

**HEARING TO RECEIVE TESTIMONY ON LIT-
TORAL COMBAT SHIP ACQUISITION IN RE-
VIEW OF THE DEFENSE AUTHORIZATION
REQUEST FOR FISCAL YEAR 2011 AND THE
FUTURE YEARS DEFENSE PROGRAM**

TUESDAY, DECEMBER 14, 2010

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The committee met, pursuant to notice, at 2:32 p.m. in room SD-G50, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Reed, Bill Nelson, Hagan, Coons, McCain, Sessions, LeMieux, Brown, and Collins.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Creighton Greene, professional staff member; and Michael J. Noblet, professional staff member.

Minority staff members present: Joseph W. Bowab, Republican staff director; Pablo E. Carrillo, minority investigative counsel; and Christopher J. Paul, professional staff member.

Staff assistants present: Christine G. Lang, Brian F. Sebold, and Breon N. Wells.

Committee members' assistants present: Carolyn Chuhta, assistant to Senator Reed; Neal Higgins, assistant to Senator Bill Nelson; Gordon I. Peterson, assistant to Senator Webb; Roger Pena, assistant to Senator Hagan; Lindsay Kavanaugh, assistant to Senator Begich; Joanne McLaughlin, assistant to Senator Manchin; Lenwood Landrum and Sandra Luff, assistants to Senator Sessions; Jason Van Beek, assistant to Senator Thune; Erskine Wells III, assistant to Senator Wicker; Brian Walsh, assistant to Senator LeMieux; and Scott Schrage, assistant to Senator Brown.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good afternoon, everybody. I want to welcome our witnesses today: from the Navy, Secretary Mabus, Secretary Stackley, Admiral Roughead, and Rear Admiral Pandolfe; from the Government Accountability Office, Mr. Paul Francis; from the Congressional Budget Office, Dr. Eric Laps; and from the Congressional Research Service, Mr. Ron O'Rourke.

The Navy continues to be faced with a number of critical issues as it tries to balance its modernization needs and procurement needs against the costs of current operations. The shipbuilding

budget remains at a level where it will be difficult at best to field the Navy that we must have. Therefore, we need to be looking for ways to make the shipbuilding program more affordable.

The original LCS acquisition plan would have had the Navy buying both types of LCS vehicles for some time while the Navy evaluated the capabilities of each vessel. At some time in the future, the Navy would have had the option to down-select to building one type of vessel, but in any case the Navy would have been operating some number of each type of LCS vessels in the fleet, which means that the Navy would have been dealing with two shipyards, two supply chains, two training pipelines, et cetera.

Last year, the Navy decided upon a winner-take-all acquisition strategy to procure the fiscal year 2010 vessels under a fixed price contract, with fixed price options for two ships per year for the next 4 years. This revised strategy included obtaining the data rights for the winning ship design and competing for a second source for the winning design among other shipyards starting in fiscal year 2012. The Navy did this after determining that the original acquisition strategy, an approach of buying at least one ship from each shipyard in fiscal year 2010 under a noncompetitive solicitation, was unaffordable. Earlier this year, the Navy released the solicitation under the revised strategy and has been in discussion with the two contractor teams and evaluating those proposals since that time.

The Navy has decided, upon reviewing the bids from the two contractor teams, to modify its strategy for the following reasons: First, both teams have made offers that are much more attractive than had been expected and both are priced well below the original noncompetitive offers;

Two, continuing the winner-take-all down-select would save roughly \$1.9 billion compared with what had been budgeted for the LCS program in the fiscal years defense program, or the FYDP.

But the Navy has also determined that accepting the offers from both LCS contractor teams, rather than down-selecting to one design and starting a second source building the winning design would save \$2.9 billion, or \$1 billion more than the program of record, and would allow the Navy to purchase an additional LCS vessel during this same period of the FYDP, 20 ships rather than 19 ships.

The Navy has also determined that, using net present value calculations, additional operation and support costs for maintaining two separate designs in the fleet for their service life over 40 to 50 years would be much less than the additional saving that could be achieved through buying both the ships during the FYDP period.

The Navy first conveyed to Congress its interest in modifying the LCS acquisition strategy in early November and said that they needed to act before the bid prices were set to expire on December 14, 2010. Since then, the Navy has requested and the contractors have agreed that the LCS teams extend these bid prices until the end of this month.

I understand that the Navy has been briefing members and staffs in the Senate and House of Representatives since announcing its revised plan.

From a broad policy perspective, I believe the Navy approach of a competitive dual-source alternative could help ensure maximum

competition throughout the life cycle of program, meeting the spirit and intent of the Weapon Systems Acquisition Reform Act of the Weapon Systems Acquisition Reform Act of 2009. Specifically, it calls for two shipbuilders in continuous competition to build the ships for the life of the program. The Navy plans to build a total of 55 of these ships, so that competition could take a number of years. The Navy has been—or the competition would be going on for a number of years.

The Navy has been prevented from sharing specific bid information that would violate the competitive source selection process by revealing proprietary information about the two contractors' bids. This has led some to ask whether these bids can be independently verified. We should hear in detail from the Navy witnesses today about that issue and also why they believe that these bids are realistic bids.

In that regard, I take some comfort from knowing that these bids are for fixed price contracts and not for cost type contracts, where a contractor has little to lose from underbidding a contract.

As far as the capability of the two vessels, we will hear from Admiral Roughead today on whether each of the two vessels would meet the Navy's requirements for the LCS program and why he favors the modified approach.

Both a report by the Congressional Research Service, CRS, and other individuals have raised a number of questions about the strategy change. This hearing, that was called at the request of Senator McCain, by the way, will give us an opportunity to get answers about the Navy's proposal.

The Congressional Budget Office analysis also estimates that continuing competition between the two teams, as envisioned by the revised Navy strategy, would cost more than going ahead with the winner-take-all option. The CBO, however, was unable to factor into their analysis the actual fixed price bid data to which the contractors are willing to agree, because of the information-sharing constraints surrounding an ongoing competition.

The Government Accountability Office, the GAO, has raised concerns about potential cost growth from design changes, additional operation and support costs, and mission package development. We will need to hear from the Navy witnesses whether design changes are a significant threat to realizing the price reductions and why the Navy has confidence in its estimate that the operating and support cost increases are far less than the expected acquisition savings.

As far as the progress in development of the mission packages is concerned, I believe the Navy's fundamental architecture of the LCS program divorces changes in the mission package from changes that perturb the ship design and ship construction. In the past when there were problems with developing the right combat capability on a ship, this almost inevitably caused problems in the construction program. In the case of the LCS, I understand that the combat capability largely resides in the mission packages that connect to either LCS vessel through defined interfaces. Now, what that means, I believe, is that changes inside the mission packages should not translate into changes during the ship construction schedule, that they're interchangeable, and whatever is happening

in the mission package development program would apparently apply equally to either the down-select strategy or the dual-source strategy. We'll need to hear from Navy witnesses today to describe that relationship in greater detail.

In terms of the proposal's effects on the industrial base and therefore on the future of competition, I would think that there would be a net positive. The Navy would have to opportunity to compete throughout the life of the program and any erosion in contractor performance could be corrected by competitive pressures. For the industrial base, there would be more stability in the shipbuilding program, and a number of Navy witnesses have previously testified that one of the important things that we could do for the Navy is to help the shipbuilders achieve stability in our shipbuilding programs.

So that to me the Navy's proposal seems to promote that goal while effectively continuing competition throughout the program and at the same time reducing acquisition costs and buying an additional ship over the FYDP.

Senator McCain.

STATEMENT OF SENATOR JOHN McCAIN

Senator McCAIN. Thank you, Mr. Chairman. I want to thank you for holding this hearing. This is a very important issue that is upon us in the final days of a lame duck session.

I want to thank the Government Accountability Office, the Congressional Research Service, and the Congressional Budget Office that have raised important questions that should have answers before I believe we should consider approving this proposal.

Mr. Chairman, we can't consider this Littoral Combat Ship in a vacuum. The story of this ship is one that makes me ashamed and embarrassed as a former Navy person and as a person who's responsible to the taxpayers of my State, and I'd like to just review with you a little background and one of the reasons why I remain incredibly skeptical about this latest rush proposal that we have to approve of in a lame duck session.

The background is that on November 2001, the Littoral Combat Ship program was started. In 2004, the Navy awarded contracts to two teams led by Lockheed Martin and General Dynamics. The initial contract price was \$188 million per ship.

In the 2006 Defense Authorization Act, Congress set a cost cap of \$220 million per ship. In the 2008 Authorization Act, Congress increased the cost cap to \$460 million per ship. In the 2009 Defense Authorization, Congress amended the cost cap again by deferring its implementation by 2 years, as the Navy requested. In the 2010 defense authorization bill, Congress increased the cost cap to \$480 million per ship.

In 2007, the Littoral Combat Ship unit procurement cost tripled to over \$700 million. Later, outside the Congressional budget review process, the Navy proposed to substantially restructure the LCS program. So 6 years later, after expenditure of roughly \$8 billion, the Navy decided to restructure the program.

Then of course we went through the strategy of the down-select and the competition of 10 LCS, that one would build 10 LCSs over a 5-year period, and the Navy decided to make a down-select deci-

sion and award the contract to build the 10 LCSs some time this summer. It delayed its decision twice. The award decision would not be made in December 2010. Then in November they came up with a great idea.

I'd remind the witnesses and the taxpayers, the cost of the LCS from 2005 to 2010 has been \$8 billion of the taxpayers' dollars. And what have we got to show for it? The first LCS was funded in 2005 and it was commissioned in November of 2008 at a cost of \$637 million. The second LCS, funded in 2006, was commissioned in January of 2010 at a cost of \$704 million.

Then numbers three, four, five, six, seven were all—LCS—they were funded and cancelled, cancelled by the Navy; the third one, funded in 2006, cancelled in 2007; the fourth one, funded in 2006, canceled in 2007. The list goes on.

Then we get to the eighth LCS, funded in 2009, christened in 2010, and now is about 80 percent complete. The ninth LCS, funded in 2009, is under construction and is about 40 percent complete.

So we've spent \$8 billion. We have two ships commissioned, another one 80 percent complete and the other 40 percent complete. If my figures are wrong, which we got from the Navy, I will be glad to stand corrected.

So here we are now with a brand-new idea as to how we should apportion the funding for the Littoral Combat Ships. Somehow, miraculously, a month or so ago the two shipbuilders came in with very low estimates. Now, we are told by the Navy those are very low estimates, but we don't know what those numbers are because it's "proprietary information."

I have to tell you, Mr. Chairman, I have never in the 20-some years that I've been a member of this committee approved of a program that I don't know what the cost is. At least I owe it to the taxpayers of Arizona to know what the cost is. But with a record like this, with a record like this, of \$8 billion for four ships and a cost, estimated cost, of about \$11 billion from 2010 to 2015, I'm supposed to say: Hey, this is a good deal.

Now, GAO—and we'll hear from GAO, and I'll end up with this. The GAO has said they have concerns about decisionmakers need more information, cost savings are uncertain, future performance is an open question, the Navy's assessment of design stability may be too optimistic, the proposal is fundamentally inconsistent with an important GAO recommendation.

CRS's concerns: How the proposal was presented raises issues; potential relative costs and risks of the two strategies is unclear; the proposal could hinder competition; the industrial base implications are uncertain; how the mission packages would be procured is unclear; and CBO's concerns are costs and savings remain unclear, certainly, and the cost of operating and maintaining LCS are probably more than the Navy's estimate.

I would just like to—and the Navy may have overstated the costs of the current plan, and using two different combat systems for each LCS version may drive costs up. If you build two different ships, then you have two different supply lines, you have two different training regimens for the crew, and you have, obviously, dramatically increased costs, plus a problem with cross-training and safety concerns.

But again, Mr. Chairman—and I understand that the two very generous offers have now been extended to December 30th. I see no reason why those offers could not be extended to January or February or March, so that this committee could at least address the concerns that the GAO, the CBO, and the Congressional Research Service have raised. And they're important questions.

When you look at the history, when you look at the history of this ship, and now we're supposed to buy an additional 15 ships based on costs we haven't been told, with the incredibly and disgraceful waste of the taxpayers' money that has characterized this whole program, Mr. Chairman, I have greater responsibilities to the taxpayers of my State.

I thank you, Mr. Chairman.

[Sound of phone ringing.]

Chairman LEVIN. I apologize for my phone. Thank you so much, Senator McCain. I thought I had turned that off.

Let me start with Secretary Mabus.

**STATEMENT OF HON. RAYMOND E. MABUS, JR., SECRETARY
OF THE NAVY**

Mr. MABUS. Mr. Chairman, Senator McCain, distinguished members of this committee: Thank you for this opportunity to appear before you to discuss the LCS program. Following my comments, Admiral Roughead will have a short opening statement. Our assistant Secretary for Research, Development, and Acquisition, Sean Stackley, is also here and is prepared, with your permission, to briefly offer some more specifics on the numbers involved in this proposal.

The LCS brings critically needed capabilities and numbers to our Nation's fleet which are necessary to give the Navy the force structure to meet the missions we've been given. For the future strength of our Navy, it's vitally important that we succeed in delivering this 55-ship class affordably, effectively, and quickly, while at the same time exercising sound judgment and solid oversight.

As Secretary, I take this process extraordinarily seriously and I would not have made this recommendation if I did not firmly believe that giving us the authority to move forward with a dual award of ten ships to each of two shipbuilders, as we are requesting, is in the best interests of the taxpayers, our Navy, and our Nation.

This authority, which I emphasize requires no additional funding, will enable us to purchase more high-quality ships for less money and get them into service in less time. It will help preserve jobs in our industrial shipbuilding base and will create new employment opportunities in an economic sector that is critical to our Nation's military and economic security.

We recognize that this proposal comes outside the normal budget process. However, a key focus of this Department for the last 2 years has been to build as many ships for the Navy as possible, as affordably as we can. As a result, I believe it was my duty to present Congress with this opportunity.

The timing of this request is the result of a very thorough analysis. Once we received the bids, we conducted two rounds of discussion with industry to assure ourselves that the bids were realistic

and sustainable. That examination demonstrated that we achieved our goal, one we share with this committee, driving down the cost of these ships.

We next needed to examine the proposal from the standpoint of naval operations, which was done by the CNO and the Navy staff. And as the CNO will explain in a moment, they concluded that a dual award created important operational flexibility. Finally, we met with Pentagon leadership for their review and concurrence with this proposal.

This process took some time, but I believe it was critical to ensuring that we were making an operationally sound and fiscally responsible proposal that meets Congressional guidelines, as well as the intent and the spirit of the Weapon Systems Acquisition Reform Act of 2009.

As you're aware, both the lead Littoral Combat Ships fully meet performance requirements. Both the lead ships of each variant are currently in service and already performing well, while also conducting a comprehensive test and evaluation program. LCS-1, the Freedom, demonstrated some of the things we can expect during her maiden deployment earlier this year, a deployment done 2 years ahead of schedule. In less than 3 weeks of counternarcotics operation in the Caribbean, she made three major drug seizures, recovered more than three tons of cocaine. It was because of her capabilities that she was able to run down fast drug boats that otherwise would have escaped.

I recognize that this program has historically had problems. The program's early shortfalls and initially unrealistic cost expectations, stretching back nearly a decade, have been pointed out by members of this committee and oversight operations—oversight organizations. It was precisely because of this poor performance record that last year, with the concurrence of Congress, we made very significant changes to our LCS procurement strategy. The message from this committee and Congress was unmistakably clear: The Navy needs more ships, but they have to be more affordable. We heard that message and established and enforced a strict policy to limit design changes and their debilitating impact on cost and schedule. We worked with industry to ensure the lessons learned building the lead ships were put in place for efficient construction of successive ships. And we put a talented, highly capable team in charge of this process.

In 2009, when bids for follow-on ships of both variants came in unacceptably high, we made the two industry teams compete against each other to get costs down. In this, we structured a highly competitive, fixed price procurement strategy to award 10 ships of a single design over 5 years to a single builder, with an additional 5 ships to be built by a second builder after another round of competition, with the Navy owning the technical data package for construction of all ships.

In response to this down-select, industry competitors restructured their respective teaming agreements to eliminate excess overhead and unnecessary costs. They leveraged the ten-ship plan to drive down material costs with their vendors and they used the long-term nature of the contract to plan facility improvements to further reduce labor costs.

These bids and the cost reductions we have seen demonstrated on LCS-3 and 4 will save the taxpayer approximately \$1.9 billion in fiscal year 2011 through 2016. More importantly, the fact that prices were so dramatically reduced presented an opportunity to save an additional \$1 billion, for a total of \$2.9 billion, through a dual award of a ten-ship contract to each bidder.

Each of the variants included in the two contracts will fall significantly below the cost cap established by Congress in 2010. If our request is approved, it would also enable purchase of an additional ship through the realized savings. In short, we'll get 20 ships for the price of 19.

It's important to note that these will be block buys and not multi-year contracts. We will not be contractually required to buy any ships after the first year and there are no termination or cancellation costs. Therefore, both Congress and the Navy will have continuing supervision and the ability to ensure this program stays on track.

Senator Levin, Senator McCain, members of this committee: You have worked for years on behalf of our service men and women to provide them with what they need to do and to have to protect our Nation, while also ensuring proper oversight to protect the interests of taxpayers. The LCS proposal you have before you is the fruit of those efforts. It delivers better value to the taxpayer and greater capability to our fleet.

I believe we have arrived at an opportunity to realize significant real savings within our shipbuilding program, and we have done so by following Congressional guidance. This is good for the Navy, good for the taxpayers, good for industry, good for workers, and good for our Nation.

Thank you.

Chairman LEVIN. Thank you, Secretary Mabus.

Now, I believe you wished our CNO, Admiral Roughead, to follow? Was that what you—okay. Admiral Roughead.

STATEMENT OF ADM GARY ROUGHEAD, USN, CHIEF OF NAVAL OPERATIONS

Admiral ROUGHEAD. Thank you, sir. Chairman Levin, Senator McCain, distinguished members of the committee: Thank you for the opportunity to appear before you today to discuss the Littoral Combat Ship and the dual-award proposal that I believe is good for the Navy, for our critical shipbuilding base, and for the taxpayer. LCS will bring new and needed capabilities to our fleet. It fills critical current and future warfighting needs in anti-submarine warfare, mine warfare, and surface warfare, close to shore, in areas of strategic interest, areas where we need shallow draft, speed, on-board capacity, and the flexibility to reconfigure our ships to optimize those missions. These same characteristics also allow LCS to take part in blue water operations. Having commanded the Atlantic and Pacific Fleets, I know the value of such a ship.

Accordingly, getting LCS into the fleet quickly, affordably, and in sufficient numbers became one of my highest priorities as CNO. The first step to get there, ironically and as was mentioned by Senator McCain, was to cancel LCS ships we had planned for in 2007 because of unacceptable costs. What followed was extraordinary co-

operation among my staff, the acquisition community, and the fleet. With the support of Congress, an acquisition strategy was developed and executed with discipline that gave us the opportunity to acquire LCS ships at great savings.

We have taken firm control of the program. Requirements have been controlled and we have held the line on changes to LCS ships under construction today. I deployed LCS earlier than any other ship class to assure we were on the right path operationally. It is clear to me that we are.

The dual award will bring important stability to the industrial base and is a major step in getting to the floor of 313 ships in our fleet. It enables more rapid production by involving two yard with two designs that fulfill LCS mission requirements and that have complementary features. It allows us to take advantage of the solid progress and infrastructure investments made by both builders. It will sustain competition.

The dual award also allows us to reduce costs by further locking in a price for 20 ships, enabling us to acquire LCS at a significant savings to American taxpayers and permitting the use of shipbuilding funds for other shipbuilding programs.

What we have proposed is outside the normal process, but it is an opportunity that, when it became apparent, was one that was to be seized. While it locks the price in, it does not lock out control by Navy or Congress, as it is not a multi-year procurement. Our ship construction budget, of which these ships are a part, will be authorized annually.

These are good ships. The LCS concept is a sound systems approach and we have brought the program under control.

I respectfully request your support of the Navy's LCS dual-award proposal. It is good for the Navy, for the Nation's industrial base, and for our taxpayers. I look forward to your questions.

Chairman LEVIN. Thank you very much, Admiral.

I think, Secretary Stackley, you were going to be next, and then we'll call on Admiral Pandolfe if he has testimony.

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

Mr. STACKLEY. Yes, sir. Senator Levin, Senator McCain, members of the committee: I'd like to provide amplifying information regarding cost numbers to better inform the committee members where we are today and why we believe that the numbers that we're looking at inside the bids are both credible and are very affordable.

To provide baseline information, as Senator McCain pointed out, the lead ships' ship construction costs cost the taxpayer, cost the Navy, the government, between 6 and \$700 million each. Those numbers reflect the shipbuilders' costs as well as government-furnished equipment and any changes that were brought to bear on those ships. We will refer to that as the baseline costs when we talk about cost cap information.

The follow ships, which are currently under construction at both Marinette and Austal, were negotiated ships inside of fixed-price contracts. Those are negotiated at target prices of about \$500 mil-

lion each, which includes the shipbuilder's cost plus government-furnished equipment. Now, we also have budgeted above those targets change orders at 5 percent, as well as a share line that runs to a ceiling on the contract. So inside of the fixed-price construct, we're sitting at targets for ship construction of about \$500 million, with a range that could go as high as about \$585 million for those ships if they don't perform in accordance with the contract.

Today for LCS-3, which launched at Marinette at about 81 percent complete, on schedule, she is on budget. So she is hitting her numbers in accordance with the target on the contract.

When we look at change order activity, which crippled the lead ships, the change order activity on LCS-3 is below 3 percent. So at 80 percent complete, change orders are performing at below 3 percent, which is also well below the 5 percent budgeted. So we see construction and performance to a contract that is demonstrating stability and capturing lessons learned from the lead ship.

For LCS-4 at Austal, she is 9 to 12 months behind LCS-3 by the natural progression of the contracts, she's about 42 percent complete and on track for her launch at about 80 percent complete. While it's still early in that ship's overall construction, she is performing in accordance with her target, as well as change orders on that ship are minimal, less than 1 percent thus far. So we're seeing demonstrated performance on the first follow ship, lessons learned and change order activity throttled to the extent necessary to ensure these ships hit their cost and schedule targets.

Now we move to the solicitation that was cancelled in the summer of 2009. In 2009 we went out for bids for the 2010 ships. Proposals that came in were going in the wrong direction. So where we saw progression from the first to the second ship targets, we were seeing a reversal of that trend in these proposals, which reflected to a great extent the introduction of new shipyards inside the teaming agreement, teaming agreements held by industry, and also risk that they viewed since they were very early on in construction of the follow ships at the time and had not demonstrated the learning that we are in fact seeing today.

We cancelled that solicitation, as you're well aware, went out with the down-select, the solicitation for 10 ships, 2 ships per year over a 5-year period. So inside of the fiscal year 2010 through fiscal year 2015 period, where we have a total of 19 LCS ships programmed, 10 of those ships were to be down-selected and the remaining ships were to be opened up for competition for a second source, and then between the first and second source they would be competed in 2015. So there's 19 ships in fiscal year 2010 through 2015, 10 bid in the down-select.

At the same time, as Senator McCain pointed out, the cost cap was established at \$480 million, with an escalation provided for the cost cap. So over those ships the cost cap is averaged to about \$538 million. So we have a cost cap of \$538 million and then we get bids in hand. We evaluate the bids and, while we can't provide specific details on individual bids, individual ships, to avoid violating the competition sensitivity, I'm going to provide average per the 20-ship bid numbers.

Per 20 ships from the 2 competitors, average, including the shipbuilder's cost for construction plus the government 5 percent budg-

et for change orders, plus a margin for potential cost growth for unknowns or other performance considerations, the Navy is including, holding in its budget, \$440 million per ship—that's inside of a fixed price contract—his bid numbers, our government-furnished equipment, our budget for change orders, plus a budget, a management reserve budget, for any cost performance or other issues that would impinge on the contract.

In the worst case, which we do not anticipate and have no cause to believe, but within the fixed-price contract at ceiling, plus government-furnished equipment, plus the budget for change orders, the price to the government is on the order of \$460 million average over the 20 ships. So under all circumstances, the pricing for these ships fall well below the cost cap and well below the budgeted amount, which is how we derive the savings that we've calculated.

Chairman LEVIN. Thank you very much, Secretary.
Admiral Pandolfe.

**STATEMENT OF RADM FRANK C. PANDOLFE, USN, DIRECTOR,
SURFACE WARFARE DIVISION OPNAV N86**

Admiral PANDOLFE. Sir, very briefly, this program was founded in validated requirements arising from growing threats in the littorals from submarines, mines, and surface crafts, that we have to counter. In response to our request, both builders have produced highly capable ships that exemplify speed and maneuverability and adaptability.

As mentioned, due to competition we now have favorable pricing, which allows us, with your permission, sir, to move forward with this program.

Senator, we need these ships and we ask for your support.

Chairman LEVIN. Thank you, Admiral.

I think, Dr. Labs, you're next on our list, so we'll start with you.

Thank you all for being here, by the way. I think I mentioned that at the beginning, but this is very short notice. We very much appreciate your all being here.

Dr. Labs.

**STATEMENT OF ERIC J. LABS, PH.D., SENIOR ANALYST FOR
NAVAL FORCES AND WEAPONS, CONGRESSIONAL BUDGET
OFFICE**

Dr. LABS. Thank you, Mr. Chairman. Mr. Chairman, Senator McCain, members of the committee: I appreciate the opportunity to discuss the Navy's Littoral Combat Ship program with you today.

As you know, Director Elmendorf sent a letter to Senator McCain on Friday in response to his request that CBO conduct an evaluation of the cost implications of the Navy's proposal to change its LCS acquisition strategy. I ask that the full text of the CBO's letter to Senator McCain be entered into the record.

Chairman LEVIN. It will be.

[The material referred to follows:]

[COMMITTEE INSERT]

Chairman LEVIN. It will be.

Dr. LABS. CBO's analysis suggests the following five conclusions: First, under either plan, costs for the first 19 ships are likely to be

less than the amounts included in the Navy's 2011 budget and future years defense program;

Second, CBO's estimates show per-ship construction costs that are about the same for the two plans, but those estimates do not take into account the bids the Navy received;

Third, adopting the dual-award plan might yield savings in construction costs, both from the possibility that the bids are lower than they would be in a subsequent competition when the economic environment could be different and from avoiding the need for a new contract to develop the infrastructure and expertise to build a new kind of ship;

Fourth, operating and maintaining two types of ships would probably be more expensive than operating just one;

And fifth, if the Navy later decides to use a common combat system for all LCSs the cost for developing, procuring, and installing that system could be significant.

Let me first address the Navy's estimates. In the 2011 FYDP, the Navy proposed spending almost \$12 billion in current dollars to procure 19 Littoral Combat Ships under the down-select plan. The Navy now estimates the cost for that plan to be \$10.4 billion, or about \$1.5 billion less than its earlier estimate. Now, with the 2 bids in hand, the Navy proposes to purchase 20 ships, 10 from each contractor, for about \$9.8 billion through 2015, or \$600 million less than it currently estimates for the down-select plan and \$2.1 billion less than its 2011 FYDP.

The Navy briefed CBO on those estimates, but did not provide the detailed contractor data or the Navy's detailed analysis of those data. If the contractors' proposals for the ten-ship award are robust and do not change, the Navy's estimates would be plausible. In fact, in today's dollars and on a per-ton basis the cost of the LCSs under each strategy align well with the historical costs of the *Oliver Perry*-class frigate, the ship in the Navy's inventory that is most similar to the Littoral Combat Ship. But CBO has on independent data to verify the Navy's savings estimate and total costs could grow by several hundred million dollars if the shipbuilders experience overruns.

In contrast, CBO's own estimates of costs are higher and indicate little difference in the per-ship cost of the two plans. But CBO's estimates do not incorporate any benefits of competition that may have arisen as a result of the Navy's existing down-select strategy, benefits the Navy argues would be locked in by the fixed price plus incentive contracts. CBO estimates that the down-select plan would cost the Navy about \$583 million per ship, compared with an estimated cost of \$591 million per ship under the dual-award plan. Given the uncertainties that surround such estimates, that difference, less than 2 percent, is not significant.

Overall, CBO's estimates of the costs for the down-select and the dual-award strategies are higher than the Navy's by \$680 million and \$2 billion, respectively. However, in light of the contract bids, it is not clear that CBO's cost estimating model is a better predictor of LCS costs through 2015 than the Navy's estimates. Still, changes in design to address technical problems, changes in the number of ships purchased, inflation, or other escalation clauses could add to costs.

The Navy decision to buy both types of ships through 2015 would have cost implications after 2015, but whether those costs will be higher or lower depends on at least three aspects of the Navy's decision: First, which of the two ship designs the Navy would have selected under its original down-select plan; second, whether the Navy will buy one or both types of ship after 2015; and third, whether the Navy decides to develop a common combat system for both LCSs or keep the two separate combat systems under the dual-award approach.

CBO cannot estimate those costs beyond 2015 because it does not know what the Navy is likely to decide in those areas. However, I would like to highlight the issue of the common combat system for the LCS. If the Navy were to decide that it wanted all LCSs to share the same system, it would be considerably more expensive to backfit the 12 LCSs under the dual-award strategy than the 2 orphan LCSs under the down-select strategy.

The combat system of an LCS today costs about \$70 million. Thus, if future Navy leaders decided that a common combat system was desirable, developing, purchasing, and installing new combat systems in 12 LCSs would cost more than the savings that the Navy is asserting that the dual award offers over the next 5 years.

Thank you and I'm happy to answer any questions you might have.

Chairman LEVIN. Thank you very much, Dr. Labs.

Mr. O'Rourke.

STATEMENT OF RONALD O'ROURKE, SPECIALIST IN NAVAL AFFAIRS, CONGRESSIONAL RESEARCH SERVICE

Mr. O'ROURKE. Chairman Levin, Senator McCain, distinguished members of the committee: Thank you for the opportunity to testify today. With your permission, I'd like to submit my written statement for the record and summarize it here briefly.

Chairman LEVIN. Thank you. They will all be made part of the record.

Mr. O'ROURKE. The Navy's proposed dual-award strategy is the third time in the history of the LCS program that the Navy has presented Congress with an important choice about the future of the LCS program late in the Congressional budget review cycle, after Congress has completed its spring budget review hearings and some of its committee markups. The first instance was in mid-'02 when the Navy submitted an amended request to Congress for fiscal year 2003 funding to get the LCS program started using a rapid acquisition strategy. The second instance was in September 2009 when the Navy announced its proposed down-select strategy.

The timing of the Navy's new proposal for using a dual-award strategy provides relatively little time for Congress to collect cost other information from the Navy, to solicit cost and other information from independent sources such as CBO and GAO, for CBO and GAO to develop such information and provide it to Congress, and for Congress to then evaluate all this information.

This situation raises a potential issue for Congress concerning the possible implications for the LCS program and for Congressional oversight of defense acquisition programs in general of proceeding with the LCS program in part on the basis of policies origi-

nally presented to Congress late in the congressional budget review cycle.

There are a number of issues to consider in evaluating the relative merits of the down-select and dual-award strategies, including their potential relative costs, and on this key question the available information is fragmentary and not well vetted. Although the Navy's statements in recent weeks about the cost implications of the dual-award strategy have tended to focus on ship acquisition costs, this is only one of at least three significant cost elements that can be examined in comparing potential costs of the down-select and dual-award strategies.

Regarding ship procurement costs, there's a notable difference between the Navy's estimate and CBO's estimate. The Navy estimates that, compared to the down-select strategy, the dual-award strategy would reduce ship procurement costs by \$1 billion through fiscal year 2016. CBO in contrast estimates that, compared to the down-select strategy, the dual-award strategy would increase ship procurement costs by \$740 million through fiscal year 2015. That's quite a difference in estimates.

The second cost element to factor in are potential additional costs under the dual-award strategy for possibly developing, procuring, and installing a common combat system for LCSs. Depending on what the Navy now or years from now decides to do regarding LCS combat system commonality, these additional costs can either be negligible or significant. Neither the Navy nor CBO has released estimates of these costs as of yesterday, but at the potential high end they could be enough to cancel out or even exceed any savings in ship procurement costs that might be realized through the dual-award strategy. The Navy's intentions regarding LCS combat systems are not clear.

The third cost element to factor in are the potential additional costs under the dual-award strategy for operating and supporting significant numbers of two LCS designs over their live cycles. GAO has reported a Navy estimate of \$295 million in net present value terms for this additional cost, but this figure does not appear to have been vetted yet by an independent entity outside DOD. Both CBO and GAO have highlighted uncertainties regarding estimates of relative life cycle O and S costs under the down-select and dual-award strategies.

When I put together the information on these three cost elements that was available as of yesterday, I get a range of possibilities. At one end of the range, the dual-award strategy might cost about \$700 million less than the down-select strategy. Toward the other end of the range, the dual-award strategy might cost hundreds of millions dollars more than the down-select strategy. The wide degree of uncertainty from one end of the range to the other can be viewed as an expression of how imperfectly understood the potential relative costs of the down-select and dual-award strategies are at this point.

Mr. Chairman, distinguished members of the committee, this concludes my testimony. Thank you again for the opportunity to testify and I'll be pleased to respond to any questions you might have.

[The prepared statement of Mr. O'Rourke follows:]

Chairman LEVIN. Thank you very much, Mr. O'Rourke.
Mr. Francis.

**STATEMENT OF PAUL L. FRANCIS, MANAGING DIRECTOR, AC-
QUISITION AND SOURCING MANAGEMENT, GOVERNMENT
ACCOUNTABILITY OFFICE**

Mr. FRANCIS. Good afternoon, Mr. Chairman—excuse me; I apologize for my raspy voice here—Senator McCain, and members of the committee, to talk about LCS today.

We've been involved in the program on or off for about the past 5 years and I would say I think the Navy's done quite a bit of work, particularly in the last year, to get the program on track, but in our view the program is not out of the woods yet. We see risks in three areas.

First would be the seaframes. The third and fourth seaframes are undergoing construction right now. There are design changes. Some design changes are being postponed to post delivery. I believe the Navy feels that they have adequately provided for these changes financially and managerially, but time will tell whether that's sufficient.

The second area is the mission equipment packages. The mission equipment packages have had difficulty in development and testing over the years. To illustrate, in 2007 the Navy had anticipated having delivered 16 mission equipment packages through fiscal year 2012. Right now the estimate is at about eight and those mission equipment packages will be less capable than envisioned.

The third area is integrated testing, that is bringing the mission equipment packages and the seaframes together. At this point, no operational testing of either the seaframes or the mission equipment packages has been done yet. Right now I believe the schedule is the first testing, operational testing of the seaframes and two mission equipment packages, will be finished on the third quarter of fiscal year 2013. The third mission equipment package will be operationally tested in fiscal year 2015. There's potential for discovery there when those systems are brought together and operationally tested.

In August 2010, we raised the concern that the ships and the seaframes may be proceeding too quickly before the operational testing was done, and we made a recommendation to the Navy of Defense that they reconsider sequencing the mission equipment packages and the seaframes so that one didn't get ahead of the other. The Navy agreed with that—the Department of Defense agreed with that recommendation, but we haven't seen that followed up in the new dual strategy proposal.

I think, in closing, I'd say the risks that I cite in the programs are not materially different in either strategy. So for example, if the dual strategy was not followed and the existing down-select to ten ships was followed we'd have many of the same risks. I think by the Navy saying they're willing to back 20 ships it does signal that the Navy is more confident in the ships and could create some expectations on the part of industry downstream. On the other hand, I think that having a second source could provide an additional hedge against risk should one seaframe develop some problems.

Mr. Chairman, that concludes my statement and I'd be glad to answer any questions.

[The prepared statement of Mr. Francis follows:]

Chairman LEVIN. Thank you very much, Mr. Francis.

Let's try a first round of 8 minutes.

First let me ask you, Secretary Stackley. You've heard now the testimony of the CBO, the GAO, and the CRS. Do you want to comment, react to any of the testimony that you've heard, before I ask specific questions?

Mr. STACKLEY. Let me make a few comments. First, I believe Dr. Labs pointed out in his assessment that he basically estimated what the ships would cost in accordance with his cost model, but his information is uninformed by the bids. What we are bringing to the table is information inside of the bids that would take CBO's cost estimates, which are within I would say 5 percent of the Navy's budget and the Navy's estimate of a year plus ago, and then bring against that demonstrated performance in the course of the past year on the first follow ships and fixed price proposals inside the bids we have.

So his estimate balanced against the fixed price bids that we have are consistent in terms of the determination of the savings that we have here. So I believe that CBO's estimate and the Navy's estimate and the Navy's proposal for a dual award to provide savings are all consistent.

The next point is—

Chairman LEVIN. Before you get to the next point—

Mr. STACKLEY. Yes, sir.

Chairman LEVIN.—the reason that they're uninformed is that he did not have that information available to him, for proprietary reasons—

Mr. STACKLEY. Yes, sir.

Chairman LEVIN.—is that correct?

Mr. STACKLEY. Yes, sir.

Chairman LEVIN. Nonetheless, looking at ranges, is that what you're saying, they are consistent with your estimates?

Mr. STACKLEY. His estimate is within a few percent of the Navy's estimate and the Navy's budget in PB 2011. When you bring the bids against that and you factor in, as I have described, the fixed price and the margins that we're including for both change and any cost excursions, then we've got a solid number to go against an estimate, and the difference is the savings that we're bringing to the table.

Chairman LEVIN. Keep going. You were saying your second comment.

Mr. STACKLEY. The second comment has to deal with, there's a common theme between CBO, CRS, and GAO regarding risk; it's risk and unknowns. I will describe that this program, as I mentioned in my opening remarks on the numbers, this program has done a complete turn-around in terms of stabilizing design, stabilizing production processes, and driving lessons learned on the part of industry into their processes.

So what that has resulted in is performance far improved, not just on this program, but also compared to other historical performance on shipbuilding programs at this stage in their respective con-

tracts. The key indicators I would tell you are what we're seeing in terms of cost performance on the first ships, the first follow ships, and control of changes on the first follow ships, and then what we're seeing in terms of remaining risk on the test program.

So we have very much controlled change, controlled the risk that the program is staring at in the future. Then the mission package discussion has isolated any risk associated with the mission packages from the seaframes themselves. So we have a different view on risk, that yes, there is risk, but it is very well controlled and contained within the estimates that we have on the program, which supports our assessment of the savings that we're bringing to the table.

Chairman LEVIN. Let me pick up where you just left off.

Admiral Roughead, one of the ship designs—one ship of each design has been delivered. They've gained some operating experience. Do both of these vessels in their current configuration meet the Navy's requirements?

Admiral ROUGHEAD. Yes, Senator, they do. Both ships do.

Chairman LEVIN. Now, the Congressional Research Service report lists some cost risks of pursuing a down-source strategy. As we've heard, the largest of these appears to be related to replacing the ship's combat systems. Now, if we were to do that as part of the plan, it would or could eliminate or seem to eliminate some of the additional savings of the dual-source strategy.

But I would note that the CRS report says that we might want to replace the combat system on all LCS ships bought to date with a new common combat system. So, Admiral Roughead or Admiral Pandolfe, I guess, is the current combat system on each type of vessel adequate to meet your requirements?

Admiral ROUGHEAD. Yes, sir, they are.

Chairman LEVIN. Now, if the combat systems fail in the future to meet requirements, then we would have to replace or upgrade those, upgrade those combat systems. But would that not be a decision unrelated to current acquisition strategy? Secretary Stackley, let me ask you that question.

Mr. STACKLEY. Yes, sir. The current acquisition strategy does not call for the changeout of the combat system.

Let me describe some characteristics of the combat system. As it was mentioned earlier, the total cost for the combat system is on the order of about \$70 million. When we think of the combat system, we break it down into a couple key components, weapons, sensors, and command and control system. We have in fact, on the weapons side of the combat system, commonality. Both ships' 57-millimeter Bofors guns, both ships we're looking at RAM-CRAM weapons systems. So the weapon system is already common both between them and also with other ships in the inventory.

Now, on the sensor side, we have contemplated moving towards a common sensor, and inside of this solicitation the Navy asked for priced bids for a new sensor to consider for the future. In total, the cost for bringing a new sensor—that's both common for LCS and with the rest of the fleet—is about \$20 million nonrecurring and about \$2 million a ship difference.

So weapons are common. If the Navy chose to go to a common system for performance reasons, the cost impact would be about \$20 million nonrecurring and a couple million dollars a ship.

Then on the C and D side, which is largely the software system and displays and processors, the Navy does not have a drive right now to go towards common C and D for this class either in the down-select or dual-award. It is something that we could consider in the future.

Chairman LEVIN. Now, another concern which has been raised by Mr. Francis is that if the Navy has to make changes in the mission package, the LCS mission package, that that would result in cost growth. As I understand the LCS architecture specifying how the mission packages plug into and operate on the ship through defined interfaces, the LCS program divorces mission package changes from the ship construction program and ship construction changes from the mission package program.

Now, let me ask you, Secretary Stackley: Is that—do I have that right so far or am I off, and if so correct me?

Mr. STACKLEY. No, sir, you have that correct. There is a strict interface control document that serves both the seaframe and the mission packages. So the seaframe is designed in accordance with the interface control document, the mission packages are designed in accordance with the interface control document, so that when you bring them together, form, fit, function, space, weight, power, and cooling support the mission packages as well as the seaframe design.

Chairman LEVIN. Thank you.

Senator McCain.

Senator MCCAIN. I want to thank the witnesses.

Dr. Labs, we've seen this movie before, haven't we? Isn't this the third time that the Navy has come in late in the game with proposals for a Littoral Combat Ship?

Dr. LABS. This has not been the first time where the Navy has come in, as you say, to change a major aspect of the program in a very short period of time. Mr. O'Rourke's report certainly goes into that history in some detail.

Senator MCCAIN. The third time after the authorization bill was done, the Navy has come in and said:

Gee, we've got it solved now and we need significant changes. And obviously, I read off the results of those significant changes twice before.

Mr. O'Rourke, you've been following this kind of business for about 30 years, is that right?

Mr. O'ROURKE. 27 years in January.

Senator MCCAIN. 27.

Chairman LEVIN. Get your mike on if it's not on.

Senator MCCAIN. Have you ever seen one quite like this?

Mr. O'ROURKE. I cannot think of another shipbuilding program that has had this many changes proposed over the years within that program at such a late stage in the Congressional review process.

Senator MCCAIN. Mr. Francis, did you have a chance to look at one of the concerns that's been raised about the combat systems, the different combat systems in the different ships?

Mr. FRANCIS. Senator McCain, we have not had a chance to look at the issue of the combat systems. I have read what Dr. Labs and Mr. O'Rourke have written, but we have not covered that ourselves.

Senator MCCAIN. Dr. Labs, do you agree with Secretary Stackley's remarks about the relative ease it would be to—on the whole issue of combat systems on the different ships?

Dr. LABS. Senator McCain, I honestly do not have enough information to sort of comment intelligently on what Secretary Stackley offered up in sort of response to those comments.

Senator MCCAIN. Do you agree with Mr. O'Rourke's statement that the costs of this new proposal could be \$700 million less and in some cases could also be as much as over \$2 billion more?

Dr. LABS. I would say that, since a large part of the \$2 billion more is being driven by the CBO estimate of what the dual-award strategy would be, it would depend very much on detailed examination of the contract bids, because the CBO model is just that, it's a model. It takes what the Navy has been paying for the ship so far, it runs it down a learning curve, it applies rate factors and things like that.

It did not take into consideration any benefits of competition, what the actual contract bids might be. If I were to have more access to that kind of data in a detailed way, it's possible that the CBO estimate could change in response to that.

There is certainly a potential range here because there's still potential for cost growth within the context of those contracts. There is potential for cost growth even outside of those contracts if other decisions are made to address technical problems that arise on the ship, as Mr. Francis has stated. So there is certainly a possible range there, but without sort of knowing more detailed information I can't comment on whether I think the high end of the range is more likely than the lower end of the range or vice versa.

Senator MCCAIN. But you agree there is a range?

Dr. LABS. There is a range, yes, sir.

Senator MCCAIN. Mr. Francis, do you agree that—that Mr. O'Rourke states on the one hand, compared with the down-select strategy, the dual-award might cost a net total of \$705 million less. On the other hand, compared to the down-select strategy, the dual-award strategy might cost a net total of as much as \$2.8 billion more?

Mr. FRANCIS. Senator McCain, I would agree that there is a range. I'm not sure what the numbers are. As Dr. Labs explained, his numbers are not based on the current bid proposals. But we do think there is potential for risk. The Navy could be exactly right on what it's estimating, but we will have to see whether they've adequately provided for that risk.

Senator MCCAIN. But the three witnesses, Dr. Labs, Mr. O'Rourke, and Mr. Francis, are operating at a certain disadvantage because you don't, as I don't, know the exact cost that's bid; is that correct?

Mr. O'ROURKE. That's correct.

Dr. LABS. Yes, sir.

Mr. O'ROURKE. And there's one more factor I think that needs to be considered, which is the unknown of what the bid prices would

be under the second-stage competition that would be held under the down-select strategy. The Navy is saying in essence that they were pleasantly surprised by the bid prices they received on this solicitation, but might not they be also pleasantly surprised by the bid prices that would be submitted under the second-stage competition that would be held under the down-select strategy? What are the Navy's assumptions regarding the kind of bid prices they might receive under that second-stage competition and are they as optimistic or as pleasantly surprising as what they have realized here?

It's also possible that if you were to implement the down-select strategy and hold the second-stage competition, the bid prices in that second-stage competition could be even better than the bid prices under this first one, because the number of bidders involved and the various talents they would bring to bear in putting their bids together could be as great or greater than what was available among the universe of bidders in this solicitation.

So when the Navy says that they think they will get a billion dollars savings more under dual-award than under down-select, they are comparing known bid prices for this down-select to an unknown bid price for a down-select that would take place two or three years from now and one which might also be pleasantly surprising to the Navy. That is one dimension of how we cannot be all that certain about what the comparative prices are if we were to move forward with the down-select versus dual-award strategies.

Dr. LABS. That's a point, Senator McCain, that I raise in my report as well.

Senator MCCAIN. Would you—obviously, you would agree with the obvious. It takes a lot of training and a lot of skill to man one of these ships efficiently, with the latest technology, latest equipment. And yet now we are asking the men and women in the Navy to be trained in two separate ships, two separate systems, two separate supply chains, two separate maintenance regimens, and we have obviously a very large number of questions that remain unresolved, not because you three aren't doing your job. You just don't have the information, and those questions are, as I talked about, the difference in costs, deficiencies affecting the lead ships have not been identified and fully resolved. Has the combined capability of the LCS seaframes with their mission modules been sufficiently demonstrated, so that increasing the Navy's commitment to seaframes at this time would be appropriate? Why would operating and maintaining two different combat systems, that is sensors, weapons, and software, that are unique to each LCS version not offset the Navy's savings estimates or ultimately prove to be wasteful and unsupportable; and how consistent is the Navy's plan with the GAO's recommendations for the program?

What's the down side, I'd ask, finally, the three witnesses, to delaying this decision? The bidders have already agreed to one extension to December the 30th. What's the down side to waiting, say 2 months, while we can get the complete information and, frankly, the people that Congress relies on for objective opinions and views and information, to give you a couple of extra months to look at and get the specifics that you don't have now in order to make the kind of informed judgment and recommendations to the Congress which, frankly, are your duties?

Could I ask, maybe beginning with you, Dr. Labs? In other words, what's the rush?

Dr. LABS. It seems to me that the down side that I can imagine to this would depend very much on the type of negotiations the Navy has been having with the contractors and the process by which those contractors are involved in building LCSs 3 and 4. If, for example, delaying the contracts, the letting of the ten-ship contract under the down-select strategy by a few months, if that leads to layoffs at the shipyard, if it leads to a loss of learning because there isn't work for people to do because they were expecting the fiscal year 2010 ships, which have not yet even been awarded yet—they already expected them to be awarded—that could lead to increased costs for that down-select strategy than what the Navy is presenting today.

I have no idea as to what the range of that potential increased cost could be. It could be very small. It could be something significant. But that seems to me would be what would be the potential down side to it.

The positive, on the positive side of the equation, are many of the things that you've mentioned, is that we'd have much more time to sort of look at the details of the proposals, look at the details of the operating cost issues, which we have very little information to go on, and to make a more informed decision. That to me is the two sides of the equation as I see it.

Senator MCCAIN. Mr. O'Rourke.

Mr. O'ROURKE. I think the premise of your question included if the bids could be extended by another month or 2 or 3, and I don't know whether that's possible. But if the bids could be extended, it would provide more time to get at questions of, for example, the potential investment costs of moving toward commonality on the combat systems. And that's not something you would do because of any inadequacy of the current combat systems. It's because you're trying to streamline the number of combat systems that the Navy would be supporting across its surface fleet at any one time.

So it would provide more time for that. It would provide more time to vet the number on life cycle operation and support costs and what the interaction between that number is, and also the interaction between that number and investments that you make in combat system commonality, because the more common you make the combat system it could actually bring down whatever the premium is for life cycle O and S costs.

In general, it's better to get ships under contract sooner rather than later. I think as a general practice people in most cases would prefer to get the ships under contract. But if we were to wait more time and not have these ships under contract for 1 or 2 or 3 more months, it would not be the only shipbuilding program that has experienced that kind of a delay while we were waiting for issues to be sorted out. The contract award on the DDG-1000 destroyers was held, on the second and third ships in the program, was held in abeyance all through this year while we put the DDG-1000 back through the Nunn-McCurdy recertification process. The Navy had to do that. And more generally, those two ships, the second and third ship in the DDG-1000 program, have not been awarded, even

though the second ship was funded in the 2007–2008 timeframe and the third ship was funded in the 2009 timeframe.

So there are other examples of ships that have waited for some time after they were funded until the contracts were awarded. It's not a preferable practice, but if you can get value out of it in terms of developing firmer information on which to base a decision, then observers might judge that value to be worth it.

Mr. FRANCIS. Senator McCain, again, if the bid prices can be extended I think a down side would potentially be work in the yard, particularly for LCS-3, which was recently launched and is 80 percent complete. So there'd be fabrication shops and so forth earlier in the process that might be looking for work.

But apart from that, I think there are up sides programmatically to have more time to go through and analyze what we're getting ourselves into and what the downstream effects are. I'll give you one example. In the current estimate, the net present value of operation and support costs to operate a second ship is put at \$295 million. But last year when the strategy was changed to a down-select strategy the Navy cited substantial operation and support cost savings by going down to one design. So a good analytical question would be, how does that \$295 million cost in this strategy compare with what savings were estimated in the last strategy?

Senator MCCAIN. I thank you. I thank the witnesses.

I thank you, Mr. Chairman. I think it's obvious that this is a rush to judgment on a program that has been plagued with billions and billions of cost overruns and waste of taxpayers' dollars. I obviously am deeply concerned about that from the taxpayers' standpoint.

Chairman LEVIN. Thank you, Senator McCain.

Senator REED.

Senator REED. Thank you, Mr. Chairman.

I believe Senator McCain has asked the right question and I think the Navy should respond. So, Secretary Mabus and Secretary Stackley, Admiral Roughead, can you respond? What is lost or what do you gain or lose by waiting?

Mr. STACKLEY. Yes, sir. Let me start with the time line that we've been on. This is a 2010 solicitation for the 2010 ships. So we in fact received the bids back in May. The competing industry teams to put together these fixed price bids have gone out through their vendor base to secure long-term vendor agreements, looking for 10-ship buys with their vendors over a 5-year period. So they have with their vendor base for that piece of their proposals to lock in those fixed prices.

The other key components of their bid are their own labor learning and the overhead rates that come with that. Delaying the contract award—that was in the May—proposals received in May. We went through the evaluation, two series of discussions, brings us to the fall. Pricing extended to expire in mid-December, and we have pushed that back to the end of the month.

When we have discussions with industry about the impacts of further delay to the award, that's where their proposals start to come apart. We have both hiring freezes and layoffs in effect at the competing shipyards, and we have vendor agreements that have

been extended far beyond what was anticipated when they went out with their first go-arounds with the vendors.

So their comeback to the Navy has been: We are at the point where we have got to press on; we've got to press on. Workforce is leaving, hiring freezes are in effect, vendors are stressed in terms of their ability to keep faith with the proposals, the fixed price proposals that they have put in place. They will need to have to then go back with any further delay and reprice their proposals.

Today we have, as I described, very affordable fixed-price proposals in hand, which is why we are here, and we do not propose to give those up for further delay.

Senator REED. If I can follow up with just one question in this area. In order to make a decision, you would have to at least implicitly assume the additional cost to the Navy for the 2- or 3-month delay, given what the vendors and the contractors are saying. I would assume in your comments you assume it would be a significant increase, not something that would be—something that could be acceptable to the Navy; is that correct?

Mr. STACKLEY. I think that they have gotten very hard commitments from their vendors. This program has been very troubled. It started, stopped, started, stopped. With this solicitation we are looking for stability. That has been the forcing function, to get costs under control and to get the competitive pressure that we've brought to bear.

Another start-stop with the vendors, I just don't have confidence that we'd be seeing the same type of pricing coming back in a repricing drill.

Senator REED. Let me ask you another question. You've talked about average cost of ships, but we don't do things on the average. We do things year by year, ship by ship. Can you sort of plot out the graph of the year by year, ship by ship? Is it going to start off at a point and go up, up, up, and then peak?

Mr. STACKLEY. No, sir. What we are looking at is going from ship 1 to ship 2—and this really is, this is the stability issue and this is industry responding to the issues that we have driven in terms of performance—going from ship 1 to ship 2, in terms of production labor, which is a big component of your cost, we're seeing on average about a one-third reduction in labor hours between the first and second ship, which is phenomenal. This is rooting out the issues that plagued us on the lead ships.

Then inside of the proposals across the 5 years, what we are seeing is very steady, aggressive learning proposed based on what we're seeing for demonstrated performance to date, what they have locked in in terms of fixed prices with their vendors, a reasonable expectation of control of overhead rates based on this business base.

So we continue down a learning curve nominally in the mid-80s, which is both very good but not unreasonable in terms of comparison with other shipbuilding programs. The 51 program, for example, experienced learning in the 85 to 90 percent range. We're seeing Virginia class in about the 90 percent range.

So they've made a significant drop in their costs from the first to the second ship and then they're extending continued good learning throughout the period of this contract, and then backing it up

with, as I described, locking in the material costs. Then you have escalation effects. In fact, the learning that we're seeing commands over any escalation effects in the period of this contract.

Senator REED. Let me turn to another subject that's been discussed. That is life cycle costs. Points have been raised by the oversight organizations that suggest that one of the motivating elements for a single contract was saving on life cycle costs, the points that Senator McCain made so eloquently about crew training, standardization. Now we have two ships and the life cycle costs are very vague, to say the least. They're influenced by systems that are going to be added—anti-submarine systems, anti-mine systems—that are still being developed.

Can you give us sort of a notion of how you're estimating life cycle costs, how that estimate will—how confident you are of that estimate, essentially?

Mr. STACKLEY. Yes, sir. Let me start with the elements of the life cycle, the total ownership cost. The LCS program—we have what's referred to as a program life cycle cost estimate, which was completed June-July timeframe. Independent of the design, whether it's design A or design B, the program life cycle cost estimate is on the order of 83, 82, \$83 billion. And the two different designs are pretty much on top of each other in that estimate.

When we look at a dual design versus a single design in the life cycle, what we focus on are those elements of the life cycle cost that are affected by the design characteristics. So when it comes to manpower, for example, manpower is equal for the two because they're both 40-man crews, and so you can remove that as a determinant in O&S costs. When you look at repair parts, repair parts, whether it's a diesel on the Austal version of the ship or the diesel on the LCS version of the ship, the repair part is about the same. So repair part costs get pushed off to the size in the assessment.

Then you have maintenance and fuel costs. Those are pulled off to the side in the dual versus single design. So the determining characteristics in placing the premium on dual design have to do with things like configuration management, in-service engineering support, software maintenance, and then nonrecurring associated with modernization. Then there's the piece that Senator McCain highlighted, associated with training for the crew. When you look at that portion of the life cycle and you estimate what the premium is dual design versus single design, and you back out the fact that we have already paid for a lot of the nonrecurring, so by delivering two ships we have already absorbed nonrecurring costs, and we also are going to continue to support the two ships that we have for either of the non-selected class in a down-select mode, that's where you arrive at a fairly manageable premium associated with O and S for dual design, which in net present value is about \$300 million.

That's the estimate. Today we went back to the 2006 business case analysis that was done at that point in time, because this same question was being viewed, and on a percent basis it is consistent with the '06 assessment, it's consistent with the program life cycle cost estimate done this year and then when we looked at it again in the fall.

Senator REED. Thank you, Mr. Secretary.

My time has expired, but I think these questions should also be posed, and I will follow up either in writing or if I get back for a second round, to the oversight, because this is a critical issue. I think it's such a highly complex and technical nature that it deserves a discussion from both perspectives.

Thank you very much, Mr. Secretary. Thank you, gentlemen.

Chairman LEVIN. Thank you, Senator Reed.

Senator SESSIONS.

Senator SESSIONS. Thank you, Mr. Chairman, and thank you for having this hearing. I think it's good to air these questions. I appreciate Senator McCain's commitment to containing costs and I think some of his criticisms early on of this program have been exactly correct. I think all of us recognize the program had an inauspicious beginning.

I would just ask maybe Admiral Roughead and Admiral Pandolfe, how many years in shipbuilding have you two? How many years do you have working with building ships?

Admiral ROUGHEAD. Oh, I've been involved with ships for going on 38 years now, Senator. And I've had the opportunity to put the second ship of a class in commission, and I understand what the challenges are associated with that. As I said in my statement, these ships are needed, but what we're seeing as we get on to building the second ship of the class or the second ship of each design is some pretty remarkable improvements that in my experience not only are encouraging, but they give me the confidence to go forward.

Senator SESSIONS. Are they—the drop in price as the new ships come on, does that exceed what you have seen normally in your previous history?

Admiral ROUGHEAD. Mr. Stackley can talk more about the pricing of ships, but what I have seen in the way of the learning curve as we go forward on these ships I think is really quite good.

Senator SESSIONS. Admiral Pandolfe, how many years have you had?

Admiral PANDOLFE. Sir, I've just gone over 30 years of operating and maintaining war ships. To the CNO's point, I think the team has worked extraordinarily hard over the last year to bring this program to where it needs to be, to put rigor into the requirements and to work with our shipbuilders, to get some affordable pricing that can lead to program stability. That's what this program needs, sir.

Senator SESSIONS. Secretary Stackley, how many years have you been working in this area?

Mr. STACKLEY. About 30 years, sir.

Senator SESSIONS. Well, I think you've got almost 100 years, 90 years here of experience. You've been living with this a lot closer than any of us in the Senate have been living with it. The House has approved this plan that you've asked them to approve, and I'm inclined to agree, based on what I know.

But I think we ought to examine it, but I think we should have an open mind. I would suggest, Mr. Stackley, that with regard to additional delays—you've mentioned a number of points. One of our reviewers in analyzing this talked about uncertainty in programs. We've already had a lot of uncertainty and a lot of delays in this

program. Do you think, could this cause a bad reputation for the Defense Department in general, to a bidder thinking, no matter what I do, it's going to be put off and delayed and costs are going to run up? Is that a concern we should have?

Mr. STACKLEY. Sir, I think one of the most critical aspects of cost control on any major defense program is stability, stability of requirements, stability of design, stability in budgeting, stability in scheduling and contracting. Delaying the program tends to destabilize what we're trying to accomplish here.

Senator SESSIONS. Admiral Roughead, you've heard from the CBO and the GAO and the CRS. But the Navy has its own plan. It's your ship, it's your money that's getting spent. Do you believe that your plan—your analysis of these bids and the decision you've reached is based on intense evaluation that is in more depth than the three that have been proposed here? Not that they're not valuable, not that a fresh look at this isn't very valuable. But tell me how you evaluate your own plan? It's not as if, I think, that you haven't analyzed these factors yourself.

Admiral ROUGHEAD. Yes, sir. I think as the other witnesses mentioned, they're working from models and from estimates. We're working from known figures. We can get into why it is that way. I think even a delay may not even solve that problem, simply because of the restrictions that we have on making that information available.

So a delay doesn't get us any farther down the road. But we're working from known figures; they're at the disadvantage of not having those figures.

But the other point that I would make and one of the reasons why I have confidence in the ships is that we've had these to sea. There is no other ship class that I'm aware of that 2 years ahead of schedule I directed Admiral Pandolfe and his team to deploy the ship within a matter of months and the ship deployed, not only to the Caribbean in real operations, but then we pushed it out to Hawaii, where it participated in the largest maritime exercise in the world with other countries and with our high-end capabilities, an aircraft carrier. And the ship has performed well.

The mission modules are plug-and-play, so the complexity of the mission capabilities of the ship allows us to change those as we go along. So I think there are so many attributes to this. I'm confident with the way we've seen both designs work at sea. And I'm comfortable with where we are.

Senator SESSIONS. Secretary Mabus, I know that when you came on board there was a lot of criticism of this program. It seems to me I have to say you've done what Congress asked. You've confronted the cost. You know, my criticism to you and Mr. Stackley was you emphasized cost so much that maybe you weren't evaluating which ship had the greatest capabilities. But we had a cost problem. Congress told you to deal with the cost problem.

I'm actually, frankly, quite surprised and pleased that you've brought this under the cost cap and to a point where you can, as I understand it, add an additional ship and still have money left over, according to your estimates, based on your previous estimates.

Would you comment on that?

Mr. MABUS. Yes, sir. Thank you. I sat in this room at my confirmation hearings, listened to the concerns raised, particularly on acquisition, on cost control of certain programs. I watched as this committee passed the Weapon Systems Acquisition Reform Act of 2009 almost immediately after I was confirmed. In this we set about to use that Act as almost a checklist to go down, to put competition in the programs, to do firm fixed price contracts whenever possible, to demand improvement as programs went along, to demand a learning curve, and that prices and time and schedule should improve as programs mature, to make sure that designs did not change to any significant degree during construction, that designs be mature, that technology be mature.

To the CNO's point, because these are modular ships, because you can remove and replace weapons systems, you have a very stable hull, a very stable platform for these weapons systems, so that you don't have to redesign an entire ship as technology improves or as weapons systems change.

I think, as I said in my statement, that this is a great example of the Weapon Systems Acquisition Reform Act of 2009 working, that we have taken a program that had problems, particularly in cost, but also in stability, and have stabilized the program, have driven costs down by using the intent, the spirit, and the specifications of that Act.

Senator SESSIONS. Mr. Stackley, I believe one of our witnesses testified that the follow-on contract bid if we use the original proposal, the single source proposal, could be lower than you've estimated as you evaluated the viability of this dual award. Isn't it possible that they could also be higher than you presently estimate? That's your best estimate.

Mr. STACKLEY. I read the CBO's report and understand the information that's in their table and the differences in terms of the way NAVSEA and CBO estimate. In terms of the baseline for the downselect, we are within 5 percent of each other relative to the estimate. But again, CBO does not have the insight into the specific bid information that we have that gives us far greater confidence in terms of the numbers that we're bringing forward.

Senator SESSIONS. I notice CBO—

Chairman LEVIN. I think if you could just bring it to an end, because—

Senator SESSIONS. Okay, Mr. Chairman. I just would not also, you're getting a fixed price contract and I believe it's CBO's numbers using inflation of 1.0 in 2011, edging up to 2.3 in 2015. If it goes above that, are the bidders required to eat that, that cost?

Mr. STACKLEY. The proposals that we received are what's referred to as "forward-priced," which means that they have included escalation inside of their bids.

Senator SESSIONS. So if it goes higher than that, they eat that cost?

Mr. STACKLEY. It's all in accordance with the terms and conditions of that fixed price contract, yes, sir.

Senator SESSIONS. And even though it's a fixed price contract, the ships—you're not contractually obligated to even buy them. If the Congress decides not to fund the ship in the future, there will be no penalty if the government fails to purchase another ship?

Mr. STACKLEY. Yes, sir. When we award these contracts, we're funding the first ships on the contract, but the ships that are in the out years are subject to the annual appropriations. So if either the Navy or Congress determine not to fund the out year ships, there is no termination liability or cancellation ceiling.

Senator SESSIONS. I think it's a pretty tough negotiation, Mr. Chairman. I think they've done a pretty good job.

Chairman LEVIN. It's the first bit of daylight in this program, actually.

Senator LeMieux.

Senator LEMIEUX. Thank you, Mr. Chairman.

Before I start on my questions, I wanted to take a moment of personal privilege. I think this will be my last Armed Services Committee meeting. Not sure, but I think so.

Chairman LEVIN. Never know around here.

Senator LEMIEUX. Never know. There could be one tomorrow.

Chairman LEVIN. It's been our privilege to have you be with us.

Senator LEMIEUX. Thank you for the good work that you've done, thank you to Senator McCain, especially important work as we're fighting two wars. So I just wanted to make a note of that.

Admiral Roughead, in listening to this it occurs to me that we've had a competition here with two ships and we're in the situation now where the proposal's on the table to not pick one or the other, but to pick both. Why is it in the best interest of the Navy and why does it serve the requirements of the Navy to have both of these ships, as opposed to just have one?

Admiral ROUGHEAD. Thank you, Senator. I think there are a couple of reasons. One, it is clearly going to allow us to begin introduction of the ships at a more rapid rate, simply because we'll have two shipyards building, so we'll have two production lines moving.

There is no question that either one of these designs meet the LCS requirement. They both do. That said, there are attributes in each design that I believe in the future will prove to be operationally advantageous and will, operating the ships in tandem, operating a particular ship with another collection of ships, I think give us capabilities that we would not have had before.

Then coupled with that are the savings that are realized by going down this path. So I think from what I would call the speed to the fleet, the flexibility that we get, and then the advantage to the taxpayer in the cost of the program, I think those are the advantages that are apparent to me.

Senator LEMIEUX. Operationally, you would potentially deploy one ship or the other depending upon the mission based upon the unique capabilities of those ships if you had both in your arsenal?

Admiral ROUGHEAD. I think that each ship has some attributes that favor one over the other. What is the mission, what is the environment, what are the other ships that are in company? I think all that is—all those are factors that will allow us to put together better mixes of capability simply because of the attributes of each design.

But they both fit the bill, but I think it's going to give our Navy increased flexibility.

Senator LEMIEUX. I don't have a problem with that and that's a compelling argument to me. I want the Navy to have all of the

tools it needs to be able to accomplish whatever mission there is. If they both fit the bill but there's one that has a unique advantage in a specific situation, I think that makes a lot of sense, for you to have that.

I am concerned, however, with the point that Senator McCain brought up, is that it's hard for us to do our oversight function if we're not able to rely upon CBO to look inside the numbers. For me to evaluate this on behalf of the taxpayer—I trust you, but the old Reagan expression, "Trust, But Verify." Our job is to know.

Maybe the chairman and the ranking member have the privy of this information. We don't have the privy of this information. On its face, the idea that we have two ships, we had a competition and we're supposed to get to one, and now we're going to take both and that's going to save us money, doesn't make intuitive sense. It doesn't make sense to have two ships which require two maintenance programs, which require two training regimens, which are going to require different attributes for the Navy to be able to deal with these two ships over time. That doesn't make intuitive sense.

If it is true that you can save whatever it is, \$600 million, or I heard the number a billion, as opposed to the number that our friends over here suggest, which will cost more, that's fine. But we need to have that information.

Mr. Chairman, this may not be something that happens when I'm here, but it seems to me that in the future making sure that the folks who do this evaluation for us have this information and then we, in whether it's executive session or not, can have that information—we can't do our job without it.

So I feel a little bit hamstrung without knowing exactly what the numbers are and what the attributes of the particular ship are. If we could have a candid conversation about why you like this ship better than that one, I think we could do a better job.

So it's hard for me to come to a final conclusion. I am appreciative of your comments and I certainly want you to have all the tools you need, but I also have to look out for the taxpayer, and it's hard for me to make that evaluation.

I appreciate what you've done. I appreciate Secretary Mabus's work on this, because I know cost-cutting, as my colleague from Alabama said, has been something that you've been focused on. So I appreciate that.

So I don't have any additional questions, Mr. Chairman, because I kind of feel at a loss if we don't have that information. I hope going forward that this committee will have the ability to be able to truly evaluate the pros and the cons with the information before it.

Thank you, Mr. Chairman.

Chairman LEVIN. There's no doubt that there's a disadvantage in that regard in terms of oversight. I don't know myself how to get around the proprietary protection.

We don't, by the way, we don't have—I don't think the ranking member has it. We don't have that information, either. So we're relying on the Navy and then our oversight folks to the extent they're able to do it, and they tell us what they can do and what they can't do, and give us the range of their limitations. It is a disadvantage, it seems to me, and we will look forward to—we will look into how

we can possibly in the future deal with that. I'm not sure that they've solved that in the past that we can, but it's an important point.

Senator LEMIEUX. If I could just suggest, in the procurement process going forward, I know that these companies have proprietary information. There's going to have to be some ability to have a limited waiver of that, because we can't do our job under the Constitution if we can't know what the information is.

Chairman LEVIN. Yes, it definitely is a problem for us, and we have to weigh the limitations in our judgment as to what we're operating under.

In terms of the attributes, though, I don't know that that is privileged information. The CNO has given us the statement that there are—each ship has certain attributes. I think that part of it probably is available to us. Is that right?

Admiral ROUGHEAD. Yes, sir, I would say it is. A lot of it is simply in the configurations of the ship, the volume that is available in one, boat-handling capability that's available in another. So as I look at both ships—in fact, the first time I walked aboard LCS was back in 2007 as the first two were being built, and was struck at the potential that was in the ship, the volume, the aviation capability, the ability to move boats on and off.

Each one is different, but in each one, as a fleet commander both in the Atlantic and Pacific and having operated globally, I could envision each one of those ships bringing great versatility, agility, and capability to our Navy. One thing our commanders will do is they'll mix and match this capability for the mission, for the environment, to get the best effect. I think it really gives us some incredible capability, not just in what we've been talking about, in cost and stability to program and to the industrial base, but I think it gives us great operational flexibility.

Chairman LEVIN. Thank you, Senator LeMieux, and thank you for your great service to this committee and to our State and to our country. We really appreciate your being with us. You've been a very, very active participant in the work of this committee and we deeply appreciate it.

Senator LEMIEUX. Thank you, Chairman. I appreciate it.

Senator SESSIONS. Mr. Chairman, I'd like to join you in that. Senator LeMieux's been a great member of the Senate and this committee. Thank you.

Chairman LEVIN. Senator Collins.

Senator COLLINS. Mr. Chairman, before Senator LeMieux leaves, I just want to point out to my colleagues that, who knows, he may be back on this committee some day.

Chairman LEVIN. I can't say exactly with a straight face that I would look forward to that, as much as I look forward to the service that you've given to us. But I think Senator LeMieux understands why I—I'm an honest person and you put me in a very difficult position.

Senator COLLINS. I apologize, Mr. Chairman.

Chairman LEVIN. That's all right.

Senator COLLINS. But I just couldn't quite resist the opportunity there.

Chairman LEVIN. But I do repeat my strong feeling that you've been a major contributor to this committee. That is sincere and I would want to keep that sincerity in my response in reaction to Senator Collins' comment.

Senator COLLINS. Thank you, Mr. Chairman.

On a more serious note—though that was a serious note—I want to thank the chairman and the ranking member for holding this hearing today on what is a very important issue. I must say that the Navy's latest decision on this program took me by surprise. I've had a very helpful opportunity to talk to some of the members of this panel as well as to other experts. But, like many of my colleagues, I've not yet reached a final decision on the Navy's proposal.

Since that decision is upon us, since language is included in the omnibus, I very much welcome this opportunity today to better understand the Navy's rationale for this change in its strategy. Both the Secretary and Admiral Roughead have said that this plan is good for our shipbuilding industrial base. As all the members of this panel as well as my colleagues on this committee know, preserving the industrial base is a major concern of mine and a major concern of the Navy's.

So let me start by first exploring that issue with you, and I'll start with you, Admiral Roughead. When the Navy announced last year that it was going to hold an LCS down-select competition and cease to build the two different designs, it stated that the winning shipbuilder would build ten ships in the near term and then there would be a second competition that would be held by the Navy to introduce the second source shipbuilder.

A number of Navy shipbuilders, including Bath Iron Works in my home State, relied on the Navy's announced plan and thought that they might well end up competing to be that second source for the ship that was produced as a result of the down-select. The reason that this is important to our shipbuilders is many of them, including BIW, are looking out and seeing gaps in their workload, and the potential of being able to build some of the Littoral Combat Ships would help fill in some of those gaps.

Under the Navy's new proposal, however, the Navy will continue to build both designs with the two current shipbuilders and there's no longer a definitive plan or commitment by the Navy to introduce competition by other shipbuilders in fiscal year 2012, which had been the original plan.

Now, I understand that the case that you're making for the new plan and I understand the advantages that it could have, including certain cost advantages. But I'm concerned that you're removing an opportunity for more volume to help fill in those gaps for other shipbuilders that had hoped to build LCSs in the future and now are unlikely to have the opportunity to do so.

So that's a long introduction, I realize, to my concern. But given your new proposed strategies, what specific actions will the Navy's leaders take to preserve shipbuilding volume and stability at critical shipyards like BIW if it now appears that they're not going to be involved in building the Littoral Combat Ship? And I ask this in particular because of my concern that we still don't have the DDG-1000, the second and third ship, under construction con-

tracts, even though they've been fully authorized and appropriated, and in view of my concern about the low level of procurement on the DDG-51, a concern that I know you share.

So, Admiral, if you could address that concern on how you plan to preserve shipbuilding volume and stability necessary for our shipyards if you go this new route.

Admiral ROUGHEAD. Yes, Senator. Thank you for the question. In fact, even if we go with the 20-ship option that we're talking about here, that's only about half the ship class. So our commitment is to continue to build LCS, to get to the target of 55 that we need. So there is more shipbuilding that will go on as a result of LCS.

Not an operational factor for me, but I also believe that the designs of the ships and the flexibility in the ships also—and also the cost of these ships—open up potential for foreign military sales that would otherwise not be there. Then on top of that, the savings that we derive, because we look at our shipbuilding account in its entirety. These savings also enable us to look at how we can shift around other procurements that we may need because we've realized these savings.

Senator COLLINS. I guess my concern is if you have the two current shipbuilders each building ten ships—and I understand the advantage if you can get 20 ships for the cost of 19, that that is powerful—but it seems very unlikely to me that other shipbuilders are going to be able to come in at that point. That's very different from a down-select that produced one ship design, the first shipbuilder would build ten, and then it's a tossup or an open competition. It's very different if you're going with 20 ships, 10 at each shipyard, and it seems to me that does make it unlikely for others to bid in the future.

But let me go to your second point about cost and ask the Secretary and you both this question. The Navy has asserted that the dual-award strategy not only adds stability to the LCS program, but will produce savings that could benefit shipbuilding programs as a whole. Earlier this year, as you're all aware, both the Senate Armed Services Committee and the House Armed Services Committee expressed concern in our committee reports that the procurement rate for destroyers is insufficient.

If the Navy's large surface combatants continue their historical average service lives of 25 to 30 years, we are never going to reach the Navy's goal of 88 large surface combatants. Furthermore, if you look at the independent Perry and Hadley panel which reviewed the QDR, that panel recommended a fleet of 346 Navy ships. Admiral Roughead, every time we've talked you've always been careful to say 313's the floor, and so I suspect that higher number is not really a surprise to you. These are actual requirements. This isn't pie in the sky. These are to meet our military presence and requirements.

So my question for both of you—and Secretary Mabus, we'll start with you: Do you believe that the change that you're proposing for the LCS program will make it easier for you to address the budget shortfalls facing the shipbuilding budget?

Mr. MABUS. Thank you, Senator. Yes, the savings that we get from the proposed dual buy, as Secretary Stackley said earlier, we would propose taking those savings and keeping it in shipbuilding,

so that we can procure more ships for the same, for the same amount of money over the next 5 years.

I know that you just said, and Admiral Roughead and I share your concern, both on the industrial base, that we keep these critical skills in our shipyards, because shipbuilding skills tend to be unique and if you lose those skills they are very hard, if not impossible, to regain. Second, as this committee has authorized, the DDG-51 line has been restarted, because it is one of our crucial platforms. It's one of the most flexible platforms that we have, and that's particularly true since the President has given the Navy the mission of being the first antiballistic missile defense in the Phased Adaptive Approach. We're the first phase, the Aegis system that goes on the DDG-51.

So it would certainly be our hope and our recommendation that any savings we get from this program of LCS go back into building more of other classes of ships.

Senator COLLINS. Admiral Roughead, do you want to add to that or give me a similar commitment that the savings would be not diverted for other purposes, but help meet the shortfall that is so clear in the shipbuilding budget?

Admiral ROUGHEAD. Yes, Senator. I am committed to the force structure. I think I've been consistent with that during my time as the Chief of Naval Operations. And I'm also very focused on the need for recapitalizing the combatant fleet when we get to the 20s. That is an issue that I would submit is bigger than the Navy, because it is about our ability to field that type of force as part of our national interest. It's also significantly important to our industrial base and what will we be doing as the ships that we built in numbers in the 80s age out. Key to that, one of those large number-drivers, are our combatants, the DDG-51s, and so what is the strategy that we as a Navy and we as a Nation have to take forward into the 2020s.

Senator COLLINS. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Collins.

I just have one—starting round two, just really one additional question. There's been the question of the additional operating and support costs of operating two different ships here. I think you told us, Secretary Stackley, that we're going to be operating ships in each class in any event since we will have at least two in each class. So the question is how confident are you that you have adequately estimated the marginal costs of operating a larger number of the ship class that might have only included two ships?

Mr. STACKLEY. Yes, sir. We have broken down the different categories of costs and to the extent that we can at this stage in what will be about a 40-year life cycle for the program, have tried to discretely cost out the research and development, the procurement, and the operations and maintenance bills associated with the dual design. We start on the R&D side on the up front. We have a good understanding today of things like training systems required for the two different ship types, and in fact we have training systems that we've already procured for the two different ship types, so we have high fidelity in the remaining costs in that category.

We're sustaining two different design efforts today inside of the procurement. We look at the premium associated in plans and engineering in a down-select versus the dual-award inside of the budget, and then we are able to extrapolate that outside of the FYDP carrying that on into the life cycle for the class. So we believe we have good fidelity there.

We understand software maintenance costs and modernization—so when you get into software maintenance and modernization, that's subjective and it's subjective by way of there are future decisions that we're going to make on the class that will impact that. So while we have what I'll call a plug number in there in our estimate, throughout the life cycle we're going to be continually re-evaluating what modernization at what cycle, what point in the program, do we insert new capabilities or do baseline upgrades. So that's a little bit more subjective, doesn't have the fidelity in the other—as compared to the other categories that I've described.

Chairman LEVIN. Thank you.

Senator SESSIONS.

Senator SESSIONS. Thank you.

I appreciate all of you. I know that the Navy has worked hard to bring this program under control. I think earlier when our independent evaluators were criticizing the program I think the Navy's defense was not so good. But I do believe you've gotten this program under control and I thank you for that. I think that criticism and objective view helped get us to the position we are today.

But ultimately it is the Defense Navy, the Navy, who handle this weapons system, who's working with it daily, who's had people in the shipyards monitoring every step of the construction. And I value your opinion and I value—you've seen both the ships and you say both would be helpful to you. I think that's something that we should consider.

It does seem to me, Admiral Roughead, that if a decade from now a new anti-mine warfare system, a new surveillance system, a new weapons system, came about and you decided to put it on 15 or 20 or 30 of the ships, might not one of those ships be better able to handle it, and could that be an advantage from having ships with slightly different capabilities?

Admiral ROUGHEAD. Yes, sir, I think the two different types give us a certain amount of flexibility, versatility, that one would not, as I talked earlier about this ability to mix the capabilities of a force that we put in there.

The other thing I would say that LCS gives us that other ships do not is that if we are upgrading a mine warfare capability in LCS that seaframe can be off doing something in anti-submarine warfare. Today, the designs of our ships—if we want to take it in and upgrade a capability, that ship comes off line. In the case of LCS, we can upgrade the mine countermeasure package while the ship is doing anti-submarine warfare or surface warfare.

So the ability to increase capability on these ships on both designs is really quite extraordinary. That's why the system that we're putting together is more than a ship. It really is a capability that we've not had before.

Senator SESSIONS. Well, I think you could argue that there could be a minor extra cost because one ship is presumably slightly less

expensive than the other, but apparently pretty close, it looks like from what I understand from your testimony. So I think that the additional advantage is helpful.

One thing about our industrial capacity, Secretary Mabus. We often sell ships to our allies and it's both good for our shipbuilding capacity and for those countries.

Having two ships, might that be somewhat of an advantage for our ability to export weapons systems to our allies?

Mr. MABUS. I think it would, Senator. I think, like operationally, in terms of foreign military sales, having both versions gives us more flexibility. Some countries may want one version for specific reasons. Others may want the other. I think it gives us a better opportunity to make those sales and make more of them than with one version.

Senator SESSIONS. I just don't think there's any doubt, Mr. Chairman. If these shipyards are preparing to go forward, they're at a point where the delays do impact them—I see one Navy source in a recent article said there's a 100 percent chance of a contest or a protest. I don't know how that is or whether that's accurate or not. But certainly we would be in a position to move forward with a lot less potential delays in this recommendation of the Navy. I'm inclined to think it's well thought out.

Thank you for having this hearing.

Chairman LEVIN. Thank you very much, Senator Sessions.

I'll just close with one request and then one comment. The request is that the agencies that help us to oversee these kind of issues—we've run into this proprietary issue before. It's not the first time. So we would ask you to give some thought as to how we can in the future address that kind of an issue. You have the same issue. You're unable to be more specific because you don't have the information. It's proprietary and these contractors are not going to disclose it.

We have the Navy, on the other hand, that has seen it, has given us the assurances. These are fixed price contracts. If these weren't fixed price contracts, let me tell you, I'd have plenty of problem with these contracts. They're fixed price contracts, so we have a pretty fair handle on that. But still, if we can solve that proprietary information issue in the future, I think it would be helpful to you and it would be helpful to us as well.

In terms of my comment, this has been a troubled program, obviously. The Senate has been deeply involved in trying to get this back on track. It seems like it is on track. This is the first daylight in this program that I think we've seen, and it's very welcome. And we are grateful that all of you would come here today again on short notice. But it was important that you be available to answer these questions, and I think you've done a very, very good job of doing that.

We are going to stand adjourned, with that very positive comment. Thank you all.

[Whereupon, at 4:36 p.m., the committee adjourned.]