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SENATE ARMED SERVICES COMMITTEE

STATEMENT OF  
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BEFORE THE  
SENATE ARMED SERVICES COMMITTEE  
HEARING ON  
LITTORAL COMBAT SHIP ACQUISITION STRATEGIES  
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Chairman Levin, Senator McCain, distinguished members of the committee, thank you for the opportunity to appear before you today to discuss acquisition strategies for the Littoral Combat Ship (LCS) program.

## **Introduction**

### **Down Select Strategy Proposed In September 2009**

On September 16, 2009, the Navy announced a proposed LCS acquisition strategy under which the Navy would hold a competition to pick a single design to which all LCSs procured in FY2010 and subsequent years would be built. (The process of selecting the single design for all future production is called a down select.) The winner of the down select would be awarded a contract to build 10 LCSs over the five-year period FY2010-FY2014, at a rate of two ships per year. The Navy would then hold a second competition—open to all bidders other than the shipyard building the 10 LCSs in FY2010-FY2014—to select a second shipyard to build up to five additional LCSs to the same design in FY2012-FY2014 (one ship in FY2012, and two ships per year in FY2013-FY2014). These two shipyards would then compete for contracts to build LCSs procured in FY2015 and subsequent years.

Section 121(a) and (b) of the FY2010 defense authorization act (H.R. 2647/P.L. 111-84 of October 28, 2009) grant the Navy contracting and other authority needed to implement this LCS acquisition strategy.

The Navy had planned to make the down select decision and award the contract to build the 10 LCSs sometime this past summer, but the decision was delayed to as late as December 14. (The final bids submitted by the two LCS contractors were submitted on about September 15, and were valid for another 90 days, or until December 14.)

### **Dual-Award Strategy Proposed in November 2010**

On November 3, 2010, the Navy notified congressional offices that it was prepared to implement an alternative LCS acquisition strategy that would involve awarding 10-ship contracts to both LCS bidders. The Navy would need additional legislative authority from Congress to implement this dual-award strategy. The Navy stated on November 3 that if the additional authority were not granted by December 14, the Navy would proceed to announce its down select decision under the acquisition strategy announced on September 16, 2009. On December 13, it was reported that the two LCS bidders, at the Navy's request, had extended the prices in their bids to December 30.<sup>1</sup>

The Navy's proposed dual-award strategy poses a near-term issue for Congress of whether this strategy would be preferable to the down select strategy, and whether Congress should grant the Navy, by December 30, the additional legislative authority the Navy would need to implement the dual-award strategy.

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<sup>1</sup> Anthony Capaccio, "Lockheed, Austal Extend Prices on Littoral Ship Bids," *Bloomberg.com*, December 13, 2010; Christopher P. Cavas, "Deadline Looms For U.S. Navy's LCS," *Defense News*, December 13, 2010: 1.

On December 8, 2010, the House passed H.R. 3082, a full-year continuing appropriations bill for FY2011.<sup>2</sup> Section 2314 of H.R. 3082 would provide the legislative authority the Navy needs to implement its proposed dual-award acquisition strategy for the LCS program.

## Observations Regarding Information on Potential Comparative Costs

The potential comparative costs of the down select and dual-award strategies are not clear. Observations that might be made about these costs as of December 13 include but are not limited to the following:

- There is a significant difference between the Navy and the Congressional Budget Office (CBO) regarding relative LCS ship procurement costs under the down select and dual award strategies. The Navy estimates that, compared to the down select strategy, the dual-award strategy could *reduce* LCS ship procurement costs by \$1 billion through FY2016. CBO, in contrast, estimates that compared to the down select strategy, the dual-award strategy could *increase* LCS ship procurement costs by \$740 million through FY2015.
- As of December 13, there were no available estimates from the Navy or CBO regarding potential additional costs under the dual-award strategy for developing and installing a common combat system on some or all of the first 24 LCSs.<sup>3</sup> Depending on what the Navy decides to do regarding LCS combat systems, these additional costs could be negligible or significant. The Navy's intentions regarding the LCS combat systems are not clear.
- According to the Government Accountability Office (GAO), the Navy estimates that, compared to the down select strategy, the dual-award strategy would *increase* LCS life-cycle operating and support (O&S) costs by \$295 million (net present value). Both GAO's December 8 report on the LCS program<sup>4</sup> and CBO's December 10 letter report on the LCS program<sup>5</sup> express uncertainty regarding estimates of relative life-cycle O&S costs under the down select and dual-award strategies.
- CBO's letter report included several cautionary statements about its estimates relating to limits on the information available to CBO in developing its estimates.

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<sup>2</sup> H.R. 3082 was originally the FY2010 military construction, the Department of Veterans Affairs, and related agencies appropriations bill.

<sup>3</sup> The LCS combat system referred to in this discussion is the ship's built-in collection of sensors, weapons, displays, and software, and not the LCS mission modules that can be placed on or taken off the ship.

<sup>4</sup> Government Accountability Office, *Navy's Proposed Dual Award Acquisition Strategy for the Littoral Combat Ship Program*, GAO-11-249R, December 8, 2010, 14 pp.

<sup>5</sup> Congressional Budget Office, letter report to Senator John McCain on LCS acquisition strategies dated December 10, 2010, 7 pp.

## General Discussion<sup>6</sup>

### November 4 Navy Point Paper on Dual-Award Strategy

A November 4, 2010, Navy point paper on the dual-award strategy stated the following (this is the full text of the point paper):<sup>7</sup>

#### Littoral Combat Ship Proposed Revised Acquisition

##### Dual Ten Ship Awards

- In summer 2009 Navy received bids for three FY10 ships from Lockheed Martin/Marinette Marine/Bollinger and General Dynamics Bath Iron Works/Austal USA industry teams. These bids did not reflect competitive pricing and well exceeded the Congressional Cost Cap. In order to reverse cost trends on the program, the acquisition strategy was revised to the current down select strategy.
- The Navy's Littoral Combat Ship acquisition strategy to down select to a single design has resulted in a highly effective competition between the industry bidders. Navy is on the path to down select in accordance with the terms of the current solicitation.
- The industry response to the competitive acquisition strategy has resulted in reduction in cost for the LCS ships relative to the previous bids. These competitive bids, coupled with Navy's desires to increase ship procurement rates to support operational requirements, has created an opportunity to award each bidder a fixed price ten-ship block buy – a total of 20 ships from Fiscal Year 2010 to Fiscal Year 2015. A comparison between the two strategies of which ships are included in a down select/second source versus dual 10 ship block buy appears in the table below.
- The current NDAA [national defense authorization act] language permits the Navy to procure up to 10 ships in a block buy. In order to execute a dual ten ship award, Navy believes Congressional authorization is required.
- If Congressional support for this approach is granted, Navy will work with industry to revise the ship procurement schedules within current proposal pricing (FY10 – FY15 vice FY10 – FY14).
- Navy is continuing on the path to down select and absent authorization, we will proceed to down select by mid-December 2010.
- There are numerous benefits to this approach including stabilizing the LCS program and the industrial base with award of 20 ships; increasing ship procurement rate to support operational requirements; sustaining competition through the program; and enhancing Foreign Military Sales opportunities.
- The Navy intends to procure the Technical Data Package for both designs and if necessary a second source for either or both designs could be brought into the program.
- Either approach will ensure the Navy procures affordably priced ships.

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<sup>6</sup> This section is adapted from the December 13 update of CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Background, Issues, and Options for Congress*, by Ronald O'Rourke.

<sup>7</sup> Source: Navy point paper on proposed alternative LCS acquisition strategy dated November 4, 2010.

		FY10	FY11	FY12	FY13	FY14	FY15	TOTAL
<b>Downselect</b>	Winner	2	2	2	2	2	4	<b>19</b>
	Second Source			1	2	2		
	TOTAL	2	2	3	4	4	4	
<b>Dual Award</b>	Contractor A	1	1	2	2	2		<b>20</b>
	Contractor B	1	1	2	2	2		
	TOTAL	2	2	4	4	4	4	

### Some General Observations About the Dual-Award Strategy

General observations that can be made on the Navy's proposed dual-award strategy include but are not limited to the following:

- The dual-award strategy would avoid, at least for now, the possibility of a contract protest being filed against a Navy down select decision.
- Although the dual-award strategy includes the possibility of the Navy at some point bringing a second source into the program for either or both LCS designs, the dual-award strategy does not include the guaranteed opportunity present in the down select strategy for shipyards not currently involved in building LCSs to compete for the right to become the second LCS builder.
- The Navy's November 4, 2010, point paper on the dual-award strategy does not outline the Navy's intentions regarding the currently different combat systems on the two LCS designs.
- The dual-award strategy would require each LCS contractor to build 10 ships over a period of six years (FY2010-FY2015) rather than five years (FY2010-FY2014), but at the same price that was bid for the five-year schedule. In addition, LCSs built under the dual-award strategy would incorporate combat systems that would be built by combat system manufacturers in smaller annual quantities than would be the case under the down select strategy, possibly increasing the costs of these combat systems. Factors such as these could, at the margin, alter the profitability for each contractor of building its respective group of 10 ships.

### Potential Oversight Questions for Congress

Potential oversight questions for Congress in assessing whether the proposed dual-award strategy would be preferable to the down select strategy announced by the Navy on September 16, 2009, and whether to grant the Navy, by December 30, the additional legislative authority the Navy would need to implement the dual-award strategy, include but are not limited to the following:

- Does the timing of the Navy's proposal provide Congress with enough time to adequately assess the relative merits of the down select strategy and the dual-award strategy? Given that the contractors submitted their bids by about September 15, could the Navy have notified Congress of the proposed dual-award strategy sooner than November 3, giving Congress more time to seek information on and evaluate the proposal? Should the Navy ask the contractors to extend their bid prices for another, say, 30 or 60 or 90 days beyond the original December 14 expiration date, so as to provide more time for congressional

review of the Navy's proposal?<sup>8</sup> (As mentioned earlier, on December 13, it was reported that the two LCS bidders, at the Navy's request, had extended the prices in their bids for 16 days, to December 30.)

- What role, if any, did a desire by the Navy to avoid a potential contract protest against the Navy's down select decision play in the Navy's decision to propose the alternate dual-award strategy? For example, how concerned, if at all, was the Navy that the announcement of an LCS down select decision might lead to a contract protest and controversy somewhat like what has been experienced in the Air Force's KC-X aerial refueling tanker acquisition program?<sup>9</sup> A December 13, 2010, press report on the LCS program stated: "One high-level Navy source recently said that without the dual-ship approach, 'there is 100 percent chance of a protest.'"<sup>10</sup>
- What are the potential relative costs of the down select and dual-award acquisition strategies, including development costs, procurement costs, and life-cycle operation and support (O&S) costs? Has the Navy fully and accurately estimated these costs—including potential costs for developing, procuring, and installing a common combat system for both LCS designs—and reported all these potential costs to Congress?
- What are the potential relative risks of the down select and dual-award acquisition strategies, including development risks, production cost risks, production schedule risks, and life-cycle O&S risks? Has the Navy fully and accurately estimated these risks, and reported all these potential risks to Congress?
- What are the Navy's intentions, under the proposed dual-award acquisition strategy, regarding the currently different combat systems on the two LCS designs? Does the Navy intend to leave them unchanged, adopt one of the combat systems as the common system for both designs, or develop a new combat system for both designs? If the Navy intends to pursue the second or third of these paths, what is the Navy's plan (including schedule) for doing so? If the Navy does not have a definite plan regarding the combat systems for the ships, how well can the potential costs and risks of the dual-award strategy be estimated and compared to those of the down select strategy?
- What are the potential industrial-base impacts of the dual-award strategy, including impacts on the two LCS contractors, on shipyards that could, under the down select strategy, bid for the right to become the second LCS builder, and on combat system manufacturers?

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<sup>8</sup> A December 6, 2010, press report states: "Lockheed officials have indicated that they could extend the pricing in their proposal for a short while beyond Dec. 14, to allow time for Congress to approve the change. Lockheed Chief Financial Officer Bruce Tanner told an investment conference last week that Lockheed could extend the prices it offered for a day or two, but not indefinitely.... Analysts said they expected both companies to show some flexibility on the expiration of their pricing, given that each firm stood to win a contract valued at around \$5 billion." (Andrea Shalal-Esa, "U.S. Navy Hopeful Congress Will Approve Ship Buys," *Reuters.com*, December 6, 2010.) Another December 6, 2010, press report that was posted online on December 3, 2010, stated: "Theoretically, Lockheed Martin and Austal could likely agree to extend the price deadline, but the Navy has not asked them to do so yet, [Navy spokeswoman Captain Cate] Mueller said." (Cid Standifer, "Stand-Alone Bill May Be Needed To Approve LCS Dual Block Buy Plan," *Inside the Navy*, December 6, 2010.)

<sup>9</sup> For more on the KC-X program, see CRS Report RL34398, *Air Force KC-X Tanker Aircraft Program: Background and Issues for Congress*, by Jeremiah Gertler.

<sup>10</sup> Christopher P. Cavas, "Deadline Looms For U.S. Navy's LCS," *Defense News*, December 13, 2010: 1.

- What impact, if any, might the Navy's proposal to shift from its down select strategy to the dual-award strategy have on the ability of the Department of Defense (DOD) to implement down select strategies for other acquisition programs? For example, will the Navy's proposal to shift to the dual-award strategy cause contractors bidding for other acquisition programs to treat with increased skepticism stated DOD intentions to carry out down selects? If so, could that reduce the benefits of competition that DOD might hope to achieve through the use of down select strategies?

### **Enough Time for Adequate Congressional Review of Navy Proposal?**

Regarding whether the timing of the Navy's proposal provides Congress with enough time to adequately assess the relative merits of the down select strategy and the dual-award strategy, it can be noted that this 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 had completed its spring budget-review hearings and some of its committee markups. The first instance was in mid-2002, when the Navy submitted an amended request to Congress for FY2003 funding to get the LCS program started using a rapid acquisition strategy.<sup>11</sup> The second was in September 2009, when the Navy announced its proposed down select strategy for the LCS program.

In light of the third instance—the Navy's proposal of November 3, 2010, for using a dual-award strategy rather than a down select strategy—a potential issue for Congress are the implications for the LCS program and congressional oversight of defense acquisition programs in general of proceeding with the LCS program in part on the basis of policies originally presented as proposals to Congress late in the congressional budget-review cycle, after Congress had completed its spring budget-review hearings and some of its committee markups. The Navy's November 3, 2010, notification to Congress of the proposed dual-award strategy, combined with a request by the Navy that Congress act on that proposal by December 30, provides relatively little time for Congress to collect cost and other information from the Navy (including information that Navy might not offer in initial briefings to individual congressional offices), for Congress to solicit cost and other information from independent sources such as the Congressional Budget Office (CBO) and GAO, for CBO and GAO to develop such information and provide it to Congress, for Congress to hold hearings at which all this information might be discussed in a group setting, with multiple parties present, and for congressional offices to then form their evaluations of the Navy's proposal.

### **Potential Relative Ship Procurement Costs**

Regarding potential relative costs of the down select and dual-award acquisition strategies, the Navy has stated that it estimates that procuring LCSs under the dual-award strategy would cost \$1

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<sup>11</sup> The Navy's original FY2003 budget request, submitted to Congress in February 2002, contained no apparent funding for development of the LCS. In addition, the Navy in early 2002 had not yet announced that it intended to employ a rapid acquisition strategy for the LCS program. As a result, in the early months of 2002, there may have been little reason within Congress to view the LCS program as a significant FY2003 budget-review issue. In the middle of 2002, the Navy submitted an amended request asking for \$33 million in FY2003 development funding for the LCS program. Navy officials explained that they did not decide until the middle of 2002 that they wanted to pursue a rapid acquisition strategy for the LCS program, and consequently did not realize until then that there was a need to request \$33 million in FY2003 funding for the program. By the middle of 2002, however, the House and Senate Armed Services committees had already held their spring FY2003 budget-review hearings and marked up their respective versions of the FY2003 defense authorization bill. These two committees thus did not have an opportunity to use the spring 2002 budget-review season to review in detail the Navy's accelerated acquisition plan for the LCS program or the supporting request for \$33 million in funding.

billion less through *FY2016* than procuring them under the down select strategy.<sup>12</sup> According to CBO, the Navy’s estimated savings through *FY2015* – the final year covered in the table shown in the Navy’s November 4 point paper – is \$600 million.

CBO in its December 10 letter report provided its own estimate of the relative ship procurement costs of the down select and dual-award strategies through *FY2015*. As shown in **Table 1**, CBO estimates that the dual-award strategy would cost \$740 million *more* in ship procurement costs than the down select strategy through *FY2015*.

**Table 1. Navy and CBO Estimates of Ship Procurement Costs Under Down Select and Dual-Award Strategies**

For the period *FY2010-FY2015*, in current (i.e., then-year) dollars

Acquisition approaches	Estimated Cost
<b>Navy estimate</b>	
19-ship down-select plan	10,400 million
20-ship dual-award plan	9,800 million
Difference between two plans	Dual-award plan costs \$600 million <i>less</i>
<b>CBO estimate</b>	
19-ship down-select plan	11,080 million
20-ship dual-award plan	11,820 million
Difference between two plans	Dual-award plan costs \$740 million <i>more</i>

**Source:** Table prepared by CRS based on data presented in Congressional Budget Office, letter report to Senator John McCain on LCS acquisition strategies dated December 10, 2010, Table 2 on page 5.

CBO’s letter report included several cautionary statements about its estimates relating to limits on the information available to CBO in developing its estimates.

Under the down select strategy, shipyards competing to become the second LCS builder could include yards that currently build other ships for the Navy, such as, possibly, General Dynamics’ Bath Iron Works (GD/BIW) of Bath, ME, Northrop Grumman’s Ingalls shipyard of Pascagoula, MS, or General Dynamics’ National Steel and Shipbuilding Company (NASSCO) of San Diego, CA. If such a yard were to be selected under the down select strategy to become the second LCS builder, it could reduce the cost of other Navy ships being built at that yard by more fully spreading the fixed overhead costs of that yard. It is not clear whether the Navy estimate in **Table 1** accounts for a possible reduction in the cost of other Navy ships that might be realized under the down select strategy through more full spreading of shipyard fixed overhead costs. The CBO estimate does not account for this possible reduction.<sup>13</sup>

<sup>12</sup> Source: DOD letter to GAO dated December 6, 2010, p. 2, as reprinted in Government Accountability Office, *Navy’s Proposed Dual Award Acquisition Strategy for the Littoral Combat Ship Program*, GAO-11-249R, December 8, 2010, p. 12. The GAO report states on page 2: “According to the Navy, \$1.9 billion in savings resulted from the competition between the two offerors and is common to both strategies. However, the Navy estimates that approximately \$1.0 billion in additional cost savings would be realized under the proposed dual award strategy because of the avoidance of higher start-up costs and risks associated with the second source planned for fiscal year 2012, among other factors. According to the Navy, these additional savings would be offset, in part, by increased total ownership costs.”

<sup>13</sup> Source: Telephone conversation with CBO, December 10, 2010.

## Potential Combat System-Related Investment Costs

Any savings the dual-award strategy might realize relative to the down select strategy in terms of costs for procuring LCSs could be offset by potential additional costs under the dual-award strategy for developing, procuring, and installing a common combat system for the two LCS designs. Developing a new common combat system for the two LCS designs might cost tens of millions of dollars. Procuring replacement combat systems for LCSs could cost tens of millions or dollars per ship. Removing an LCS's existing combat system and installing a replacement system could cost several millions of dollars per ship. CBO's letter report states that "if the Navy later decided to use a common combat system for all LCSs (rather than the different ones that would initially be installed on the two different types of vessels), the costs for developing, procuring, and installing that system could be significant."<sup>14</sup>

If, for example, the Navy decided to develop a new common combat system for both LCS designs, developed that new system at a one-time cost of, say, \$30 million, procured 24 copies of that system at a recurring cost of, say, \$50 million per copy, and installed them on the first 24 LCSs (i.e., LCSs 1 through 4, plus the 20 ships to be awarded under the dual-award strategy's two 10-ship block-buy contracts) at a recurring installation cost of, say, \$5 million per ship, the total cost would be \$1,350 million.

If, as another example, the Navy decided to adopt one of the two existing LCS combat systems as the common combat system for both designs, adapted that existing system for the other LCS design at a one-time cost of, say, \$10 million, procured 12 copies of that system at a recurring cost of, say, \$50 million per copy, and installed them on 12 of the first 24 LCSs (i.e., the LCSs originally built or to be built with the other combat system ) at a recurring installation cost of, say, \$5 million per ship, the total cost would be \$670 million.

CBO's December 10 letter report states that the existing combat systems on the two LCS designs cost about \$70 million per ship.<sup>15</sup> Using this figure (instead of \$50 million) as the basis for estimating the cost of a replacement combat system, the estimates of \$1,350 million and \$670 million in the preceding two paragraphs would become \$1,830 million and \$910 million, respectively.

Regarding the Navy's intentions for the combat systems on the two LCS designs, a November 29, 2010, press report states that "the Navy intends to keep separate the combat systems of the Lockheed and Austal USA versions of the Littoral Combat Ships for its dual buy strategy, but will 'procure the tech data package to allow for consideration of [a] common combat system in the future,' according to Navy spokeswoman Capt. Cate Mueller." The report also quoted an industry official as saying that the Navy is likely "still strategizing as to how they're going to single up on a combat system."<sup>16</sup> A December 13, 2010, press report described as an "analysis" article stated:

To speed development [of the LCS], each [LCS industry] design team was allowed to develop its own system. [For the Lockheed team's LCS design,] Lockheed came up with COMBATSS-21, in some ways a lightweight derivative of the Aegis combat system built by the company and fielded on nearly 80 U.S. Navy cruisers and destroyers. General Dynamics' Advanced Information Systems (AIS) developed an entirely new system for [the General Dynamics team's LCS] design, a system the company claims more closely

<sup>14</sup> Congressional Budget Office, letter report to Senator John McCain on LCS acquisition strategies dated December 10, 2010, p. 3.

<sup>15</sup> Congressional Budget Office, letter report to Senator John McCain on LCS acquisition strategies dated December 10, 2010, p. 7.

<sup>16</sup> Andrew Burt, "Navy Open To Combining Combat Systems On Both Littoral Combat Ships," *Inside the Navy*, November 29, 2010. Material in brackets as in original. The Austal USA version of the LCS is the version developed by the General Dynamics-led LCS industry team.

embodies the open architecture concept espoused by the Navy for virtually all its new computer systems.

Each combat system requires its own support pipeline: maintenance and parts chains, training programs, operational characteristics. Even if the Navy had simply picked one, it would still have been unique in a fleet that has striven for homogeneity and relative simplicity.

Navy officials downplay the impact of fielding separate systems, and claim competition will hold prices in check. But sooner or later, whether today's management team supports both combat systems or not, an official will come into office who sees the dual-system setup as wasteful and unsupportable. When that happens, the ships with one of the systems will likely be taken out of service — years before they're used up — and probably made available for foreign military sales.

The Navy reportedly has a plan to deal with the dual combat systems, but it's not saying what it is, possibly because officials lack the authority to discuss details of a dual-ship buy. While a number of congressional staffers and analysts have been briefed on the plan, they've been sworn to secrecy. Even among those who have been briefed, there are concerns that this is an issue the Navy needs to address publicly before the buy-both-designs plan can be approved.

What's the Plan?

So what is the Navy's plan for the combat systems? Sean Stackley, the service's top weapons buyer, gave some clues in September 2009 when he announced the service would have a competition to buy only one of the designs. As a key factor in the strategy to keep a lid on cost growth and perhaps drive prices down, the Navy would compete multiple elements of each LCS design, including the combat systems, weapons and engines. Eventually, the service wants to purchase the technical package both for the design and for the combat system, thus allowing other companies to bid for construction.

After sailors have a chance to put each LCS combat system through its paces, the service will begin to pick and choose among the various elements of each system. Those elements will be incorporated into what would become, in essence, a third combat system. Another competition would then be held for that, allowing companies such as Northrop Grumman, Raytheon or even Saab to bid as the combat system integrator.

Under this scenario, a third system might be developed in time to begin incorporating the new, one-size-fits-both combat system into the later ships of each company's 10-ship buy. Even if the new system isn't ready by then, it could become a key element in follow-on LCS ships, beginning with the 25th LCS in 2016.

What would become of the earlier ships featuring individual combat systems is not yet clear.<sup>17</sup>

## Potential Relative Life-Cycle Operation and Support (O&S) Costs

Any savings the dual-award strategy might realize relative to the down select strategy in terms of costs for procuring LCSs could also be offset by potential additional life-cycle operation and support (O&S) costs of operating significant numbers of two different LCS designs. GAO's December 8 report states: "According to the Navy, [estimated savings in LCS procurement costs under the dual-award strategy] would be offset, in part, by an additional \$842 million in total ownership costs, which the Navy equates to a net present value of \$295 million."<sup>18</sup> The GAO report also states:

<sup>17</sup> Christopher P. Cavas, "Two LCS Designs, One Big Dilemma," *Defense News*, December 13, 2010: 22.

<sup>18</sup> Government Accountability Office, *Navy's Proposed Dual Award Acquisition Strategy for the Littoral Combat Ship*

Navy officials expressed confidence that their cost estimate supporting the dual award provides details on the costs to operate and support both designs. However, since little actual LCS operating and support data are available to date, the Navy's estimates for these costs are currently based on data from other ships and could change as actual cost data become more available. These estimates are also based on new operational concepts for personnel, training, and maintenance that have not been fully developed, tested, and implemented. For example, the Navy has not yet implemented a comprehensive training plan, and it is possible that the plan could cost more or less than the training costs currently accounted for by the Navy.<sup>19</sup>

CBO's December 10 letter report stated:

Operating and maintaining two types of ships would probably be more expensive, however. The Navy has stated that the differences in costs are small (and more than offset by procurement savings), but there is considerable uncertainty about how to estimate those differences because the Navy does not yet have much experience in operating such ships.<sup>20</sup>

### Potential Resulting Relative Net Costs

Using information available as of December 13, potential relative costs of the down select and dual-award strategies might be bounded as follows:

- **On the one hand, compared to the down select strategy, the dual award strategy might cost a net total of \$705 million less.** This net figure includes \$1 billion in Navy-estimated ship procurement cost savings through *FY2016*, no additional combat system-related investment costs (i.e., the Navy decides not to pursue a common combat system for the two LCS designs), and \$295 million in additional life-cycle O&S costs (net present value) for operating significant numbers of both LCS designs.
- **On the other hand, compared to the down select strategy, the dual award strategy might cost a net total of as much as \$2,865 million more.** This net figure includes \$740 million in CBO-estimated higher ship procurement costs through *FY2015*, as much as \$1,830 million in additional combat system related costs (i.e., the Navy decides to develop, procure, and install on 24 LCSs a new common combat system with a procurement cost of as much as \$70 million per ship), and \$295 million in additional life-cycle O&S costs (net present value) for operating significant numbers of both LCS designs.

### Potential Relative Risks

Regarding the potential relative risks of the down select and dual-award acquisition strategies, the GAO report states that "a second ship design and source provided under the dual award strategy could provide the Navy an additional hedge against risk, should one design prove problematic."<sup>21</sup> A converse argument might be that managing the construction of two very different LCS designs could place increased demands on overall Navy program management capacities and on the

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*Program*, GAO-11-249R, December 8, 2010, Table 1 on page 3.

<sup>19</sup> Government Accountability Office, *Navy's Proposed Dual Award Acquisition Strategy for the Littoral Combat Ship Program*, GAO-11-249R, December 8, 2010, p. 6.

<sup>20</sup> Congressional Budget Office, letter report to Senator John McCain on LCS acquisition strategies dated December 10, 2010, p. 3.

<sup>21</sup> Government Accountability Office, *Navy's Proposed Dual Award Acquisition Strategy for the Littoral Combat Ship Program*, GAO-11-249R, December 8, 2010, p. 4.

Navy's Supervisor of Shipbuilding (SUPSHIP) capabilities for on-site monitoring of the construction of Navy ships – factors that might increase the chances of program-management challenges in the LCS program or of the Navy not detecting in a timely manner construction-quality problems that might occur in one or both LCS designs.<sup>22</sup>

Mr. Chairman, distinguished members of the committee, this concludes my testimony. Thank you again for the opportunity to appear before you to discuss these issues. I will be pleased to respond to any questions you might have.

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<sup>22</sup> Limits on Navy SUPSHIP capacities may have been a factor in the delayed discovery by the Navy of construction quality problems on Navy San Antonio (LPD-17) class amphibious ships. For a discussion of LPD-17 class construction quality problems, CRS Report RL34476, *Navy LPD-17 Amphibious Ship Procurement: Background, Issues, and Options for Congress*, by Ronald O'Rourke.