August 2010

GAO Highlights

Highlights of GAO-10-523, a report to congressional requesters

DEFENSE ACQUISITIONS

Navy's Ability to Overcome Challenges Facing the Littoral Combat Ship Will Determine Eventual Capabilities

Why GAO Did This Study

The Navy's Littoral Combat Ship (LCS) is envisioned as a reconfigurable vessel able to meet three missions: surface warfare, mine countermeasures, and anti-submarine warfare. It consists of the ship (seaframe) and the mission package it carries and deploys. The Navy plans to invest over $25 billion through fiscal year 2035 to acquire LCS. However, recurring cost growth and schedule delays have jeopardized the Navy's ability to deliver promised LCS capabilities.

Based on a congressional request, GAO (1) identified technical, design, and construction challenges to completing the first four ships within current cost and schedule estimates, (2) assessed the Navy's progress developing and fielding mission packages, and (3) evaluated the quality of recent Navy cost analyses for seaframes and their effect on program progress. GAO's findings are based on an analysis of government and contractor-generated documents, and discussions with defense officials and key contractors. This product is a public version of a For Official Use Only report, GAO-10-1006SU, also issued in August 2010.

What GAO Recommends

GAO recommends the Secretary of Defense take actions to ensure more realistic cost estimates, timely incorporation of design changes, and coordination of seaframe and mission package acquisition. The Department of Defense concurred with each of these recommendations.

View GAO-10-523 or key components.
For more information, contact Belva Martin at (202) 512-4841 or martinb@gao.gov.

What GAO Found

The Navy faces technical, design, and construction challenges to completing the first four seaframes within current cost and schedule estimates. The Navy and its shipbuilders have learned lessons from construction of the first two seaframes that have positioned them to more effectively construct future vessels. However, technical issues with the first two seaframes have yet to be fully resolved. Addressing these technical issues has required the Navy to implement design changes at the same time LCS 3 and LCS 4 are being built. Incorporating changes during this phase will likely require additional labor hours beyond current forecasts. Together, these challenges may hinder the ability of shipbuilders to apply lessons learned to follow-on ships and could undermine anticipated benefits from recent capital investments in the LCS shipyards.

Challenges developing mission packages have delayed the timely fielding of promised capabilities, limiting the ships' utility to the fleet during initial deployments. Until these challenges are resolved, it will be difficult for the Navy to align seaframe purchases with mission package procurements and execute planned tests. Key mine countermeasures and surface warfare systems encountered problems in operational and other testing that delayed their fielding. For example, four of six Non-Line-of-Sight Launch System missiles did not hit their intended targets in recent testing, and the Department of Defense has since canceled the program. Further, Navy analysis of anti-submarine warfare systems has shown the planned systems do not contribute significantly to the anti-submarine warfare mission. These combined challenges have led to procurement delays for all three mission packages. Mission package delays have also disrupted program test schedules—a situation exacerbated by early deployments of initial ships—limiting their availability for operational testing. In addition, these delays could disrupt program plans for simultaneously acquiring seaframes and mission packages. Until mission packages are proven, the Navy risks investing in a fleet of ships that does not deliver promised capability.

The Navy entered contract negotiations in 2009 for fiscal year 2010 funded seaframes with an incomplete understanding of LCS program costs. These contract negotiations proved unsuccessful, prompting the Navy to revise its acquisition strategy for the program. The contractors' proposals for construction of the next three ships exceeded the approximate $1.4 billion in funds the Navy had allocated in its fiscal year 2010 budget. In response, the Navy revised its strategy to construct one seaframe design instead of two for fiscal year 2010 ships and beyond in an effort to improve affordability. Navy cost analyses completed prior to the failed negotiations in 2009 lack several characteristics essential to a high-quality cost estimate. These characteristics include the completion of sensitivity and uncertainty analyses and an independent review of the cost estimate. The Navy plans to complete a more comprehensive cost estimate before award of additional ship contracts in 2010.