
GLENN NYE, Virginia	THOMAS J. ROONEY, Florida
CHELLIE PINGREE, Maine	
ERIC J.J. MASSA, New York	

WILL EBBS, *Professional Staff Member*
JENNESS SIMLER, *Professional Staff Member*
ELIZABETH DRUMMOND, *Staff Assistant*

CONTENTS

CHRONOLOGICAL LIST OF HEARINGS

2009

	Page
HEARING:	
Friday, May 15, 2009, Fiscal Year 2010 National Defense Authorization Act— Budget Request for Department of the Navy Shipbuilding Acquisition Pro- grams	1
APPENDIX:	
Friday, May 15, 2009	33

FRIDAY, MAY 15, 2009

FISCAL YEAR 2010 NATIONAL DEFENSE AUTHORIZATION ACT—BUDGET REQUEST FOR DEPARTMENT OF THE NAVY SHIPBUILDING ACQUISITION PROGRAMS

STATEMENTS PRESENTED BY MEMBERS OF CONGRESS

Akin, Hon. W. Todd, a Representative from Missouri, Ranking Member, Seapower and Expeditionary Forces Subcommittee	3
Taylor, Hon. Gene, a Representative from Mississippi, Chairman, Seapower and Expeditionary Forces Subcommittee	1

WITNESSES

McCullough, Vice Adm. Barry J., USN, Deputy Chief of Naval Operations for Integration of Capabilities and Resources, U.S. Navy	7
Stackley, Hon. Sean J., Assistant Secretary of the Navy (Research, Develop- ment and Acquisition), U.S. Navy	5

APPENDIX

PREPARED STATEMENTS:	
Akin, Hon. W. Todd	39
Stackley, Hon. Sean J., joint with Vice Adm. Barry J. McCullough	41
Taylor, Hon. Gene	37

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.]

FISCAL YEAR 2010 NATIONAL DEFENSE AUTHORIZATION ACT—BUDGET REQUEST FOR DEPARTMENT OF THE NAVY SHIPBUILDING ACQUISITION PROGRAMS

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SEAPOWER AND EXPEDITIONARY FORCES SUBCOMMITTEE,
Washington, DC, Friday, May 15, 2009.

The subcommittee met, pursuant to call, at 10:02 a.m., in room 2212, Rayburn House Office Building, Hon. Gene Taylor (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. GENE TAYLOR, A REPRESENTATIVE FROM MISSISSIPPI, CHAIRMAN, SEAPOWER AND EXPEDITIONARY FORCES SUBCOMMITTEE

Mr. TAYLOR. The subcommittee will come to order. Good morning and welcome.

Today, we need concession to receive testimony on the fiscal year 2010 budget request for shipbuilding programs. Appearing before us today are the chief acquisition officer of the Navy, the Honorable Sean Stackley; the chief requirements officer of the Navy, Vice Admiral Barry McCullough.

Admiral, you are well-known to this committee. Welcome back. Secretary Stackley, while many know you and have worked with you in the past, we believe this is the first time that you will testify before this committee, and welcome.

The good news is that we are not going to be interrupted by votes because the House stands in recess. It is my hope that this will allow us to have a frank and detailed discussion on where we are and where we need to go with our shipbuilding programs.

I thank the members in attendance for staying in town to participate in this very important hearing.

In previous years at this hearing, I have commented that the budget request and the accompanying 30-year shipbuilding plans were unachievable. In fact, I have stated that the long-range plan was pure fantasy.

It nows appears that the Navy has learned how to deflect criticism of the shipbuilding plan. They don't submit one. Although required by title 10 of the United States Code, all plans for future years' ship procurement are being withheld from the Congress. This obviously makes it very difficult for the Members of Congress to fulfill the Article I obligations to provide and maintain a Navy.

I realize the two witnesses sitting before this committee today did not make that decision, and I will not continue to dwell on the subject. But I state for the public record that the failure of the Department to describe the future shipbuilding plan will not prevent

this subcommittee from doing due diligence required in recommending to the full committee and to the full House a shipbuilding plan which will restore the Navy to an acceptable number of ships which will preserve domestic industrial capacity of the construction of warships.

I will say that again. If the Navy chooses not to submit a shipbuilding plan to Congress, Congress will provide one for the Navy.

With limited time, the subcommittee has to review this year's budget request. It appears to be somewhat better than previous years. The Department is requesting authorization for the procurement of eight new ships. And it is requesting advanced procurement funds for the procurement of at least seven more next year, including two submarines.

If you take into account that the Littoral Combat Ship program (LCS) and the joint high speed vessel do not require advanced procurement, then the potential exists for a 12-ship request next year. And the following concerns, which I trust that our witnesses will address today—none of this should come as a surprise, particularly to our two witnesses, since I have expressed these concerns either publicly or directly to them.

I am concerned about the Electromagnetic Aircraft Launch System (EMALS) program of the next aircraft carrier. Mr. Secretary well knows I recently visited the production facility, and I was favorably impressed. However, failure of this one system to deliver on its promises means that we are building the world's largest helicopter carrier. I would like the Secretary to address what additional oversight and continued out oversight envisions for the program.

I also remain very concerned about the LCS program. I am not happy with either the cost or scheduled performance.

In January, I spoke with the captain of the first ship, and to the credit of the shipbuilder, he is pleased with the ship and I am happy that he is pleased with the ship. But the fact remains that the ship was delivered 18 months late and two-and-a-half times over the cost that the contractor promised. No one, neither the Navy nor the contractor, should be patting themselves on the back for the first ship or for the second ship, which has still not been delivered.

I am not convinced that the costs are being properly monitored by the Navy. These ships are too expensive. We need to drive the costs down and/or we need to see who can build these ships for a fair price.

I think it is important to note that everything about this program is different from other shipbuilding programs. The Navy does not contract with the shipyards building the ship. They have agreements with two prime contractors. The ship's propulsion systems; combat systems; Command, Control, Communications, Computers, and Intelligence (C4I) systems were not specified by the Navy; they were chosen by the prime contractors to meet performance specifications. Because of this, there is very little common equipment between the two types of ships.

Lack of commonality costs money now, it will increase training costs for the sailor and it will increase overall life cycle costs. I re-

quest that the Admiral and the Secretary address this issue for lacking commonality today.

Returning to the destroyer program, it is no secret that this committee last year supported the Chief of Naval Operations' (CNO's) desire to return to construction of the *Arleigh Burke*-class guided missile destroyer (DDG-51). Not everyone is happy with the final decision. We seem to now have a final decision for the Secretary of Defense on the way forward, an agreement between the two shipyards, which will level the industrial load. I request the Secretary explain the agreements and I request the Admiral give us some sense of how he will use these two very different types of destroyers.

I would also like an explanation this morning of some fairly significant funding requests in the research and development accounts. The Secretary of Defense has testified that future procurement decisions will be based on the results of the Quadrennial Defense Review, and it has stated that as the reason to not request funds to alleviate shortfalls and validate requirement gaps, such as the current Strike Fighter shortfall of the F/A-18s.

If the Department is requesting one-half of a billion dollars for the development efforts for replacement of a higher-class submarine before the QDR validates the requirement, make no mistake, this subcommittee has been the strongest proponent over the last three years in submarine construction and the preservation of our Nation's submarine industrial base. The subcommittee has been supportive of pulling forward the design of the next-generation submarine to ensure we do not lose our skilled-edge designer workforce. Yet this request goes far beyond that goal.

I ask the witnesses to please explain why the subcommittee should recommend the full request for a nonvalidated requirement when there are very real shortfalls and other validated requirements today.

These are a few of our concerns. I am sure the other members will express theirs.

Again, I welcome the Secretary. I welcome the Admiral for being with us.

And I now turn to my friend from Missouri, the ranking member, Mr. Akin.

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

STATEMENT OF HON. W. TODD AKIN, A REPRESENTATIVE FROM MISSOURI, RANKING MEMBER, SEAPOWERS AND EXPEDITIONARY FORCES SUBCOMMITTEE

Mr. AKIN. Thank you, Mr. Chairman. And good morning to our witnesses. I had the opportunity to meet with Admiral McCullough for the first time yesterday. I had another good discussion yesterday with Secretary Stackley, also in our office.

I would like to thank you again for taking time to answer my questions and share your thoughts regarding some of the shipbuilding programs proposed in this year's budget.

I was also interested to hear the Chief of Naval Operations state yesterday at the full committee hearing that the Navy still intends to maintain the 313 ships. It had begun to sound as if the Sec-

retary of Defense in his Foreign Affairs article and the Navy in its budget rollout were beginning to back away from that number. It was not clear to me how the Navy planned to implement the joint maritime strategy with its emphasis on forward presence if the Navy intended to accept fewer ships. A ship can only be in one place at a one time, and today's fleet is the smallest it has been for nearly 100 years.

Despite the good news, however, that the Navy is not backing away from the goal of increasing the size of the fleet, the CNO also acknowledged in his written statement for fiscal year 2010 budget aligns with the path of our maritime strategy is that, "However, we are progressing at an adjusted pace." That sounds like code to me for, this budget request doesn't invalidate our maritime strategy, but it will allow us to meet our goals.

I see evidence of this in the budget request for shipbuilding. For example, the Navy will commission and decommission the same number of ships this year, which means no net increase to the number of ships. To be fair, it can't be blamed on the budget request, for the simple math, 300 ships with an average 30-year life, means that we need to commission and decommission about 10 ships a year. And this budget request, only eight ships, presents no future plan to give Congress any reason to believe the Navy will ever meet its force structure requirements.

Our colleague, Representative Forbes, asked Secretary Gates and Admiral Mullen about the lack of a 30-year shipbuilding plan at a hearing earlier this week. Admiral Mullen stated it will come in the 2011 budget.

I would say we can rely reasonably well on the 30-year shipbuilding plan that has been submitted before, but I count at least nine ways this budget diverges from the 2009 plan:

One, moving the funding of carriers to 5-year centers drops the force to 10 carriers by 2039;

Two, building three DDG-1000 destroyers instead of seven;

Three, building one DDG-51 destroyer instead of zero;

Not building the next-generation cruiser;

Not building a large-deck amphib for the maritime prepositioning force in 10;

Not building a mobile landing platform ship for the maritime prepositioning force in 2010; and then

Seven, not shutting down the amphibious transport dock (LPD-17) production line at nine ships;

But funding the final increment for the tenth ship;

Nine, building two T-AKE ships for 10, instead of zero; and

Investing half a billion dollars in research and development (R&D) for the replacement of the *Ohio*-class submarine.

So, in fact, we cannot rely upon the last shipbuilding plan and evidently we don't receive a new one. We have the same problems on the aviation front, but I will save those comments for next week's aviation hearing.

Therefore, we can only rely on the testimony you provide today to shed light on the analysis that went into the decisions that were made within the shipbuilding account.

The investments that the Navy is making in ship construction and R&D were evidently a higher priority than addressing the

Strike Fighter gap which until recently the Navy said was a serious concern. This may be true, but to do our jobs, it becomes critically important that this committee understand your reasoning.

Thank you again, Mr. Chairman.

To our witnesses, I appreciate your being with us today and truly look forward to our discussion.

[The prepared statement of Mr. Akin can be found in the Appendix on page 39.]

Mr. TAYLOR. Thank you, Mr. Akin.

The Chair now recognizes the Secretary, Mr. Stackley.

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

Secretary STACKLEY. Thank you, sir.

Mr. Chairman, Representative Akin, distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address Navy shipbuilding. If it is acceptable to the committee, I would propose to keep my opening remarks brief and submit a formal statement for the record.

Mr. TAYLOR. Without objection, Mr. Stackley.

I also want to inform that although it is the norm for the full committee to limit witnesses for five minutes, please take whatever time you feel is necessary.

Secretary STACKLEY. Thank you, sir.

Mr. TAYLOR. Thank you.

Secretary STACKLEY. Today's Navy is a fleet of 283 battle force ships, as many as half of which may be underway on any given day, supporting combat operations, building global partnerships, providing international security, performing humanitarian assistance and disaster response, prosecuting piracy, testing future capabilities and training for future operations.

Beyond numbers, the quality of the force—our ships, aircraft, weapons systems and, most importantly, our sailors and marines—is unmatched at sea. 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 the century, however, point to our future and must increasingly contend with irregular and asymmetric threats. And two, we must pace the capabilities of rogue states and emerging naval powers that would intend to challenge our influence in the regional security of our friends and allies.

In the face of these growing challenges, the Chief of Naval Operations has outlined requirements for the future force, the 313-ship Navy. In fact, CNO has emphasized, the 313 ships represents the floor if we are to meet the full range of missions confronting the Navy in the next decade and beyond.

The fiscal year 2010 budget request funds eight ships, a modest but important step forward towards meeting the CNO's requirements. Again, however, it is more than numbers.

The Navy is moving to close gaps in our capabilities. To this end, we will restart the DDG-51 construction in 2010 to provide increased air and missile defense to meet the demand from combat-

ant commanders. The success of the Aegis system against ballistic missiles demonstrates that at-sea testing and, two, through real-world performance against an earthbound satellite provides a solid foundation for this mission.

At the other end of the warfare spectrum, we are increasing production of the Littoral Combat Ship with our request 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. But we are confident that the utility and flexibility of this ship will prove indispensable in future naval operations.

This year's request also includes the twelfth *Virginia*-class fast attack submarine and two T-AKE dry cargo and ammunition ships. Both of these are strongly performing programs. The eight ships in our request is one of two joint high speed vessels that the Navy is jointly procuring with the Army.

The budget request also funds the balance of LPD-26 and DDG-1002 and includes advanced procurement for seven future ships.

The underlying challenge, indeed the pressing requirement before us today, is affordability. This is not a new challenge, but it has 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 into new platforms.

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

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

All of these factors lead to inefficient 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 House bill on acquisition reform, 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 acquisition programs. And to this end, the 2010 Navy shipbuilding plan strives to provide stability, which would underpin improved performance across government and industry.

The budget request builds on ship programs which are currently in serial production. There is renewed emphasis on minimizing change to requirements, minimizing change to design and improving our estimates for follow-up ships. This leads to reducing risk to the shipyard's ability to execute follow-on vessels and enabling the Navy to expand the use of fixed-price-type contracts.

We are committed to ensuring that new ship designs are mature enough to commence production. We are working to fully leverage competition at every level of our shipbuilding programs, recognizing at the prime there are often limited competitions, but we are drawing down to the first and second tier vendors as well.

Within our shipbuilding contracts, we are implementing affordability programs, reuse of existing design and incentives for selected industrial capital investments and improvement projects. As well, open architecture, both for hardware and software, promises to be a powerful cost-avoidance tool as well as a process for improving our warfighting capability.

The challenge before us is great, but so is the need. And in meeting the need, this subcommittee has been steadfast and unwavering in its support for a strong Navy and Marine Corps. We thank you for that.

Again, I thank you for your time today and look forward to your questions.

[The joint prepared statement of Secretary Stackley and Admiral McCullough can be found in the Appendix on page 41.]

Mr. TAYLOR. Thank you, Mr. Secretary.

STATEMENT OF VICE ADM. BARRY J. MCCULLOUGH, USN, DEPUTY CHIEF OF NAVAL OPERATIONS FOR INTEGRATION OF CAPABILITIES AND RESOURCES, U.S. NAVY

Mr. TAYLOR. Admiral McCullough.

Admiral MCCULLOUGH. Chairman Taylor, Representative Akin and distinguished members of the subcommittee, I am honored to appear before you this morning with Secretary Stackley to discuss Navy shipbuilding. I request our written statement be made a part of the record.

Mr. TAYLOR. Without objection.

Admiral MCCULLOUGH. Mr. Chairman, before I begin, I would like to mention that in addition to our role in seapower, the Navy currently has more than 13,000 Navy personnel serving on the ground in Iraq and Afghanistan. They serve in traditional roles with the Marine Corps, but also in support of the land service combat support and combat service support in support of joint commands in the Army. We provide these sailors, in addition to fulfilling our commitments to the country and our allies to provide persistent forward presence, incredible combat power in support of the maritime strategy.

Today, we have a balanced fleet capable of meeting most combating commander demands, from persistent presence to counter piracy to ballistic missile defense. Right now, we have 40,000 sailors deployed aboard 124 ships and submarines around the world as part of our ever-deployed force.

However, as we look ahead, in the balance of capability and capacity, we are seeing 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 their shores and with improved warfighting capabilities.

A number of countries who historically have only possessed regional military capabilities are investing in their navies to extend their reach and influence as they compete for global markets. Our Navy needs 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 as we go forward.

In order to align our surface combatant investment strategy to best meet evolving warfighting gaps, our fiscal year 2010 budget request truncates the *Zumwalt*-class guided missile destroyer (DDG-1000) program at three ships and restarts the DDG-51 production line. This plan best aligns our service combatant investment strategy to meet Navy and combatant commander warfighting 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.

The Navy can always be persistently present 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 (AFRICOM) capacity commands will not mitigate the growing European Command (EUCOM) requirement and Southern Command (SOUTHCOM) has consistently required more presence that goes largely unfilled.

The Navy remains committed to procuring 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 maritime security and antipiracy operations.

The Navy remains committed to an 11-carrier force for the next three decades, which is necessary to ensure that we can respond to national crisis with the currently, presently described time lines. Our carrier force provides the Nation the unique ability to overcome political and geographic barriers to access for all missions and to project power ashore without the need for host-nation ports and airfields.

The *Ohio*-class ballistic submarine, originally designed for a 30-year service life, will start retiring in 2027 after over 40 years of service life. The Navy commenced an analysis of alternatives in fiscal year 2008 for a replacement *Ohio*-class ballistic submarine (SSBN). Early research and development will set the stage for the first ship to begin construction in fiscal year 2019. This time line is consistent with the development of the *Ohio* class.

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 security environment; and it is replacing our aging 688 class submarines. Now, in its tenth year of construction, the *Virginia* program is demonstrating that this critical capability can be delivered affordably and on time.

In this budget request, we have delayed the start of the follow-on cruiser program known as Future Class Cruiser (CGX). This requirement has been validated by the Joint Requirements Oversight Council (JROC), and the JROC approved the initial capabilities document. However, this system is dependent on development of certain aspects of the ballistic missile defense system, total architecture, specifically sensors and sensor netting. Thus, the analysis of alternatives remains in Navy staffing until we better understand the required sensors for this platform and our ability to deliver that capability.

The Commandant of the Marine Corps is determined that a minimum of 33 assault echelon ships is necessary to support Marine Corps lift requirements; specifically, he has requested a force of 11 aviation capable ships, 11 LPD-17s and 11 LSDs. The Chief of Naval Operations supports the Commandant's requirement; however, this requirement, as well as the CGX requirement, will be further reviewed by the Department during the Quadrennial Defense Review (QDR).

The Navy must maintain its carrier submarine and amphibious forces. In addition, we need to increase our surface combatant capacity with additional destroyers in LCS to meet combatant commander needs today and for ballistic missile defense, theater security cooperation. And then steady state security posture of the future.

I thank you for this opportunity to discuss the Navy shipbuilding program and your support of our Navy. I look forward to answering your questions and, again, thank you very much for your support to the Navy.

[The joint prepared statement of Admiral McCullough and Secretary Stackley can be found in the Appendix on page 41.]

Mr. TAYLOR. Admiral, thanks for your comments and, above all, thanks for your many years of service to our Nation.

I am going to turn to Mr. Akin.

Mr. AKIN. I didn't have any specific—I guess I could run through a couple of different things here.

The first one is the *Arleigh Burke*-class guided missile destroyer (DDG-51). Last year, the Navy was criticized for proposing to restart the DDG-51 line without having revalidated the requirement through the Joint Requirements Oversight Council (JROC).

In your opinion, was that necessary? Have you done so? Or is it not really necessary?

Admiral MCCULLOUGH. We took the DDG-51 brief through the Joint Requirements Oversight Council. There were specific questions about what drove the change. The change was driven by our evaluation of changing threats globally.

This was conveyed to the JROC, specifically the development of antiship ballistic capability in the western Pacific; the proliferation of ballistic missiles globally; the improved capability in nonstate actors, specifically demonstrated by Hezbollah in the 2006 war with Israel when Hezbollah launched two C-802 coastal defense cruise missiles, one striking the Israeli ship *Ahi-Hanit*, and the other striking a merchant vessel.

So from an area air defense perspective and an antiballistic defense perspective, we saw a rapid increase in development of threat capability and the proliferation of this capability.

Additionally, we have been monitoring submarine deployments of potential adversaries in the Pacific and have noted an increase in deployment numbers and times of that potential adversary out into areas east of Taiwan. These are not with previously noted noisy-type submarines, but with increasingly quiet, advanced diesel electric submarines with antiship cruise missile capability.

When we looked at the development of the threat and the fact that the development of that threat had moved to the left, we found it increasingly necessary to increase our capability and capacity in those areas.

This goes hand in hand with the capability that we have developed in the DDG-51 class ship. There are those that would say that is older technology, and I would say that the capability we put in DDG-112 is substantially much better from a capability standpoint than what was originally put in the *Arleigh Burke* in the early 1990s. *Arleigh Burke* DDG-51's first deployment was in 1991.

When we look—

Mr. AKIN. Is that capability that you are talking about stronger in terms of the ballistic defense or also submarine, antisubmarine?

Admiral MCCULLOUGH. Open ocean submarine warfare in the case of the *Arleigh Burke* destroyers is much better. The *Arleigh Burke* has a much more powerful, active sonar; and that was by design. The DDG-1000 has a lower-power sonar, but that is required in littoral operations, specifically in a reverberation environment.

The DDG-1000 ship is an excellent ship for what we asked the designers to design and the shipbuilders to build, but it does not answer the threats we see today in antiballistic missile defense, cruise missile defense and open ocean antisubmarine warfare.

That is why we made the change, sir.

Mr. AKIN. One other question, then.

My understanding is that the Navy intends to spend \$1.6 billion to complete research and development (R&D) on DDG-1000, and that may have benefits for future platforms such as CVN-78, the *Ford*-class carrier, and help the industrial base. But since DDG-1000 provides a capability that is less valuable to the Navy in the future, can you tell me if the Navy has considered sacrificing some of that capability in order to save the money for R&D or procurement, or it could be applied elsewhere?

Secretary STACKLEY. Sir, if I could take that question, let me break down the R&D elements of DDG-1000 into a couple of categories.

First, you have an R&D stream that goes for the total platform that, regardless of the quantity that you build, if you are going to build one, we have to complete the design development for the class.

There is a second R&D stream that goes to supporting completion of development of major systems, such as the dual band radar, the advanced gun system; and again, if you are going to field one DDG-1000, you are going to have to invest in those dollars. And then the dual band radar, as well, goes to the carrier program. So that stream would stay in place.

But there are significant opportunities to improve on the total dollars, particularly when we take a look at some of the test and evaluation (T&E) requirements. The T&E program for DDG-1000 is extremely robust, and I am working with the program office right now. We are basically going line by line, tracing requirements—program requirement, platform requirements, system requirements—to test requirements and basically looking to be able to harvest some of those opportunities. Those aren't in the near years. You don't get heavy into T&E until the outyear.

But we are attacking it, and I would be happy at the right time to return to the subcommittee here and give you greater insight into both the opportunities and the approach we are taking.

Mr. AKIN. Thank you very much.

I yield back, Mr. Chairman.

Mr. TAYLOR. Thank you, Mr. Akin.

Secretary Stackley—and again you are fairly new to the job; when we express our disappointment in the Navy's failure to articulate a shipbuilding plan, you just happen to be the one to get the message today.

Without the Navy articulating a plan, let me tell you what I think is the plan.

Apparently, one of the centerpieces will be, as the Admiral mentioned, a very large purchase of LCSs. The LCS was—when the Navy came to Congress and said they wanted the ship, the centerpiece of it was, it was going to be an affordable warship. And the price grows from \$220 to \$500 or \$600 or \$700 billion per ship.

To use an analogy that the Secretary of Defense did the other day on a smaller aircraft, when it starts getting in the league, same price range as a DDG-51, and it is about one-fifth of the capability, then something is wrong.

I am going to ask you for the record, what is your target price for the follow-on vessels in the LCS program starting with the seventh and the eighth?

Secretary STACKLEY. Yes, sir.

Now the 2010 budget is requesting the fifth, sixth—

Mr. TAYLOR. I understand. Again, I realize this is going to continue to be a learning curve on the part of the manufacturer.

So what is your target price since we have a goal of about 50 of these vessels? What is your target price for the seventh and eighth?

Secretary STACKLEY. Sir, let me describe two pieces. One is budget and the other is target price. Because the target price would be our contract price with the contractors for delivering the ship, and then beyond that we have additional budget requirements associated with government—associated with integrated logistic support.

Mr. TAYLOR. I understand the additional packages.

Secretary STACKLEY. Yes, sir.

So we have taken the \$460 million cost cap and we have used that, I will call it, as a “forcing function” in terms of driving to that number because that is not where we are today.

So the numbers that you quoted, the 700 number, that would be a total budget number for the first two ships. We have come down measurably, going from the first two ships to three and four, and we look to make about equal strides in ships five, six and seven

with the 2010. That means we have not hit 460 for total program, but we are targeting 460 or, as you describe it, a target price.

Mr. TAYLOR. I was an early convert to Admiral Roughhead's decision to end the DDG-1000 program, go back to the 51s. I am in total agreement.

Since that is apparently going to be our warship of choice for the foreseeable future, what steps are you taking for a multiyear procurement contract, again, to get the best economies that the Nation can get on this warship?

Secretary STACKLEY. Yes, sir.

If I could combine this with your opening statement with regards to the agreement with industry, what we are doing as a part of that agreement is, we have made the decision that we are going to restart at one location, at Northrup Grumman Ingall's operation. And by making that decision, we are coupling it with investments in terms of production planning and in terms of yard-wide improvements to facilitate not just restarting, not just building like they built the last DDG-51 off the line, but let us look forward, at ways to significantly improve the way we bring this ship together in the long term—get off to a good start—those two ships in the 2010 and, we project, 2011 budget request, if you will.

And my target is to be able to move back into multiyear procurements in 2012 and out. That is a target; we have to work this through the 2011 process. We are going to have to be able to come back to you all to demonstrate that we are going to be able to achieve this significant savings.

As well, we are going to have to put together an economic order quantity advanced procurement plan that would start with planning in 2011, as well, at the Bath Iron Works. They will get their first DDG-51, their equivalent of a restart, 2012, they would be competing with Northrup Grumman in a multiyear environment. That is my goal.

Mr. TAYLOR. Thirdly, it has been my observation—and I will use the LCS program as the poster child program gone horribly wrong.

For years, Mr. Bartlett, the previous chairman and ranking member, and I would get reports from captain or admiral, one after another, Everything is fine; it is all on time, it is on budget. And then within a week or two, the change to where the Democrats got control of Congress, another admiral comes into my office, and it is literally an "awe-shucks" moment, "We have cut the main reduction gear backwards, everything is wrong, things really spun out of control on the program."

Part of that problem I think was that the officer in charge of the program, the baton would be passed to use a better analogy, about once a year. And every one of those officers left and said, Everything is fine.

We can't afford mistakes like that anymore. As I spoke on the Electromagnetic Aircraft Launch System (EMALS) program, electromagnetic launch on the next carrier, if it fails—and I support your decision to go with it, but if it fails—and it is not a joke—we have taken what should have been a \$7 billion aircraft carrier and we now have a \$7 billion helicopter carrier. No one wants that to happen.

It is my intention to recommend to the committee, as a part of our markup, to tell the Navy in our markup that you should appoint an officer who is going to be in charge of that program from today through the development of the prototype. Then tell the Navy that after that prototype is developed and accepted by the Navy, a second officer will be in charge of the development of the prototype to delivery of the vessel by the United States Navy in approximately five to seven years.

What would be your reaction to that?

Secretary STACKLEY. Let me describe that the program manager who is currently responsible for EMALS is top-notch. He is one of our superstars. And at this critical stage in the program, I have separately determined that he needs to stay until we complete system development demonstration.

And so we are on that path. So what you are proposing is what we are doing.

Mr. TAYLOR. What about for the second half?

Secretary STACKLEY. Likewise, sir. We are looking at timing. We want to be able to bring on the relief for the current program manager and give him more than two weeks turnover, actually start to lay the groundwork, because his focus is going to be on transitioning from the design development to the ship installation and integration. And it is a little bit longer than a normal rotation, if you will.

We are going to have to work that hard. But we see the value and the importance and the criticality.

Mr. TAYLOR. Again, I am glad to hear we are in agreement.

I think it makes perfect sense to put it in the law. Since people come and go, we need to see to it that the law remains steady and that the program is—again, that it is done right.

I want you to know that I do support your decision to go to the EMALS. We want to make sure we get it right.

Having said that, the Chair recognizes the gentleman from—the Chair recognizes the gentleman from California, Mr. Hunter.

Mr. HUNTER. Thank you, Mr. Chairman.

Secretary Stackley, General Dynamics-NASCO in San Diego, according to the Navy's view, is doing really well with their T-AKEs. The costs are going down, they are on schedule, and it is a pretty amazing job that they are doing.

I know that funding for the last two planned ships in the dry cargo/ammunition ship (T-AKE) program, 13 and 14, are in this year's budget, and there is \$120 million in advanced procurement funding and some R&D funding also requested towards the MLP, which represents a critical capability to the Marine Corps, and it is also NASCO's nearest-term ship they are going to be building after the T-AKEs.

Secretary Gates announced last month that the procurement of the first mobile landing platform (MLP) ship was going to be deferred to 2011, as with the procurement of the eleventh amphibious transport dock (LPD-17) ship and the QDR, even though, from what understand from the Navy, they wanted the MLP funded in 2010.

So the question is, do you agree that we need to do what we can to make sure that there is not a production gap between the T-

AKE and the MLP, which there would be with only \$120 million, from what I understand. That is not going to be enough to sustain the shipbuilder in between 2010 and when the MLP starts being produced; there is going to be a gap there.

And to add on to that, too, with what is going on in the general economy, this is kind of just a broad question, I would think that the Navy and you especially, Mr. Secretary, would be more intent on letting the administration know what shipbuilding does for the local economies and where we are—it creates job, it helps out the economy in general.

You hire American workers and make an American product and buy American steel; and I think that ties in with the entire state of the American economy. And if you lobby harder, maybe we might be able to get some of this stuff done. This creates jobs.

Anyway, back to the MLP, please.

Secretary STACKLEY. Yes, sir. Let me describe a couple of components there, first, T-AKE.

The T-AKEs that are being requested in the 2010 budget, those were originally—in terms of the contract, there was a 2010 option, a 2011 option, and then in terms of the budget, what we see is an opportunity to improve cost on those contracts by joint buying, buying two ships in the same year.

So there is an economic decision, if you will. We are looking at savings of \$170 million, the way we have programmed in the T-AKEs, two ships in the 2010 budget request. So that helps stabilize the shipyard. That helps stabilize the vendor base. And it also meets our Phase 1 Maritime Prepositioning Force (Future) (MPF(F)) requirement. So that is the logic and justification for bringing two T-AKEs into 2010.

The MLP program, on the other hand, was originally intended to have been a competed program. And in fact, when we went through the competition process, we found ourselves quickly in a sole source, so we were able to improve on the schedule, if you will, to get to a contract, and our marching down the R&D line and the design development for MLP with NASCO in that sole-source environment. But we did not see a contract award prior to the fourth quarter of 2010 in that schedule.

Mr. HUNTER. What I am talking about is the R&D, the \$120 million that is being put out there now to keep them going for all their design change, reducing risk, trying to make—for once they are actually doing it right, where they are trying to get risks down, get everything done early, get engineering done early on, get everything designed so that when they actually start making it, there are not a bunch of changes along the way and then everything skyrockets like the LCS. They are actually doing it the right way.

What I am saying is, there is not enough money in there in that 120 for them to sustain between the T-AKE and the MLP. There is a gap there that is going to end up costing them more down the line, costing the Navy more down the line, because they are going to have a gap in their shipbuilding.

It is not an incredible amount of money that they will need. I am not sure what it is, but there is a gap there when it comes to what they are going to be getting between the T-AKE and the MLP.

Secretary STACKLEY. Yes, sir, to try to tack on top of that:

\$120 million of R&D that goes to the shipbuilder, primarily to the shipbuilder, for his design and development for MLP, it also includes advance procurement to lead the ship construction. We did not see a ship construction contract, though, based on the design development schedule before the fourth quarter of 2010.

There is a potential gap right now, looking at the workload at NASCO. We never like seeing a production gap at our shipyards. But given the choices between T-AKE and MLP—timing, potential savings—we believe the right answer is, put in advanced procurement to try to take care of the up-front activities so they can move quickly into a construction contract if, as a result of the QDR, we request an MLP in 2011; and we will be staged to minimize any potential gap between the T-AKE and the MLP.

Mr. HUNTER. Wasn't the MLP already slated for 2010, though? The MLP was originally asked for for 2010 by the Navy.

Secretary STACKLEY. In the 2009 budget request, when you look in the 2010 column, you would see an MLP.

Mr. HUNTER. It was slated for then and it was pushed off to 2011, so—okay, I understand what you are saying.

I think you are making the wrong decision by leaving that gap there. If the Navy originally wanted it then, it is being pushed off and it is going to produce that gap. You could potentially see thousands of jobs lost, literally, and then you are also going to see production suffer in the future for the MLP based on that gap that exists between the T-AKE and the MLP.

That is all I have, Mr. Chairman. I yield back.

Mr. TAYLOR. The Chair thanks the gentleman from California.

We now recognize the gentleman from Connecticut. Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman. I want to focus a minute on the *Ohio* research and development request.

Again, in your opening remarks, Mr. Stackley, there was a comment that “ship designs must be appreciably complete before the start of fabrication to avoid concurrency and rework,” which Mr. Hunter referred to in his comments, is that trying to get the design done and finished so you don't have to change in midconstruction seems to be a new sort of mantra here.

Given the fact that the *Ohios* are going to be coming off line, as the Admiral said, in 2027 and the construction is targeted for 2019, I mean, that is the point here, isn't it, to get the R&D and design work started so that we won't have that kind of difficulty?

Secretary STACKLEY. Yes, sir. What is referred to as the sea-based strategic deterrent, which is the *Ohio*-class replacement boat, if you will, we are targeting 2019 procurement; and the R&D receiving that procurement includes a request in 2010.

That R&D targets a couple of things primarily. One is what is referred to as the common missile compartment. The U.S. and the U.K. are jointly developing a common missile compartment that will support both our requirements as well as the U.K.'s successor class, which will replace the Vanguard. This is rather unique that the U.K. is ahead of the United States in terms of its requirements because the successor class is due, basically initial operation—operational capability, in 2024. So they are three years ahead of us in terms of need.

We are going to develop this jointly. So, in fact, our R&D is a bit ahead of historical R&D streams. So approximately 387 million of our 495 request goes towards that joint development with the U.K., the balance of the request going to the front end of design and feasibility studies for a new reactor plant design for this new boat.

Mr. COURTNEY. Just one question—the SSGNs are going to start coming off line probably pretty soon after the *Ohio*. And I guess the question—if we are going to invest in this early research and development, then we have got SSGN sort of right next in line in terms of coming off use.

Should we maybe be focusing a little broader than just the SSBN in terms of R&D or—I don't know if you have any comment on that.

Admiral McCULLOUGH. Sir, what I would say about that is, you know, we just completed the first deployment with *Ohio*; and initial indications are, that submarine did exceptionally well in performing its missions and what it was tasked to do. We are still trying to get our arms around what a follow-on strategy for SSGN and what the operational requirements would be.

Now, that said, as we go forward with an *Ohio* replacement, we need to look at what else we could potentially use that submarine for and what it could be adapted to, to go into an SSGN replacement. But at the same time, we have to be very conscious of what the potential cost of that submarine will be. And if you just did the inflation from an *Ohio*, it would be a substantial piece of our shipbuilding budget if you just inflated the cost of the original *Ohio* boat into the 2015 time frame.

So there will be a nuclear posture review, and I know there is a lot of discussion about that. But I can't see any decrease in requirement for the sea-based part of the strategic triad. You might see some reduction in the number of tubes required, but I don't see a reduction in that requirement.

And so we have to look at both what we see coming out of the SSGNs as operational capability and how we want to go to backfill that capability in the future and to contain the cost on a replacement ballistic missile submarine, sir.

Mr. COURTNEY. Thank you, Mr. Chairman.

Mr. TAYLOR. The Chair thanks the gentleman. The Chair now recognizes the gentleman from Colorado, Mr. Coffman.

Mr. COFFMAN. Thank you, Mr. Chairman.

Mr. Secretary, one question about the—given the current situation the economy is in, it seems that commodity prices have dropped, labor prices have dropped. In terms of acquisition, how have we benefited from that in terms of reductions in cost?

Secretary STACKLEY. Let me describe a couple of things. You said commodity and labor. In fact, we are not seeing a reduction in labor costs. And I will come back to that.

Commodities—commodities have come down significantly when you look at where they were one to two years ago, versus where they are today. Now, commodities in terms of shipbuilding, as an example, represent a small percentage of the total cost of the ship. So whether you are talking steel, pipe, cable, you are in the less than five percent total cost for the ship, for the raw material. So

we are going after those benefits, but they aren't appreciably changing the cost of the ships.

On the labor side, it is a more complex equation. When we look at labor and labor rates, they are affected by several factors. One is the direct wage that you pay to the worker, and that direct wage goes up with the cost of living or labor union agreements that are contracts between the shipyards and the labor unions. Those have been going up at a steady, predictable rate, and so in fact what we have with the shipyards are what are called forward pricing rate agreements that account for that.

The second major component associated with those rates is the overhead and indirects. Overhead is associated with the facilities' costs that the shipyard is operating. So they have a cost that comes back in their pricing for such factors as appreciation or capital expenses that get spread out over the term of the equipment; and then you have the indirect costs which would include such things as insurance, health insurance, a number of those factors that again are not coming down. Those are going up.

So when I look at the categories that you just described, commodities, we are going after it; it is not having the big bang because commodities don't represent a large percentage of the cost. And then rates, we don't have much influence—I am going to say, frankly, we don't have influence on the direct wages that are going to the workers or some of the indirects.

But what we do have the ability to go after are the overheads. So I have spent time with the CEOs of our shipyards, attacking that issue. Much of our overhead was sized for larger throughput than what we have got today, okay? Some of these facilities, going back to the buildup of the 1980s, some of them have been drawn down over time. So many of them have recapitalized.

What we have to do is ensure that the shipyards that are building our ships are the right size for the production we have got going through them to bring that overhead down. It doesn't happen quickly. So we have to work closely with those shipyards to be able to drive that overhead rate down.

The piece you didn't talk about, when you mentioned commodities and rates, was the rest of the material costs, in this case, for ships. And that is where you start to get into equipments, components, hardware. That is not coming down with the price of commodities because that, in fact, brings a lot of touch labor to it and it is typically highly skilled touch labor when you talk about whether it is gas turbine engine or whether it is a common equipment enclosure for electronics. In that case, what we have to look at is—commonality as an example, where we try to drive common equipments, yet the benefit of economic order quantities to get at that material cost.

So we are tackling the equipments; commodities, we don't have the bang for the buck that we—you might look to see based on what is happening with economic rates; and we are going after overheads.

Mr. COFFMAN. It seems like what you mentioned earlier was a lack of competition. It seems like that is a factor in the fact that we haven't been rightsizing in terms of capacity.

Secretary STACKLEY. There are certain cases where you don't have competition. And so we have to work—we have to use other methods to attack some of the cost structure in the noncompetitive environment. But even in those cases, you go after the material underneath of the prime, if you will.

So if you have a shipyard that is the only shipyard building that type of ship, you have to go after the whole cost structure, which includes everything that he buys and drive competition down throughout the program. Where we do have competition has proved to be extremely effective in motivating a focus on cost performance.

Mr. COFFMAN. Mr. Chairman, I yield back the balance of my time.

Mr. TAYLOR. The Chair thanks the gentleman.

The Chair now recognizes the gentleman from New York, Captain Massa.

Mr. MASSA. Thank you, Mr. Chair. And I have no questions at this time.

Mr. TAYLOR. The Chair then recognizes Ms. Pingree.

Ms. PINGREE. Thank you, Mr. Chair.

Mr. TAYLOR. The gentlelady from Maine.

Ms. PINGREE. Well, thank you very much. I appreciate both your service and your testimony this morning. And as you probably know, I am one of the newer members of this committee, just elected in November. But I represent the First Congressional District of Maine. So Bath Iron Works is in my district, and we are very proud of the work they do and their ability to work with you.

Honestly, much of what I am concerned about, of course, is the size of the future Navy. Some of these questions have already been posed to you and I appreciate your answers. I know that much of this won't come up until the Quadrennial Review, but we are very anxious, of course, to make sure that the industrial capacity not only for my district, but just generally in the shipbuilding industry continues to grow, that we have the competition in the business, but also we have the business going on in building ships. For us, the opportunity to continue to build ships is important.

The plan right now clearly works well for us to build the DDG-1000s and to be in line to go back to building the DDG-51s.

Ms. PINGREE. But I just want to hear you talk a little bit more about that from our perspective. I know that we had Admiral Roughead visit our district recently to launch our most recent ship and talked about the capacity of Bath Iron Works (BIW) and the quality of our work. And, frankly, I just want to hear you say it again and say that this is important to us, that industrial capacity is important, that we will be hearing more, as has been asked today and was asked previously in our hearing yesterday, about, you know, continuing to build ships and the importance of shipyards and not losing that capacity as we see our work force being downsized and some of the issues that have gone on in the past which I think is bad for national security, bad for the manufacturing capacity of this country, and worrisome about the future.

Secretary STACKLEY. Yes, ma'am.

Let me first say that I was at that christening with Admiral Roughead, and I was able in my remarks to bring back to every-

body the statement that Bath built is best built. It is not just a logo.

Ms. PINGREE. That is our favorite statement.

Secretary STACKLEY. It is tattooed in the hearts and minds of every worker up there, and I say that with all sincerity.

A couple of quick comments. We just talked about competition and how important competition is. When we look at surface combatants, Bath Iron Works and Northrop Grumman have been our surface combatant builders for my life, and what we see is we see a very robust competition between the two, not just in terms of costs but in terms of innovation. And when I look at the land level facility at Bath Iron Works and the investment that really turned the corner in terms of their performance, that was driven by competition. And so when we look forward to future construction of surface combatants, I look forward to continued competition.

The chairman made reference to the agreement between the Navy, Northrop Grumman, and Bath Iron Works. An important part of that agreement which builds the three DDG-1000s at BIW is the stability that it brings to that shipyard. We are able to address what was a concern associated with future workload and, at the same time, take advantage of three ships, one learning curve, one shipyard, which is good for the Navy, good for the Nation, and just happens to be good for Bath Iron Works.

Admiral MCCULLOUGH. And if I could, ma'am, let there be no confusion that the Chief of Naval Operations (CNO) stated in his testimony and I will state it here, the minimum number of ships to execute the maritime strategy—global maritime strategy for the 21st century is 313. We have said that repeatedly. CNO stands by that, I stand by that, and that is what we need. And so that is a minimum of 313 ships.

Ms. PINGREE. Well, thank you for your thoughts. And, again, that has been brought up several times since I have been on this committee, this concern that while there is a commitment to increasing the size of the ships, and 313 is the number, the current plan does not look like we are going to get there. So I know there is a lot of talk about that being in the Quadrennial Review. I just want to say that I am anxious to see that and make sure that we do continue to reinforce that capacity.

And just to add a note, I am glad you brought up the land level facility; and I think that is another important factor about Bath Iron Works. I served in the State legislature at the time when the State made that commitment. The State of Maine helped to build that part of the facility to modernize it, and so this is a commitment that not only is part of the companies that work there and the workers that work there but our State, too. We clearly recognize this is important to us and to the industrial capacity of our Nation and to the future of the Navy and so appreciate this partnership and look forward to it continuing.

Secretary STACKLEY. Let me go a little bit out of bounds here and talk a little bit further on that. Because that land level facility represents a couple of things. It was the result of competition. Basically, General Dynamics (GD) Bath Iron Works knew that they had to do something different or they weren't staying in the game.

But it was also the result of stability and a multi-year procurement that gave them the ability to commit the investment to the facility where they knew that they would get the return on investment. So we have competition, stability, and a solid acquisition approach that resulted in driving down the cost, as well as delivering to the Navy what it needed in terms of ships on schedule and on budget.

Ms. PINGREE. Well, thank you. It seems to have been a successful plan, and I can guarantee you we are committed in our State to continuing to be innovative and bring down costs and deliver best-built ships on time. So thank you.

Mr. TAYLOR. The Chair thanks the gentlewoman from Maine.

The Chair now recognizes the gentleman from Virginia, Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman.

Secretary Stackley, Admiral McCullough, thank you for joining us today and thank you for your service to our Nation.

Admiral McCullough, I will begin with you. The other day when Admiral Mullen came to testify before us concerning the authorization process, one of the questions I asked him was concerning a proposal to go from 11 carriers down to 10 carriers; and I have a couple of questions along those lines for you.

Is it the Navy's intention to ask for a change in the law which presently requires 11 carriers, or a waiver? And, if so, it looks like that drop from 11 to 10 would take place, according to Admiral Mullen, in the years 2014 and 2015 for about a 24-month period. Can you tell me if you believe that that is going to have a strategic impact on this Nation's naval capabilities? And, if so, what are the contingencies that you would put in place to make sure that there is not a drop or a gap in the strategic capability of this Nation?

Admiral MCCULLOUGH. Yes, sir. Thanks for the question.

First of all, what we need to do is take Enterprise out of service on time; and she is supposed to go out of service in November of 2012. That carrier will be about 47 years old. As you well know, it is an eight reactor ship, one of a kind. It was our Nation's ability to try to put nuclear power to sea in an aircraft carrier that drove the design and construction of Enterprise, and it was very successful, and it has served in everything from the Cuban missile crisis to recently in the Arabian Sea and the Arabian Gulf.

The ship needs to be retired on schedule. So the waiver we request is to be able to decommission Enterprise and inactivate Enterprise in November, 2012.

Now, that will lead us to a 10 carrier level until the delivery of the *Ford*, CVN-78, which is scheduled for September, 2015. So the question, can we mitigate our operational availability of the Nation's aircraft carriers during that period? Yes, sir, we can.

We have moved some availabilities forward, PIAs for the aircraft carriers maintenance availabilities, and we have moved some to the right in order to produce that operational availability to meet the commitment of the Navy to the Nation during that time frame.

I would also tell you that if we don't take Enterprise out and the direction is to keep her in service and we have to put her in the dock to do the maintenance required to continue that ship in service beyond 2012, it significantly disrupts the refueling schedules for

the remaining *Nimitz*-class carriers. The one immediately impacted in that time frame is Abraham Lincoln, CVN-72. When Lincoln comes home from her last deployment prior to her currently scheduled refueling availability, she is out of gas, if you will. So if we put Enterprise in the dock to do the maintenance availability on her to get her beyond 2012, not only do you have that aircraft carrier out of service, you can't get any more operational availability out of *Nimitz* or out of Lincoln because she is out of fuel. And then each subsequent refueling would be delayed.

Now, there is a compounding factor associated with that. Because now you have to retain Enterprise after she comes home from a deployment, after the maintenance availability. So if she went into that maintenance availability in 2012, she got one deployment's worth of fuel left in her. So if she deploys, she comes home, now, because we have delayed the refueling availabilities of Lincoln and beyond, we have no place to fit her in to do her inactivation availability.

It is a nuclear powered warship. You can't lay it up and put a very reduced crew on it. You have to keep the crew on it to maintain the propulsion plant.

So now we have got this carrier set aside with no operational availability out of it, maintaining a crew of around 2,000 people on it, which have to be there and can't contribute to the Navy elsewhere. And we looked at taking those people out and putting them on the follow-on ship. So the answer is we need legislative relief to take Enterprise out of service on time, and we can mitigate the operational availability.

Mr. WITTMAN. Would that legislative relief be in the form of a waiver or a request to change the law?

Admiral MCCULLOUGH. I think it is in the form of a waiver, was what the legislative proposal was. I will get back to you on that for sure. I don't want to sit here and sort of give you a half answer.

[The information referred to is retained in the committee files and can be viewed upon request.]

Admiral MCCULLOUGH. But the Nation, as I said in my opening statement, is committed to—or the Navy is committed to 11 aircraft carriers for the next three decades; and Secretary Gates was clear on that when he talked about moving the build cycle to five-year centers.

Mr. WITTMAN. Thank you, Mr. Chairman.

Mr. TAYLOR. The Chair thanks the gentleman for a great question and wants to compliment the Admiral on an excellent answer. I appreciate, for the sake of the committee, you walking us through that.

The Chair now recognizes the gentleman from Indiana, Mr. Ellsworth.

Mr. ELLSWORTH. Thank you, Mr. Chairman; and I apologize for being late. If these questions were already answered, I apologize to you all.

I was in a meeting—I heard Secretary Stackley say our favorite saying. I was in a meeting with the President about three weeks ago, and he said that at some point we have to start making decisions on national defense based on national defense. I hope that is

up there in the top of our favorite sayings, also, because I think that is very true.

I want to ask three questions, hopefully from the short answer up to the longer answer.

My first question is when we plan to announce the propulsion system for our cruisers. If you will think about that one, if you can give me an answer on that.

The second, I would like your thoughts and plans on spare long-lead reactor parts, addressing that issue.

And, thirdly, and what might take the longer answer, is that Secretary Gates announced in April about going to the five-year building procurement on the carrier. I would like the justification and logic on that and what that might do to the price of these carriers.

And if you can get all three of those in my five minutes, I would appreciate it, if possible.

Secretary STACKLEY. Okay. Let me start with the question regarding the propulsion system for the cruiser.

The cruiser, as Admiral McCullough alluded to earlier, is outside of the Fiscal Year Defense Plan (FYDP), and I don't want to try to pin down a date right now. Let me simply state it is outside of the FYDP.

What we are doing in terms of preparing for the cruiser is identifying what the capabilities are that are required to not just meet the mission but we are also projecting the threat, if you will. So the immediate work that is going on, that is follow-up to the analysis of alternatives that was done about a year ago that is continuing to be reviewed is to identify the capabilities and the system and technology developments that are needed for that cruiser. That will inform what the requirements are, the larger hull, mechanical and electrical requirements are for the ship in terms of electrical power propulsion, size, displacement, et cetera.

With that information, then you start to get into the design cycle for the propulsion plant or the integrated propulsion plant, which would also bring your power systems. So we don't have sufficient fidelity for those requirements to start serious analysis, if you will, for the propulsion plant. Absent that, what we are doing is feasibility studies.

So we are quite mindful of the NDA requirement that a future cruiser would be nuclear powered. We have to have greater fidelity in terms of what size, shape, what it is going to look like, what it is going to operate to be able to come back to the committee and provide any specifics regarding our analysis.

So in terms of our feasibility, what we are doing is taking existing propulsion plants, CVN-78 design, and scaling, if you will, what would half of a CVN-78 propulsion plant mean in terms of size of ship required, if you will, to drive that around, and do we have a match or do we have a mismatch with the systems and capabilities required for the future cruiser to meet its requirements against the future threat.

The second question regarding spare long-lead reactor plants parts, we do have a very unique and somewhat fragile industrial base associated with U.S. Navy reactor plants. And so we are very mindful, very careful to try to avoid peaks and valleys regarding workload associated with, whether it is carriers or submarines, and

we used advanced procurement, if you will, to try to help smooth out the workload there. So regarding long lead, I think we have a very healthy long-lead advanced procurement plan for our nuclear powered ships.

Regarding spare reactor plant parts, I would have to get back to you on that. I don't know that we are not properly spared in that case.

[The information referred to is retained in the committee files and can be viewed upon request.]

Mr. ELLSWORTH. And, thirdly, just the justification logic for the four- to five-year announcement on the carrier procurement, what that is going to do, add to the cost, take away from the cost, how that works into the goal of the 313 ships.

Secretary STACKLEY. I think the justification is more of a requirements issue.

I will just quickly touch on the cost considerations. When we look at Newport News and its workload for what was to be a 2012 carrier and is now projecting to be a 2013 carrier, at that same point in time we will have a Refueling and Complex Overhaul (RCOH) ongoing at Newport News, and we are into the two-boat-per-year phase for the *Virginia* class. So there is, in fact, a lot of activity, a lot of work going into Newport News in that period of time.

The impact on costs would be, as I was discussing earlier, the effect on overheads associated with pulling the work to the right as well as the effect associated with inflation when you delay procurements an additional year. So we use advance procurement. We have an opportunity to use advance procurement to offset some of those escalation impacts, and we are going to work around the work going on in the shipyard at the time, completion of CVN-78, ramping up to two submarines per year on the *Virginia* class and the RCOH to try to minimize the cost impacts. And I am not at this point able to give you a good assessment of that because we are still going through all the puts and takes, and it will be significantly impacted by the lead stream that we put into the CVN-79.

Mr. ELLSWORTH. Thank you.

I yield back, Mr. Chairman.

Mr. TAYLOR. The Chair thanks the gentleman.

Secretary Stackley, I think you are hearing a lot of interest on the parts of the members of this committee, a lot of concern about the industrial base. And I think you are hearing a willingness on the part of this subcommittee to make investments in our yards if we can turn around and tell the American people that, by making taxpayer investments in these yards, we are getting a better ship, quicker, greater capability and, above all, a better price for the taxpayer at the end of the day. I was curious what type of initiatives that you have in mind that we could help you with legislatively towards that end.

Secretary STACKLEY. Yes, sir.

Let me first walk through the way we incentivize investments today. I gave a generic discussion on competition. Competition basically drives shipyards to figure out how to get costs out, which means investing in facilities to improve their performance. Ship construction is labor intensive and it is capital intensive, so what that means is heavy front end load in terms of facilities tooling ma-

chinery that gets written off over time on ship construction contracts.

So what we do there is we do a couple of things. They have the ability to depreciate on their contracts, their investments. As well, we provide what is called a facilities cost capital of money. If they tie money up into facilities, we allow that to come back on the contracts. We replace the equivalent earnings of that money that got tied up into facilities.

And then, going beyond that, what we have done is we have opened up what we refer to as capital expenditure incentives, where we put incentives in the programs where the shipyard identifies a return on investment. We pay the front end in an incentive. When he demonstrates a return on investment, then we pay the back end in terms of incentives.

Mr. TAYLOR. If I may, Mr. Secretary, I appreciate everything you said. But since most of our shipyards operate on basically a cost plus basis, what incentive do they have to identify that saving?

I am going to disagree. I think it is our job as a Nation to identify those things and point it out to the shipyard, rather than the other way around.

Secretary STACKLEY. Yes, sir.

Mr. TAYLOR. That is what purchasing agents do for a company.

Secretary STACKLEY. Yes, sir. Let me try to—let me clarify in terms of most of our shipyards working on a cost plus. I think what we have is most of our ship construction contracts right now are fixed-price type contracts. But we buy ships one year at a time. So when a shipyard is trying to make or a corporation is trying to decide whether or not to make a significant capital investment to reduce its costs, even if it is a fixed-price type contract, it has to be able to convince itself that it will get the return on investment not just this year but guessing what will happen in the outyears.

So in terms of the government as the customer, as the buyer, what we have to do is work with industry to try to either offset the risks associated with an investment up front with nothing on the back end to justify it, and we try to do that through—some through incentives, some through the way we buy our ships. And, frankly, we struggle to get to the things like multi-year procurements where, when you are laying a multi-year, you are laying in potentially five years' worth of known quantity of work, and that will drive him to invest on the front end to get the return over the five years. Those are the tools that we have in hand today.

We have chartered a separate group to do an independent assessment regarding investments, costs and investments in our shipyards. And the facts come to bear that there are investments pretty much across the board where there is either a healthy front-end stable workload or competition to drive the investments.

What we don't have is a tool where we would go in and pay direct for a shipyard to upgrade its facilities. That starts to go down a path where, when you look at the industrial base, how would you meter that out? How would you decide where the government makes its investments, where the government will get the return on investments across the broad industry? It is a challenge.

Mr. TAYLOR. It is a challenge, Mr. Secretary, but I think it is your job to do that, quite honestly. And I don't say this happily,

but we are in a situation where our six major shipyards have one customer, that is the United States Government. Whether it is the United States Navy, the United States Coast Guard, they have got one customer. And as that customer, I think, and with the responsibility of 300 million people to defend them but at a price that is reasonable, I cannot encourage you enough to take those steps to identify those procedures, come to this committee with your recommendations, and then put the responsibility on us to make a pitch to the rest of the Congress to make those things happen. I think you are the man to do that, and I hope you will do that.

Secretary STACKLEY. Sir, I will take it for action.

Mr. TAYLOR. Thank you.

Going back to Mr. Ellsworth's questions, it is the committee's decision to try to work with the Navy on the LCS program. I believe the committee is in agreement with the CNO as far as the DDG-51.

The fact of the matter is they are both extremely capable warships, but they are both gas guzzlers. Last summer, when gasoline prices were \$4 a gallon, that committee responded by saying that the next generation of amphibious assaults ships would be nuclear powered. The year before that, when gasoline was about \$3 a gallon, this committee decided that the next generation of cruisers would be nuclear powered. I am of the opinion that gasoline is temporarily down. I am of the opinion that when the world economy recovers that price is going to go back up and that I am told that the next—that a typical cruiser uses about 10 million gallons of fuel per ship per year.

So since I believe it is inevitable that the price is going up, that it is a military vulnerability to have warships that need to be refueled every three to five days, and that you can remove that vulnerability with a nuclear powered ship, I must express my disappointment in the Navy's decision to delay the building of the CGX.

I would also like to hear your thoughts on what steps you are taking when we build the nuclear powered cruiser to use the common propulsion plant that is going into the *Ford* carrier, the A1B, in order to not only get some economies of scale on the manufacturing side but also get economies of scale within the Navy on your training.

Secretary STACKLEY. Yes, sir.

Let me start with the last question there. The *Ford*-class propulsion plant, as I was discussing earlier, the CGX research and development (R&D) funding that we do have, the piece of that that is associated with the propulsion plant is doing feasibility studies taking exactly a look at the *Ford* plant, scaling it in half and trying to come to grips with what that means in terms of a total ship.

We don't design a ship around a propulsion plant, but the propulsion plant will start to put some limitations, if you will, on the ship design. So we have got a known configuration. We are figuring out what does it mean to scale it in half and then what does that mean in terms of driving, length, beam displacement for our cruiser. While, separately, we are attacking the issue associated with technology and systems development and design to meet the requirement, the capability warfighting requirement for that cruiser.

Mr. TAYLOR. Mr. Secretary, what is the Navy's reluctance to just go ahead and make that decision to say it is going to be an A1B, and, yes, we are going to build a ship around this power plant?

Secretary STACKLEY. Well, you start with the requirements.

Mr. TAYLOR. Going back to your earlier comments about the problem of having at one point, I think, 12 different ships under construction and all the issue of costs that went that. If you have got a power plant that you believe works, if we all know the economies of scale and that there are huge benefits to sticking with something that you know works, I would like you to walk the committee through why you are reluctant not just to say that is going to be the power plant.

Secretary STACKLEY. Yes, sir.

Let me—I will start by offering follow up in terms of a classified briefing. But in an unclassified setting let me walk through—and Admiral McCullough might jump in here as well—where we are in terms of the analysis of alternatives (AOA) for the CGX.

The AOA was conducted a year plus ago, and there were two parts to the AOA, one part associated with the capability that is required to meet the mission, to defeat the threat, and the other part of the AOA was the platform that would carry the capability.

A couple of significant issues emerge. First and foremost is cost and size of the systems that are required for that mission. So that informs a decision that the CGX needs to move outside of the Future Years Defense Plan (FYDP). We can't get there from here in the time where the CGX was showing up in the budget. So the platform moves outside of the FYDP while we look forward at not just looking at the technology but how do we best go after this threat. Because we cannot get there based on the costs that emerged from the AOA. We have to look at other alternatives.

So the nuclear power plant piece of that discussion is really tied to the platform piece, while we tackle the more difficult issue of how do we get the threat, what technologies do we need. And it goes beyond a single platform. It goes beyond a CGX discussion.

Admiral MCCULLOUGH. The reason—one of the reasons for the slip at a cruiser, Mr. Chairman, was how much radar do we need in a ship. And some of this I will have to take off line with you.

But if you look at not only ship-based sensors but land-based sensors and overhead sensors and put them together in the right network, what size capability or sensitivity radar do you need to put on a ship? And as we worked through that, we saw no clear path to get to the capability we needed in the sensor for the ship that would get that ship built inside the Future Years Defense Plan (FYDP). So what pushed the ship outside the FYDP was no debate over the engineering plant. It was what size and sensitivity sensor do we need and what can we rely on from other sensors to mitigate the size of the one we would have to put on the ship.

And, as Mr. Stackley has said, the plant—when we looked at nuclear power plant options, the plant that would go in that ship is a variant of the A1B power plant because we have that designed and we would not want to commit a vast amount of money to re-designing another power plant to put inside the ship.

But what we really don't know is, because we haven't yet defined the sensor, we don't know what the electric generation capacity is

that will be needed to drive the combat system in that ship. And until we can bring all the pieces of the puzzle together, we don't know what the length beam and the displacement of the ship will be and what the power density requirements to drive that combat system and to propel the ship through the water will be. And so we are working our way through that.

If you look at the tankage required for extremely high-powered radar in a fossil-fueled ship, you also have to look at what the rotation rate would be from that ship being on station and have to go alongside in order to refuel. And so what is the true operational availability of the platform, because you are going to have to take it off line to refuel it.

And so, the cost of fuel aside, it gets down to really what the power density requirements are. We just haven't sorted that out yet, and we are working hard to get through it. So that is where we are, sir.

Mr. TAYLOR. The gentleman from Colorado, Mr. Coffman.

Mr. COFFMAN. Thank you, Mr. Chairman.

Just one question in general, because I think the chairman has raised a very critical point in terms of the logistical complexity as well as the long-term cost of relying upon conventional fuels. Is it that in the short run that the capital cost of a nuclear power plant is more expensive than a conventional power plant? In addition to the issues that you have raised?

Admiral MCCULLOUGH. That is something we consider, sir. But, in the end, you have to look at the total ownership cost of the ship or the life-cycle cost of shipment. And when you make an up-front investment in a nuclear propulsion plant it will add acquisition cost to the ship. But then as you look at the projected cost of fuel over the life of that ship and if we are going to build a ship that we are looking at—we are looking at a 50-year service life on this ship, similar to an aircraft carrier. What would be the life-cycle cost to operate that ship using fossil fuel?

So we don't just look at it from an up-front acquisition cost. I mean, obviously, that is an input, but we try to look at it from a total ownership cost. And that easily mitigates the up-front cost of nuclear power if you look at what we think the ship would require, if it requires the high-end radar.

Secretary STACKLEY. One of the CNO's priorities is fuel. If you look at the rate at which we consume fuel, it is both logistics and it is cost. And so, across the board, Navy systems platforms, we are attacking our fuel consumption rates. So we are looking—you look at aircraft, you look at ships, you look at ground vehicles. We are trying to figure out how to get a better handle on the rate at which we are consuming fuel.

Admiral MCCULLOUGH. And to add on to that, we are looking at alternative fuels, not just fossil-based fuels. And we would like to get to what we call the Green Hornet sometime in the near term that runs off a non-petroleum-based fuel.

Mr. TAYLOR. The Chair recognizes the gentleman from Virginia, Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman.

Admiral McCullough, I go back on another issue concerning our carriers. And I know that—I appreciate the Navy's willingness in

the decision making process for home porting, to make that decision through the Quadrennial Defense Review (QDR) process. I do, though, have a couple of questions that do seem to create some contradictions; and I would like for you to just elaborate a little bit on that.

I see in the Navy's justification book it clearly indicates that future projects at Mayport would include a controlled industrial facility, ship maintenance support facilities, and other construction projects that would be necessary only if a carrier were home ported there in Mayport. So I wanted you to maybe explain to me. Is there maybe a disconnect there or an updating that is needed in the justification book between the budget planning process and the decision deferral?

And then also the request for \$76 million for dredging and dockside improvements there at Mayport that, again, you would question, knowing that there are other ports in the Nation where they could accommodate a nuclear carrier on an emergency basis. And certainly that \$76 million might lead you to believe that there is the beginning of an effort there to create a permanent home porting facility there in Mayport.

So I was wondering if you couldn't comment on those.

Admiral MCCULLOUGH. Yes, sir. Thank you.

As we look at carrier facilities on the east and west coast, there are three bases, if you will, on the west coast that can accommodate a nuclear powered aircraft carrier in the *Nimitz* class. On the east coast, we currently have one; and that is Norfolk. So we believe that it is in the Nation's best interests to have an alternate carrier facility on the east coast to include both the ability to berth the aircraft carrier there and to service it as required if something would preclude getting in and out of Norfolk.

Sir, as you well know, the carriers won't fit through the Panama Canal. So if something happened and we couldn't get a carrier in or out of Norfolk for some period of time and the ship was coming home from deployment and required service, based on the current distribution of bases, we would have to send it around South America to get it to a west coast facility.

So we believe it is in the Nation's interest to have an alternate capability on the East Coast; and we believe the easiest place to do that is in Mayport, where the Navy has had aircraft carriers based since I believe about 1952 until the *Kennedy* was decommissioned. To get that ship in that turning basin with adequate bottom clearance requires dredging even to tie that ship up in Mayport. And that is what is in the budget request today.

The pier work in Mayport is not particularly associated with—that is in the budget this year. The budget request this year is not associated with an alternate carrier facility. That amount of money was in the budget for other pier work in Mayport to support the ships that are currently there.

As we looked at the requirement for Mayport, as you suggest, if we are going to truly have an alternate carrier facility on the east coast, you would need the ship's maintenance facility and the consolidated industrial facility to support the nuclear work. We would additionally need to do further upgrades to the wharf in Mayport.

So, given we are going to look at carrier basing and global force dispersal, or deployment, rather, in the QDR, we think it is in the Nation's and the Navy's best interest to proceed with the dredging project, to at least have an adequate facility to berth a carrier in Mayport, should we need to do that.

I know there are other ports on the East Coast that various folks think you could put an aircraft carrier in; and I have heard mention of Charleston, South Carolina, and Baltimore. The sea detail going in and out of Charleston in the Cooper River, with the flow and shape of the Cooper River, is difficult for attack submarine and cruiser destroyer type ships. Having served on Enterprise for 26 months and been the commander of two carrier strike groups, I would not want to have to live through that sea detail on a nuclear powered aircraft carrier.

I have also heard of Baltimore. And while the Baltimore ship channel going up the Bay I believe is dredged to a depth of 50 feet, having taken a DDG 10,000-ton destroyer to Annapolis, I, again, would not wish that sea detail on anybody to put a nuclear powered—or try to get a nuclear powered aircraft carrier into Baltimore.

So, given all those factors, the Navy came to the conclusion that Mayport is probably the best alternative for an additional carrier facility on the East Coast.

Mr. WITTMAN. Just as a follow-up on that then, it sounds like then from what you are telling me is that the Navy has pretty much got their mind made up prior to going into the QDR that Mayport's going to be the place and that we are essentially ramping up for that by the first phase with this \$76 million improvement there.

Admiral MCCULLOUGH. I would say we need the capability. I think the dredging is the first start. But the Navy and the Defense Department believe that needs to be looked at in the QDR. And while I have some ideas what the projects proposed in Mayport are, if the QDR decides that that is not the appropriate place to put the aircraft carrier, then we will revisit the whole issue.

Mr. WITTMAN. Thank you, Mr. Chairman.

Mr. TAYLOR. The Chair recognizes the gentlewoman from Maine, Ms. Pingree.

Ms. PINGREE. Thank you very much.

I hadn't really intended to ask you about this, but since I have this opportunity and a chance to ask another question, not only do I have BIW in my district but I have the Kittery Portsmouth Naval Shipyard where we recondition submarines. I have only had one opportunity to visit there, but it seemed like there was a tremendous amount of work going on and the need for a fair amount of construction to handle the capacity. It looked to me like there was more work than they could handle in spite of the excellent workforce, and I know they are hiring more and doing more. But I didn't know if you wanted to just talk about a little bit about the need for that capacity and what is going on there.

Secretary STACKLEY. Let me just describe a couple of things.

We have recently submitted in a report to Congress what is referred to as the Shipyard Business Plan, which takes a look at public-private, the division of work going into the public shipyards, and

then how do we plan and manage that workload to ensure that we are meeting our public-private requirements as well as ensuring that our shipyards are efficiently loaded.

And at Portsmouth—and I will get the number exactly wrong—but I would say that there is what we call full-time equivalents for workload at Portsmouth looks fairly stable at the 4—roughly 4,000 per year rate. In the repair world, particularly in Portsmouth's world where most of their work—all of their work is submarine, but most of their workload was tied to refuelings, and as we move—as we have moved out of 688 refuelings and have gone to Virginia where you don't have a mid-life refueling plan, then it becomes more of a challenge. So what we are trying to do is balance that skill level, 4,000, to workload to ensure we are not operating the shipyard inefficiently. And it will be a continual challenge.

Ms. PINGREE. Thanks.

Mr. TAYLOR. The Chair recognizes the gentleman from Missouri, the ranking member.

Mr. AKIN. We are starting to run long here, but I just had one quick question or concern. And that was, having been in charge of maintenance in a steel mill I know when there is a lot of budget pressure it is easy to sort of shave off the maintenance budget. Certainly in the last number of weeks we have been sensitive to a lot of budgetary pressures.

In addition, I believe that a lot of the maintenance requirements have been sort of moved out of the public domain in a way. I guess it is just a thought or a concern that we make sure that, you know, you are trying to keep a 300-something ship Navy, you have got to keep up on the maintenance, too. I hope that that is being balanced carefully. It might be something that we need to look at just to make sure that we are not shaving that too tight.

Admiral McCULLOUGH. Yes, sir. Thanks very much for that statement.

We look at maintenance very carefully. And as we talk about a 313 ship floor, as we go forward, two-thirds of that 313 is sitting at the pier right now. And if we don't get our ships to their estimated service lives we will never achieve the 313 floor structure plan.

In the current budget request we have funded or requested funding for service ship maintenance to a level of 96 percent of what we perceived the requirement is. And when we looked at the entire portfolio and the risk we were taking with respect to procurement and manpower and ops and maintenance, that four percent we believed was acceptable risk.

But absolutely, sir, we look at that. We think it is very important to do the right maintenance on the ships at the right times. And I would tell you, as part of our 2009 execution year challenge, we have curtailed some operations to continue to fund maintenance availabilities. And that is the way we view that, sir.

Mr. AKIN. I appreciate your keeping that kind of balance in the whole thing. Because there is so much pressure for platforms and new technology and all that kind of thing. And, as you know, if you let maintenance get away from you, then it can really eat you alive. Because it is a preventive thing. And you didn't catch it early and

now you have got to tear something all to pieces in order to get into some part you have got to change.

Thank you, Mr. Chairman.

Mr. TAYLOR. The Chair thanks the ranking member.

Gentlemen, I want to compliment you on what I think has been one of the better presentations that I have seen in my time in Congress.

Secretary Stackley, I think we are lucky as a Nation to have you where you are. And I would leave you with just one last thought. I am always amazed at the caliber of our officer corps and our enlisted corps. We are, as a Nation, are blessed.

I think, though, that, over the years, the most glaring weakness in our Department of Defense has been the acquisition force. It has been my observation that a grounding, no matter how slight, is a career-ending move for a ship captain. I would hope that a program that runs over budget or fails to be delivered on time, that we, as a Nation, would take the same attitude towards those programs, that we could instill in our acquisition force the need to—with a Nation that is going to run a \$1 trillion deficit this year and with a series of programs that have run late and well over budget, I would hope that one of your goals would be to get within your acquisition force that type of a mentality that we are going to be on time, we are going to be on budget, and we are going to get the best value for the fleet, for the sailors, and for the people who pay for that.

Secretary STACKLEY. Sir, can I offer a comment?

Mr. TAYLOR. Absolutely.

Secretary STACKLEY. Thank you.

Let me first say that, yes, sir, we have absolutely—we have to change course in terms of where we are going regarding cost and schedule performance on our major defense acquisition programs.

As far as the caliber of the individuals that you have working for you day in and day out to achieve that, we have top-notch individuals who are working hard. One of the challenges that we face is that in the course of the past 15 years we have taken the acquisition and work force and reduced it by 55 percent. So now what you have done is you have taken hard-working individuals and you have stretched them way too thin. So the Congress recognizes that, and the Department recognizes that, and we are taking the steps necessary to start the rebuild.

The Department of the Navy has 5,000 acquisition workforce members that we are going after in the FYDP. We have got it identified in terms of critical skills, where do we need them placed, and we are actively going after getting the best folks we can to come into the government to help us take on that task.

Mr. TAYLOR. Mr. Secretary, again, I think we are lucky to have you where you are. I very much appreciate the attitude you are taking towards this, and we are going to work with you to make that happen.

If there are no other questions, then the subcommittee stands adjourned.

[Whereupon, at 11:46 a.m., the subcommittee was adjourned.]

A P P E N D I X

MAY 15, 2009

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MAY 15, 2009

**Seapower and Expeditionary Forces Subcommittee
Chairman Gene Taylor
Hearing on the Navy FY10 Budget Request for Shipbuilding Programs**

"Good morning and welcome. Today we meet in open session to receive testimony on the fiscal year 2010 budget request for shipbuilding programs. Appearing before us today are the chief acquisition officer of the Navy, the Honorable Sean Stackley, and the chief requirements officer of the Navy, Vice Admiral Barry McCullough. Admiral, you are well known to this committee, welcome back. Secretary Stackley, while many of us know you and have worked with you in the past I believe this is your first time in testimony to this committee, welcome also to you.

"The good news is that we will not be interrupted by votes because the House stands in recess. It is my hope that will allow us to have a frank and detailed discussion on where we are and where we need to go with our shipbuilding programs. I thank the Members in attendance for staying to participate in this very important hearing.

"In previous years, at this very hearing, I have commented that the budget request and the accompanying 30 year shipbuilding plans were unachievable. In fact, I have stated that the long range plan was 'pure fantasy.' It now appears the Navy has learned how to deflect criticism of the shipbuilding plan: don't submit one. Although required by title 10 of the United States Code, all plans for future year's ship procurement are being withheld from the Congress. This obviously makes it very difficult for the Members of this Congress to fulfill their Article I responsibilities to 'provide and maintain a Navy.'

"I realize the two witnesses sitting before this committee today did not make that decision, and I will not continue to dwell upon it here. But I state for the public record that the failure of the Department to describe the future shipbuilding plan will not prevent this subcommittee from the due diligence required in recommending to the full committee and the full House a shipbuilding plan which will restore the Navy to an acceptable number of ships and which will preserve the domestic industrial capability for construction of warships.

"In the limited time this subcommittee has had to review this year's budget request it appears to be somewhat better than previous years. The Department is requesting authorization for the procurement of eight new ships, and is requesting advance procurement funds for the procurement of at least seven more next year, including two submarines. If you take into account that the Littoral Combat Ship (LCS) program and the Joint High Speed Vessel program do not require advance procurement then the potential exists for a 12 ship request next year.

"I have the following concerns which I trust that the witnesses will address today. None of these should come as a surprise, particularly to the two witnesses, since I have expressed these concerns either publicly or directly to them.

"I am concerned about the EMALS program for the next aircraft carrier. As the Secretary knows well, I recently visited the production facility and was favorably impressed; however, failure of this one system to deliver on its promises means we are building the world's largest helicopter carrier. I would like the Secretary to address what additional oversight and continuity of oversight he envisions for this program.

"I remain very concerned about the LCS program. I am not happy with the cost and schedule performance. In January I spoke with the Captain of the first ship - he loved it, he was very

happy, but the fact remains that the ship was delivered over 18 months late and 2 ½ times over the cost the contractor promised.

"No one, either the Navy or the contractor, should be patting themselves on the back for this ship or the first aluminum ship, which has still not delivered. I am not convinced that the costs are being driven out of this program. These ships are too expensive. We need to drive the cost down. Or, we need to see who else can build these ships for a fair price.

"I think it is important to note that everything about this program is different from other shipbuilding programs – the Navy does not contract with the shipyards building the ship, they have agreements with two 'prime contractors.' The ship's propulsion systems, combat systems, and C4I systems were not specified by the Navy, they were chosen by the prime contractors to meet 'performance specifications.'

"Because of this, there is very little common equipment between the two types of ships. Lack of commonality costs money now, it will increase training costs for Sailors and it will increase overall life cycle costs. I request that the Admiral and the Secretary address this issue of a lack of commonality today.

"Turning to the destroyer controversy. It is no secret that this committee last year supported the CNO's desire to return to the construction of the DDG 51 destroyer. Not everyone is happy with the final decision, but we seem to now have a final decision from the Secretary of Defense on the way forward, and an agreement between the two shipyards which will level the load on the industrial base. I request the Secretary explain the agreements and I request the Admiral give us some sense on how he will use both of the two very different destroyers.

"I would also like an explanation this morning to some fairly significant funding requests in the research and development accounts. The Secretary of Defense has testified that future procurement decisions will be based on the results of the Quadrennial Defense Review (QDR), and has stated that as the reason to not request funds to alleviate shortfalls in validated requirements gaps such as the current strike fighter shortfall of F/A 18s.

"Yet the Department is requesting half a billion dollars for development efforts on a replacement to the Ohio class submarine before the QDR validates the requirement. Make no mistake, this subcommittee has been the strongest proponent over the last three years in submarine construction and the preservation of the submarine industrial design base. The subcommittee has been supportive of 'pulling forward' the design of the next generation submarine to ensure we do not lose our skilled design workforce. Yet this request goes far beyond that goal.

"I would ask the witnesses to please explain why this subcommittee should recommend this full request for a non-validated requirement when there are very real shortfalls in other, validated, requirements today.

"These are just a few of the concerns I have; I am sure that we will discuss others, but now I wish to call on my friend from Missouri for any remarks he may wish to make."

Akin Opening Statement for Hearing on the U.S. Navy's 2010 Shipbuilding Plan

"Thank you Mr. Chairman, and good morning to our witnesses. I had an opportunity to meet the Admiral for the first time yesterday and to have another good discussion with Secretary Stackley. Gentlemen, I'd like to thank you again for taking the time to answer my questions and to share your thoughts regarding some of the shipbuilding programs proposed in this year's budget.

"I was also interested to hear the Chief of Naval Operations state yesterday, at the Full Committee hearing, that the Navy still intends to maintain a minimum of 313 ships. It had begun to sound as if the Secretary of Defense, in his *Foreign Affairs* article, and the Navy, in its budget roll out, were beginning to back away from that number. It was not clear to me how the Navy planned to implement the joint Maritime Strategy, with its emphasis on forward presence, if the Navy intended to accept fewer ships. A ship can only be in one place at once and today's fleet is the smallest it has been for nearly one hundred years.

"Despite the good news, however, that the Navy is not backing away from the goal of increasing the size of the fleet, the CNO also acknowledged, in his written statement, 'Our FY 2010 budget aligns with the path our Maritime Strategy has set; however, we are progressing at an adjusted pace.' That sounds like code to me for 'This budget request doesn't invalidate our Maritime Strategy, but it won't allow us to meet our goals.' I see evidence of this in the budget request for shipbuilding. For example, the Navy will commission and decommission the same number of ships this year – which means, no net increase in the number of ships. To be fair, we can't blame that on this budget request. But the simple math – 300 ships, with an average 30 year life - means we need to commission and decommission about 10 ships a year. This budget requests only 8 ships and presents no future plan to give Congress any reason to believe the Navy will ever meet its force structure requirements.

"Our colleague, Representative Forbes, asked Secretary Gates and Admiral Mullen about the lack of a 30-year shipbuilding plan at a hearing earlier this week. Admiral Mullen stated, '...it will come in the '11 budget. And I would say we can rely reasonably well on the 30-year shipbuilding plan that's been submitted before.' But I count at least nine ways this budget diverges from the FY09 plan:

- Moving the funding of carriers to five year centers, drops the force to 10 carriers in 2039.
- Building 3 DDG 1000 destroyers instead of 7.
- Building 1 DDG 51 destroyer instead of zero.
- Not building the next generation cruiser (CG(X)) in FY11.
- Not building a large deck amphib for the Maritime Prepositioning Force in FY10.
- Not building a Mobile Landing Platform ship for the Maritime Prepositioning Force in FY10.

- Not shutting down the LPD-17 production line at 9 ships, but funding the final increment for the 10th ship.
- Building 2 T-AKE ships in FY10 instead of zero.
- Investing half a billion dollars in R&D for the replacement of the OHIO Class submarine.

“So, in fact, we cannot rely upon the last shipbuilding plan and evidently we won’t receive a new one. We have the same problems on the aviation front, but I’ll save those comments for next week’s aviation hearing. Therefore, we can only rely on the testimony you provide today to shed light on the analysis that went into the decisions that were made within the shipbuilding account. The investments that the Navy is making in ship construction and R&D were evidently a higher priority than addressing the strike-fighter gap, which until recently, the Navy said was a serious concern. This may be true – but to do our jobs, it becomes critically important that this committee understand your reasoning.

“Again, thank you, Mr. Chairman. To our witnesses, I appreciate you being with us and truly look forward to our discussion.”

41

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

STATEMENT

OF

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

AND

VICE ADMIRAL BERNARD J. MCCULLOUGH
DEPUTY CHIEF OF NAVAL OPERATIONS
FOR INTEGRATION OF CAPABILITIES AND RESOURCES

BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND EXPEDITIONARY FORCES

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

NAVY FORCE STRUCTURE AND SHIPBUILDING

May 15, 2009

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

Mr. Chairman, Representative Akin, and distinguished members of the Subcommittee, thank you for the opportunity to appear before you today to address Navy shipbuilding. The Department is committed to the effort to build an affordable fleet tailored to support the National Defense Strategy, the Maritime Strategy, and the 2006 Quadrennial Defense Review. The Department's FY 2010 budget will provide platforms that are multi-capable, agile, and able to respond to the dynamic nature of current and future threats. The FY 2010 shipbuilding budget funds eight ships, including the twelfth Virginia class fast attack submarine, three Littoral Combat Ships (LCS), two T-AKE Dry Cargo and Ammunition Ships, and the second Joint High Speed Vessel (JHSV) for the Navy. The eighth ship, a DDG 51 class, restarts the DDG 51 program. The budget also funds the balance of LPD 26 and DDG 1002.

Since the 1800s, the United States Navy has been permanently deployed far from American shores, and our nation's first responder to crisis and upheaval throughout the world. The Navy's continuous presence assures our friends and allies that the United States remains ready to help deter aggression, maintain access to the seas, and assist in the event of humanitarian crisis or natural disaster. Forward presence uniquely provides our country's leadership the ability to act with understanding, speed, and flexibility to contain issues or conflicts before they escalate. The Navy's forward presence has been called upon for more than 75-percent of our nation's combat operations and shows of force, and 90-percent of long duration humanitarian assistance or disaster response missions since 1970. The cost of perpetual presence requires us to continually maintain, upgrade and recapitalize our ships and submarines.

Inherent to the Navy's ability to perform these critical National Security missions are our ships and our ship force structure. Ships define the Navy and underpin virtually all of our naval warfighting capabilities. Today, we have a balanced fleet capable of meeting most Combatant Commander critical demands, from 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 not only in the littorals, but in open ocean Anti-Submarine Warfare, Anti-Ship Cruise Missile, and Theater Ballistic Missile Defense. Gaps in these warfare areas pose increased risk to our forces. These factors drive our future force structure requirements for 313 ships.

Beyond addressing capability requirements, the Navy needs to have the right capacity to meet Combatant Commander warfighting requirements and remain a global deterrent. Combatant Commanders continue to request more surface ships and increased naval 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 surface combatant 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.

Your Navy remains committed to building the fleet of the future and modernizing our current fleet to meet increasingly complex threats. The continual challenge the Navy faces is the availability of resources to fully populate the necessary force structure. As a result, the Navy will assume risk in some capability areas in order to achieve a balance across all of its mission sets. While there will be some areas that have risks, the aggregate force will retain its basic warfighting capability to ensure the Nation does not lose its ability to deter, dissuade and win in armed conflict, while at the same time provide security and stability through Theater Security

Cooperation. In the past decade, the average age of the Navy's ships has risen from about 15 to over 20 years old as platforms built in the 1980s approach the end of their service lives. Replacement ships have been delayed, are more expensive, and are fewer in number than planned, shrinking the Fleet from 344 total active ships in 1998 to 284 today. The shipbuilding industrial base has followed suit, downsizing aggressively in response to the Navy's reductions in ship procurement, leaving just two major shipbuilding companies operating across six locations. These individual shipyards are substantially smaller than they were just a decade ago. We are at a minimum sustaining rate for affordable shipbuilding; further reductions in ship procurements will exacerbate existing shortages, and we risk losing the core talent and industrial tools necessary to build future naval platforms. Mindful of this, Navy force structure planners are increasingly constrained by, and consequently focused on, the ability of the private shipbuilding industry to respond to our production requirements. With the advent of the Littoral Combat Ship and the Joint High Speed Vessel, the Navy is also dealing with second tier shipyards (In the case of the LCS program these yards are subcontractors.) The advantages of dealing with second tier shipyards are typically reduced labor rates and their reliance on commercial shipbuilding. The concerns with second tier shipyards are their ability to construct complex warships and the concern of dependency on Navy contracts in future workload projections.

The Navy has examined the rising cost of ship acquisition. Per-ship costs are rising due to such factors as reduced competition, increased system complexity, build rate volatility, low rate production, instability in ship class size, and challenges with introducing new technologies into new platforms. All of these factors lead to inefficient ship production. The Department is working aggressively to control costs. We are ensuring that new ship designs are mature enough to commence production. We are working to fully leverage competition at every level of our shipbuilding programs, at the first and second tier vendors if not with prime contractors. Lack of competition adds costs throughout the shipbuilding supply chain. In addition, within our shipbuilding contracts, we are continuing to implement proven cost-reduction tools and methods like multi-year procurements, cost reduction incentives, affordability programs, re-use of existing designs, and incentives for selected industrial capital improvement projects (CAPEX). Open Architecture, both for hardware and software, promises to be a powerful cost avoidance tool as well as a process for improving warfighting capability.

In 2008, the Navy instituted a more stringent acquisition governance process which improves reporting, reviewing, and oversight processes that provide specific criteria for areas such as requirements, funding, and technical performance. This process ensures that stakeholders from the resources, requirements, acquisition, and operational communities are apprised of, address, and revisit at defined intervals, issues associated with technical maturity, affordability and program health. In addition to the review process, every major defense acquisition program conducts an annual Configuration Steering Board, which provides a means to identify further opportunities to reduce costs. In response to issues regarding shortcomings in cost estimating, the Navy has a new, highly-focused Cost Estimating Tiger Team as a result of insights accumulated through our initial experience with the Acquisition Governance Process. The team is investigating the factors that contribute to improved cost estimates and developing plans of action which will then be implemented by the Navy cost estimating organizations.

Working with the Office of the Secretary of Defense (Acquisition, Technology, and Logistics), the Department of the Navy (DoN) is taking specific measures to grow its Acquisition

Workforce, which will ensure our ability to properly staff and manage programs. These measures include assigning a Principal Civilian Deputy (Senior Executive) to the Assistant Secretary of the Navy (Research, Development and Acquisition) with responsibilities for all DoN Acquisition Workforce; rebalancing the workforce by reversing the over-reliance on contractor-support executing core Navy acquisition functions (e.g., Systems Engineering, Cost Estimating, and Earned Value); more deliberate management of the Program Manager pipeline (experience and training); and leveraging the recent National Defense Authorization Act Sections 219 and 852 to restore capability and capacity in the DoN Acquisition Workforce. Specific to shipbuilding, the Navy focused on strengthening our Supervisor of Shipbuilding workforce to provide on-site presence in the private shipyards executing shipbuilding contracts.

Further, we are working with our international allies to exchange best practices and lessons learned on shipbuilding efforts. A Shipbuilding Quadrilateral forum, comprised of government officials from the United States, United Kingdom, Canada and Australia, meets quarterly to discuss systematic trends that are emerging in shipbuilding programs. This spring, the United States is hosting the forum, which serves as a forum to discuss acquisition matters such as contracting practices and industry trends.

The FY 2010 Navy shipbuilding plan provides stability for our industry partners. Over the past decade we have introduced eleven new designs or significantly modified ship classes. The President's budget for FY 2010 shipbuilding plan does not introduce any new design ships. Instead, the President's budget for FY 2010 requests ships which are currently in serial production. Stability in the Navy's plan is reflected in no change in requirements, no change in design, and predictable cost for a follow-on ship. Risk of the shipyards' ability to execute follow-on vessels is reduced, and the Navy can enter into fixed price type contracts, or exercise existing fixed price type contract options.

Serial production should benefit the shipyards and suppliers. Continuation of ship classes allows the shipbuilders to optimize their shipyard(s) for that particular product line. In the case of the VIRGINIA Class Block III Multi-Year Procurement, the shipbuilder can enter into long term relationships with suppliers for the next eight submarines. The Navy will continue to explore use of block buys and multi-year procurements for other ship classes as programs mature.

The Navy has learned a great deal from a protracted period of lead ships. These lessons will be applied as we move forward on any future new designs:

- Ship designs must be appreciably complete before start of fabrication to avoid concurrency and rework. Through the acquisition governance process, the Navy reviews a program's ability to enter into construction based on design completion. These results are documented in reports to Congress.
- Adequate staffing is key to lead ship design and production success. Staffing includes government (including on-site) and industry. Skill sets required must be carefully considered.
- Competitive prototyping of high risk components is valuable in the identification of technical challenges and helps to retire this risk.

- The private sector shipbuilding design base must be carefully managed. Too many new designs/significant modifications can stress the industry.
- The flow down of requirements can drive unintended costs. Technical authority must be carefully weighed against overarching requirements (key performance parameters). Development and review of system design specifications is now required as part of the acquisition governance process.
- Capital investment in shipyards needs to be considered during a ship's design phase so investments for efficient production can be made in advance of construction. This only applies in sole source arrangements, but once a competitive downselect is made, opportunity for facilities investments can be considered.
- Life cycle costs must be understood early in a ship's development. Reduced manning may transfer maintenance to shoreside, so end-to-end costs must be understood. Use of common parts should be considered for life cycle savings.

The Navy is procuring capability and modernizing current ships to create our future fleet. A discussion regarding the requirement for each element of our force structure and the status of construction and modernization for the platforms that comprise the Navy's Fleet follow.

Aircraft Carriers

Aircraft carriers are the foundation of our Carrier Strike Groups and continue to ensure dominance of and presence from the sea. 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 current prescribed timeframe. Our carrier force provides the Nation the unique ability to overcome political and geographic barriers to access critical areas and project power ashore without the need for host nation ports and airfields.

The 11-carrier requirement is based on a combination of world-wide presence requirements, surge availability, training and exercises, and maintenance. During the 33-month period between the planned 2012 decommissioning of USS ENTERPRISE (CVN 65) and the 2015 delivery of GERALD R. FORD (CVN 78), however, legislative relief is requested to temporarily reduce the carrier force to 10. Extending USS ENTERPRISE to 2015 involves significant technical risk, challenges manpower and industrial bases, and requires expenditures in excess of two billion dollars. Extending USS ENTERPRISE would result in only a minor gain in carrier operational availability and adversely impact carrier maintenance periods and operational availability in future years. The temporary reduction to 10 carriers is possible during a limited time period, mitigated by careful preplanning of personnel rotations and capacity and maintenance availabilities prior to and following the window.

CVN 21 Program

GERALD R. FORD (CVN 78), the lead ship of the CVN 78 Class is the designated numerical replacement for CVN 65. CVN 78 warfighting capability improvements include: 25-percent increase in sortie generation rate; a significant reduction in ship's force, as well as the air wing and embarked staff manning level; nearly three-fold increase in electrical generating capacity; restoration of service life allowances; and enhanced Integrated Warfare System to pace future threats. These improvements will ensure that CVNs remain the centerpiece of our Carrier Strike Groups, and will continue to lead the Navy throughout their 50-year expected service

lives. The detail design and construction contract between the Navy and Northrop Grumman Shipbuilding – Newport News (NGSB-NN) was signed in September 2008. Keel laying is planned for this fall. The CVN 79 Construction Preparation (CP) contract covering FY 09 and FY 10 was awarded in January 2009. The President's Budget request for FY 2010 includes \$740 million in full funding for the CVN 78 and \$484 million in Advance Procurement for CVN 79.

CVN 68 Class

USS GEORGE H. W. BUSH (CVN 77), the tenth and final Nimitz Class carrier, is the numerical replacement for USS KITTY HAWK (CV 63). CVN 77 was commissioned in January 2009 and, is expected to deliver in May 2009. Upon delivery, she will enter a Post Shakedown Availability. Delivery of CVN 77 maintains the force structure at the required 11-carrier level.

CVN 68 Class Refueling Complex Overhaul (RCOH)

For each CVN 68 RCOH, 35-percent of a carrier's total service life maintenance plan is performed, as well as depot level mid-life recapitalization which extends the service life of the ship to approximately 50 years. Nuclear reactor refueling, warfighting modernization, and ship systems and infrastructure repair will help meet future missions. These combined upgrades support a reduction in operating costs, achieve expected service life, and allow the Nimitz Class to retain combat relevance to deter projected threats well into the 21st century. This program is critical for the class to achieve its service life and retain combat relevance. USS CARL VINSON (CVN70) is currently in the final months of her RCOH and will complete this summer. USS THEODORE ROOSEVELT (CVN 71) is scheduled to begin her RCOH in September 2009. The President's Budget request for FY 2010 includes \$1.8 billion for the CVN 68 Class RCOH program.

The Submarine Fleet

It is our intent that the Navy's submarine force remains the world's preeminent submarine force. We are aggressively incorporating new and innovative technologies to maintain dominance throughout the maritime battle space. We are promoting the multiple capabilities of submarines and developing tactics to support national objectives through battle space preparation, sea control, supporting the land battle and strategic deterrence. To these goals, the Department has continued a pattern of timely delivery of VIRGINIA Class submarines while ensuring the overhaul of the OHIO Class submarines supports their continued ability throughout their full anticipated lifetime. The Department has also begun looking at alternatives to replace the OHIO Class submarines when they reach the end of their service life in 2027.

VIRGINIA CLASS

The VIRGINIA Class submarine is a multi-mission platform that fully supports the Maritime Strategy. VIRGINIA was designed and constructed to dominate the undersea domain in the littorals as well as open ocean in today's challenging international environment and is replacing our aging LOS ANGELES Class submarines as they reach over 30 year service lives. Now in its 10th year of construction, the VIRGINIA program is demonstrating that this critical undersea capability can be delivered affordably and on time.

Five VIRGINIA Class submarines have delivered and six more are under construction. In 2008, the Navy commissioned USS NORTH CAROLINA (SSN 777) in May and USS NEW

HAMPSHIRE (SSN 778) in October. The sixth ship, NEW MEXICO (SSN 779), will be commissioned in November 2009.

General Dynamics Electric Boat and NGSB-NN continue to jointly produce VIRGINIA CLASS submarines and are working with the program office to reduce the construction time and cost of these ships. An eight-ship, multi-year procurement contract for the FY 2009-2013 ships was signed in December 2008. The contract achieves the cost reduction goal of \$2 billion (FY 2005 dollars) with the FY 2012 ships as well as the two per year build rate starting in FY 2011. The FY 2010 President's budget request includes \$3.970 billion for construction of the FY 2010 ship as well as advance procurement and economic order quantity funds for materials for the FY 2011-2013 ships contained in the multi-year contract.

SSBN Engineered Refueling Overhauls (EROs)

The OHIO Class SSBN Engineered Refueling Overhaul Program continues. USS ALASKA (SSBN 732) completed her overhaul in March 2009; USS NEVADA (SSBN 733) will complete her overhaul in 2010; and USS TENNESSEE (SSBN 734) will complete her overhaul in 2011. These EROs are a one-time depot maintenance period, near the mid-point of the SSBN service life, during which the nuclear reactor is refueled, major equipment is refurbished, class alterations are installed, and SUBSAFE unrestricted operations maintenance is accomplished. In the FY 2010 President's Budget, the Department has budgeted for SSBN EROs in O&MN and OPN appropriations vice SCN. ERO work is repair and maintenance work needed to fulfill the ship's design service life. Funding the overhaul with O&MN and OPN better aligns work and budget responsibilities to the fleet, the primary Navy Shipyard customer. The FY 2010 President's Budget requests \$201 million for ERO of USS PENNSYLVANIA (SSBN 735).

Sea Based Strategic Deterrent (SBSD)

The Ohio Class ballistic missile submarine, originally designed for a 30-year service life, will start retiring in 2027 after over 40 years of service life. The DoD initiated an Analysis of Alternatives in FY 2008 for a replacement SSBN. Early research and development will set the stage for the first ship authorized in FY 2019. As long as our potential adversaries possess nuclear weapons, the United States will need a reliable and survivable sea-based strategic deterrent. To ensure there is no gap in our Nation's sea-based strategic nuclear forces, the FY 2010 President's Budget request includes \$495 million. These funds will ensure that design and technology development can begin to support technology readiness levels, prototyping and design maturity when the lead ship is authorized. The United States will achieve significant program benefits by aligning our efforts with those of the United Kingdom as they move forward with their VANGUARD SSBN replacement program. The US and UK are working towards finalizing a cost sharing agreement.

Surface Combatants

Today's Navy is operating in an increasingly complex and challenging environment. Demand from Combatant Commanders for traditional Navy core capabilities, forward presence, deterrence, sea control, and power projection by surface combatants operating both independently and with strike groups is increasing. The new Maritime Strategy also calls for expanding capabilities in Integrated Air and Missile Defense to include ballistic missile defense, maritime security, disaster relief and humanitarian assistance.

The Navy, after extensive discussions with General Dynamics Corporation Bath Iron Works (BIW) and Northrop Grumman Shipbuilding, Inc. (NGSB) arrived at a plan that most affordably meets the requirements for Navy surface combatants, commences the transition to improved missile defense capability in new construction DDG 51, and provides significant stability for the industrial base. Under a memorandum of agreement signed in April 2009, BIW will be responsible for design, construction, integration, testing and delivery of DDG 1000, DDG 1001 and DDG 1002. NGSB will retain responsibility for design, engineering and fabrication of the composite Superstructure and composite hangar, and fabrication of aft Peripheral Vertical Launch System for DDG 1000 ships. In addition, the Navy will award contracts for construction of the first two ships of the DDG 51 restart program (DDG 113 and DDG 114) to NGSB, and will award a contract for construction of the third ship of the DDG 51 restart program (DDG 115) to BIW.

CG 47 Modernization

Twenty-two Aegis Cruisers remain in service and are planned to receive modernization upgrades. A comprehensive Mission Life Extension is critical to achieving the ship's expected service life and includes the All Electric Modification; SMARTSHIP; hull, mechanical, and electrical (HM&E) system upgrades; and a series of alterations designed to restore displacement and stability margins, correct hull and deck house cracking, and improve quality of life and service onboard. Cruiser Modernization bridges the gap to future surface combatants and facilitates a more rapid and affordable combat capability insertion process. The first full modernization availability was completed on USS BUNKER HILL (CG 52) in February 2009 and included Advanced Capability Build 08 (ACB08). ACB08 brings upgraded warfighting capability to CG 52-CG 58 including Cooperative Engagement Capability (CEC) and upgraded weapon systems. The President's Budget request for FY 2010 includes \$495 million which will modernize two cruisers.

DDG 51 Modernization

The DDG 51 modernization program is a comprehensive effort to modernize the Arleigh Burke class ships' combat and HM&E systems. As ships are modernized halfway through their 35-year estimated service life, each ship will be enabled to achieve an additional 10-15 years of life that historically has been reduced by early decommission due to both the inability to pace the threat and to high operating costs. This program is modeled on the successful CG Modernization program and will occur in two phases. The first phase is the HM&E phase. These upgrades support workload reduction, operating costs minimization, expected service life achievement, and projected threat pacing well into the 21st century. The second phase, expected to commence in FY 2012, will consist of a full combat systems computing plant and Combat Information Center replacement, known as Advanced Capability Build 12 (ACB-12). ACB-12 will allow the class to field substantial capability against ballistic missiles, new generation advanced anti-ship cruise missiles and new, quieter submarines now in the hands of potential adversaries.

The first DDG to be modernized will be USS ARLEIGH BURKE (DDG 51), planned for FY 2010. The President's Budget request for FY 2010 includes \$329 million which supports two ship modernizations in FY 2010.

DDG 1000 and DDG 51 Destroyers

DDG 1000, with its Dual Band Radar and sonar suite design, is optimized for the littoral environment. DDG 1000's advanced gun system provides enhanced naval fires support capability in the littorals with increased survivability.

The Navy began construction of DDG 1000 in February 2009. A rigorous systems engineering approach has been employed to mitigate the risk involved with building a complex lead ship surface combatant. This approach included successful building and testing of the ten critical technologies via engineering development models. Naval Vessel Rules were fully accommodated in detail design. Mission systems design is nearly complete. Detail design was also near completion prior to the start of fabrication – more complete than any other previous surface warship.

However, in the current program of record, the DDG 1000 is incapable of conducting Ballistic Missile Defense, and less capable than the DDG 51 Class for providing Air Defense. As well, although superior in littoral ASW, the DDG 1000's lower power active sonar design is less effective in the blue water than DDG 51 capability. In view of increasing demand by Combatant Commanders for air and missile defense capability, the budget request truncates the DDG 1000 program at three ships and restarts construction of DDG 51 Class ships.

The FY 2010 President's Budget request of \$ 1.084 billion provides the balance of split funding for the third ship of the class authorized in 2009. In addition, \$2.241 billion is requested to re-start the DDG 51 program.

The research, development, test and evaluation efforts for the DDG 1000 program (\$539 million in FY 2010), which include software development and other critical efforts, must continue in order to deliver the necessary technology to complete DDG 1000 class ships and support the CVN 78 Class.

The Swap II Memorandum of Agreement (MOA) will align construction responsibilities for FY09 and prior DDG 1000 Class ships and selected DDG 51 Class ships between BIW and NGSB through the order of the next three planned DDG 51s in order to ensure shipyard workload stability at both yards, leverage learning, stabilize and minimize cost risk for the DDG 1000 Program, efficiently re-start DDG 51 construction, facilitate performance improvement opportunities at both shipyards, and maintain two sources of supply for future surface combatants.

Next Generation Cruiser CG(X)

CG(X) is envisioned to be a Joint Air and Missile Defense and Joint Air Control Operations Battle Space dominance ship. CG(X) will provide air and missile defense to Joint forces ashore and afloat. The Maritime Air and Missile Defense of Joint Forces (MAMDJF) Initial Capabilities Document (ICD) was validated by the Joint Requirements Oversight Council (JROC) in May 2006.

The results of the Navy's Analysis of Alternatives (AoA) for the Maritime Air and Missile Defense of Joint Forces capability are currently within the Navy staffing process. Resulting requirements definition and acquisition plans, including schedule options and associated risks, are being evaluated in preparation for CG(X) Milestone A. This process includes recognition of the requirement of the FY 2008 National Defense Authorization Act, that

all major combatant vessels of the United States Navy strike forces be constructed with an integrated nuclear power plant, unless the Secretary of Defense determines this not to be in the best interest of the United States.

Vital research and development efforts are in progress for the Air and Missile Defense Radar which paces the ship platform development. Engineering development and integration efforts include systems engineering, analysis, computer program development, interface design, engineering development models, technical documentation, and system testing are in process to ensure a fully functional CG(X) system design. The FY 2010 President's Budget requests \$190 million for the Air and Missile Defense Radar development and \$150 million to continue maturation of the CG(X) design based on the preferred alternative selected.

Littoral Combat Ship (LCS)

The Navy remains committed to procuring 55 LCSs. LCS expands the battle space by complementing our inherent blue water capability. LCS fills warfighting gaps in support of maintaining dominance in the littorals and strategic choke points around the world. The LCS program capabilities address specific and validated capability gaps in Mine Countermeasures, Surface Warfare, and Anti-Submarine Warfare. The concept of operations and design specifications for LCS were developed to meet these gaps with focused mission packages that deploy manned and unmanned vehicles to execute a variety of missions. LCS' design characteristics (speed, agility, shallow draft, payload capacity, reconfigurable mission spaces, air/water craft capabilities) combined with its core Command, Control, Communications, Computers and Intelligence, sensors, and weapons systems, make it an ideal platform for engaging in Irregular Warfare and Maritime Security Operations.

The Navy is aggressively pursuing cost reduction measures to ensure delivery of future ships on a schedule that affordably paces evolving threats. This will be accomplished by matching required capabilities, to a recurring review of warfighting requirements through applying lessons learned from the construction and test and evaluation periods of sea frames and mission packages. USS FREEDOM (LCS 1) was delivered to the Fleet on September 18, 2008 and was commissioned in November 2008. INDEPENDENCE (LCS 2) was christened in Mobile, Alabama on October 4, 2008. In 2009, the Navy will accept delivery of the second ship which is a completely different design.

In October 2008, the Undersecretary of Defense for Acquisition, Technology and Logistics approved a revised acquisition strategy for procurement of the FY 2009 and FY 2010 LCS. The updated strategy combines the FY 2009 procurement and FY 2010 options to maximize competitive pressure on pricing as a key element of cost control. Increasing the quantity solicited by adding the FY 2010 ships to the FY 2009 solicitation as options enables industry to better establish longer term supplier relationships and offer the potential for discounting to the prime contractors and subcontractors. The FY 2009 ships and FY 2010 ship options are fixed price type contracts.

The FY 2010 President's Budget request includes \$1.38 billion for three additional LCS seaframes.

Acquisition strategies for FY 2011 and outyear ships are under development. OSD will conduct a Milestone B prior to FY 2011 procurement. The Navy's strategy will be guided by

cost and performance of the respective designs, as well as options for sustaining competition throughout the life of the program. Combat systems and HM&E design will be evaluated throughout the test and trial periods and we are already looking for opportunities to reduce total ownership costs.

Amphibious Ships

These ships provide distributed forward presence to support a wide range of missions from forcible entry to conventional deterrence, Theater Security Cooperation, and humanitarian assistance. In major combat operation, DON requires sufficient amphibious ships to support two Marine Expeditionary Brigades (MEB). As an organization principle, this requires the Navy to maintain a minimum of 38 amphibious ships. Understanding this requirement and in light of the fiscal challenges with which the Navy is faced, the DoN plans to sustain a minimum of 33 amphibious ships in the assault echelon.

WASP (LHD 1) Class Amphibious Assault Ship

The WASP (LHD 1) Class comprises multi-purpose amphibious assault ships whose primary mission is to provide embarked commanders with command and control capabilities for sea-based maneuver and assault operations as well as employing elements of a landing force through a combination of helicopters and amphibious vehicles. MAKIN ISLAND (LHD 8), the last of the Wasp Class, completed successful Acceptance Trials in March 2009 and was delivered in April 2009. Although a modified repeat of the previous seven ships, this ship introduced a gas turbine propulsion system with all electric auxiliary systems and eliminated the steam plant and steam systems.

LHA (R) General Purpose Amphibious Assault Ship (Replacement)

The LHA(R) Assault Echelon (AE) ships will provide flexible, multi-mission platforms with capabilities that span the range of military operations--from forward deployed crisis response to forcible entry operations. LHA(R) is a modified LHD 8 design with increased aviation capacity in lieu of a well deck to better accommodate aircraft in the future USMC Air Combat Element (ACE) including JSF/MV-22. LHA (R) is the functional replacement for the aging TARAWA (LHA 1) Class ships that will reach the end of their extended service life in 2011-2015. The Navy's study to assess the impact of MPF(F) without LHA(R) ships has determined that this change is feasible but may result in slightly longer time to complete mission and may require modifications to remaining MPF(F) ships.

LPD 17 Class Amphibious Warfare Ship

The LPD 17 Class of amphibious warfare ships represents the Navy's commitment to a modern expeditionary power projection fleet that will enable our naval force to operate across the spectrum of warfare. SAN ANTONIO Class ships will play a key role in supporting the ongoing Overseas Contingency Operations by forward deploying Marines and their equipment to respond to crises abroad. USS GREEN BAY (LPD 20) was commissioned in January 2009 and USS NEW ORLEANS (LPD 18) deployed the same month. New York (LPD 21) is planned to deliver this summer. LPDs 21-25 are in various stages of construction phase. The FY 2010 President's Budget requests \$872 million for the balance of the funding for LPD 26 which was authorized in 2009. Further, \$185 million of advance procurement is requested for LPD 27 in accordance with the Swap II agreement to leverage production efficiencies of the existing LPD 17 class production line.

Auxiliary and Intra-Theater Lift Platforms

Combat logistics force ships are critical for forward deployed forces. The vital role of underway replenishment of such items as fuel, food, repair parts, and ammunition enable Navy ships to operate for extended periods at sea. The extended operating demands for vessels such as Joint High Speed Vessels (JHSV) and LCS for intra-theater lift, Theater Security Cooperation, or engagement missions will place a high demand for support on existing logistics shipping and increase the operating tempo of the Combat Logistics Force ships. Intra-theater lift is key to enabling the United States to rapidly project, maneuver, and sustain military forces in distant, anti-access or area-denial environments.

Maritime Prepositioning Force (Future)

Maritime Prepositioning Force (Future) or MPF(F) provides a scalable joint sea-based capability for the closure, arrival, assembly and employment, sustainment and reconstitution of up to a baseline MEB-sized force in support of the Assault Echelon of the amphibious assault force. MPF(F) will provide the nation a rapid reinforcing capability and significant utility in response to Humanitarian Assistance/Disaster Relief (HA/DR), Non-Combatant Evacuation Operations (NEO), and Theater Security Cooperation Program. The MPF(F) Squadron composition will be acquired in three increments, with the first increment consisting of the Lewis and Clark Class Dry Cargo/Ammunition Ship (T-AKE) and the Mobile Landing Platform (MLP).

Mobile Landing Platform (MLP)

The Navy awarded a preliminary design contract to General Dynamics NASSCO for the Mobile Landing Platform – one of the MPF(F) vessels in February 2009. The FY 2010 President's Budget request includes \$120 million of advance procurement funding for the MLP and \$52 million of RDT&E for the MPF(F) program, including MLP risk reduction and technology development.

Lewis and Clark Class Dry Cargo/Ammunition Ship (T-AKE)

T-AKE replaced the Navy's combat stores (T-AFS) and ammunition (T-AE) shuttle ships. Working with an oiler (T-AO), the team can perform a "substitute" station ship mission which will provide necessary depth in combat logistics. Fourteen T-AKE ships are covered under a fixed-price incentive contract with NASSCO. Three of the T-AKEs are to support MPF(F) program requirements. Major accomplishments for 2008 include delivery of USNS ROBERT E. PEARY (T-AKE 5) in June 2008 and USNS AMELIA EARHART (T-AKE 6) in October 2008. USNS CARL BRASHEAR (T-AKE 7) delivered in March 2009 and WALLY SCHIRRA (T-AKE 8) will deliver later this year. The construction contract option for the T-AKE 11 and 12 and long lead time material for the T-AKE 13 and 14 were exercised in December 2008. The FY 2010 President's Budget requests \$940 million for construction of two T-AKEs (T-AKE 13 and 14) in the National Defense Sealift Fund in support of MPF(F) requirements.

Joint High Speed Vessel (JHSV)

The Joint High Speed Vessel (JHSV) program is for the acquisition of high-speed vessels for the Army and the Navy. JHSV will be a high-speed, shallow draft surface vessel able to

rapidly transport medium payloads of cargo and personnel over intra-theater distances to austere ports, and load/offload without reliance on port infrastructure. The detail design and lead ship construction contract was awarded to Austal, USA in November 2008, and includes contract options for nine additional ships for the Army and Navy. Delivery of the first vessel will be to the Army and is expected in 2011. The FY 2010 President's Budget request includes \$178 million for the construction of the Navy's second JHSV and \$178 million for the second Army funded vessel.

Summary

The Navy has come through many difficulties associated with lead ships and sustained production is proceeding. The FY 2010 budget request, which focuses on improving performance in the production of follow ships of each class, reflects the Navy's emphasis on stabilizing the shipbuilding plan. We understand the impact long term attrition and downsizing has had on the acquisition workforce, and are taking necessary steps to restore our core competencies. We have instituted the acquisition governance process to improve requirements/acquisition decision making. We are committed to meeting the force structure required to meet the Maritime Strategy.