ARLEIGH BURKE DESTROYERS

Delaying Procurement of DDG 51 Flight III Ships Would Allow Time to Increase Design Knowledge

Why GAO Did This Study

Over the next 10 years, the Navy plans to spend more than $50 billion to design and procure 22 Flight III destroyers, an upgrade from Flight IIA ships. Flight III ships will include the new SPY-6 radar system and Aegis (ballistic missile defense) combat system upgrades. The Navy’s MYP approach requires the Navy to seek authority to do so from Congress. House report 114-102 included a provision for GAO to examine the Navy’s plans for the DDG 51 Flight III ships and AMDR. This report assesses (1) the status of efforts to develop, test, and integrate SPY-6 and Aegis in support of Flight III; (2) challenges, if any, associated with the Navy’s plans to design and construct Flight III ships; and (3) the Flight III acquisition approach and oversight activities, among other issues. GAO reviewed key acquisition documents and met with Navy and other DOD officials and contractors.

What GAO Found

The Air and Missile Defense Radar (AMDR) program’s SPY-6 radar is progressing largely as planned, but extensive development and testing remains. Testing of the integrated SPY-6 and full baseline Aegis combat system upgrade—beginning in late 2020—will be crucial for demonstrating readiness to deliver improved air and missile defense capabilities to the first DDG 51 Flight III ship in 2023. After a lengthy debate between the Navy and the Department of Defense’s (DOD) Director of Operational Test and Evaluation, the Secretary of Defense directed the Navy to fund unmanned self-defense test ship upgrades for Flight III operational testing, but work remains to finalize a test strategy.

Flight III ship design and construction will be complex—primarily due to changes needed to incorporate SPY-6 onto the ship, as shown in the figure.

Flight III Ship Configuration Changes Related to SPY-6 Radar Introduction

The Navy has not demonstrated sufficient acquisition and design knowledge regarding its Flight III procurement approach and opportunities exist to enhance oversight. If the Navy procures the lead Flight III ship in fiscal year (FY) 2016 as planned, limited detail design knowledge will be available to inform the procurement. In addition, the Navy’s anticipated cost savings under the FY 2013-2017 Flight IIA multyear procurement (MYP) plan do not reflect the planned addition of Flight III ships. While the Navy did not update its cost savings with Flight III information, doing so would increase transparency and could help inform expected savings under the next MYP. The Navy plans to request authority to award new Flight III MYP contracts (FY 2018-2022) in February 2017. The Navy will be asking Congress for this authority to procure nearly half of Flight III ships before being able to meet the criteria to seek this authority. For example, detail design will not be complete and costs will not be informed by any Flight III construction history. Finally, Flight III cost and schedule performance is not distinguished from that of the overall DDG 51 ship class in annual reports to Congress. Establishing Flight III as a major subprogram would improve reporting and offer greater performance insight.

What GAO Recommends

Congress should consider requiring an update of estimated savings for the current DDG 51 MYP to reflect the addition of Flight III ships. The Navy should delay procurement of the lead Flight III ship and refrain from seeking authority for a MYP contract until it can meet criteria required for seeking this authority. DOD should also designate Flight III as a major subprogram to improve oversight. DOD partially concurred with all three recommendations but is not planning to take any new actions to address them. GAO continues to believe the recommendations are valid.

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