

GAO Highlights

Highlights of [GAO-17-418](#), Report to the Committee on Armed Services, U.S. Senate

Why GAO Did This Study

The U.S. Navy spends at least \$18 billion per year on shipbuilding—a portion of which is spent after ships are delivered. During the post-delivery period—after delivery from the shipbuilder and before the ships enter the fleet—Navy ships undergo a variety of tests, trials, and construction.

GAO was asked to assess the post-delivery period, including quality and completeness of ships when they are delivered to the fleet. The Senate Report on the National Defense Authorization Act for Fiscal Year 2017 included additional questions about ship status after delivery. This report assesses the extent to which the Navy (1) provides complete and quality ships to the fleet, (2) has a ship delivery policy that supports those efforts, and (3) reports ship quality and completeness to Congress. GAO reviewed a nongeneralizable sample of eight Navy ships, six of which have entered the fleet and two that recently began the post-delivery period. GAO reviewed program documentation and interviewed Navy officials.

What GAO Recommends

The Navy should revise its ship delivery policy to identify what kinds of defects should be corrected and by when and study how to best ensure that INSURV verifies ships. Also, the Navy should reflect in its reports to Congress key milestones and consistent definitions in line with DOD policy. DOD did not concur with two recommendations, partially concurred with a third, and fully agreed with a fourth. GAO stands by its recommendations, which will help ensure that complete and quality ships are provided to the fleet and that Congress is provided with meaningful information on ship status.

View [GAO-17-418](#). For more information, contact Michele Mackin at (202) 512-4841 or mackinm@gao.gov.

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NAVY SHIPBUILDING

Policy Changes Needed to Improve the Post-Delivery Process and Ship Quality

What GAO Found

GAO reviewed six ships valued at \$6.3 billion that had completed the post-delivery period, and found they were provided to the fleet with varying degrees of incomplete work and quality problems. GAO used three quality assurance metrics, identified by Navy program offices, to evaluate the completeness of the six ships—LPD 25, LHA 6, DDG 112, Littoral Combat Ships (LCS) 3 and 4, and SSN 782—at delivery and also at the time each ship was provided to the fleet. Although the Navy resolved many of the defects by the end of the post-delivery period, as the table below shows, quality problems persisted and work was incomplete when the selected ships were turned over to the operational fleet.

Number of Quality Problems or Defects at the Beginning and End of the Post-Delivery Period across Six Selected Ships

	At delivery	At the time the Navy provided the ship to the fleet
Significant construction deficiencies	363	45
Systems not meeting minimal functional standard	139	54
Significant deficiencies in mission-essential equipment	N/A ^a	53

Source: GAO analysis of Navy documents and data. | GAO-17-418

^aThis information is not evaluated at delivery

Fleet officials reported varying levels of concern with the overall quality and completeness of the ships, such as with unreliable equipment or a need for more intense maintenance than expected. For CVN 78 and DDG 1000, the Navy plans to complete significantly more work and testing during the post-delivery period than the other six ships GAO reviewed. As such, these ships are at a greater risk of being provided to the fleet at the end of their post-delivery periods with incomplete construction work and unknowns about quality.

The Navy's ship delivery policy does not facilitate a process that provides complete and quality ships to the fleet and practices do not comport with policy. The policy emphasizes that ships should be defect-free and mission-capable, but lacks clarity regarding what defects should be corrected and by when. Without a clear policy, Navy program offices define their own standards of quality and completeness, which are not always consistent. Further, because the Navy's Board of Inspection and Survey (INSURV) does not inspect ships at the end of the post-delivery period, it is not in a position to verify each ship's readiness for the fleet, as required by Navy policy. The Navy has not assessed the costs and benefits of ensuring INSURV does this. Addressing these policy concerns would improve the likelihood of identifying and correcting deficiencies before fleet introduction and increase consistency in how the Navy defines quality.

The Navy does not use consistent definitions for key milestones in its reports to Congress—such as delivery or Initial Operational Capability (IOC)—and, therefore, these milestones are not as informative as they could be regarding ship quality and completeness. For example, the Navy has routinely declared IOC on new ship classes without having demonstrated that ships are able to perform mission operations—contrary to Department of Defense (DOD) guidance, which, for nearly all acquisition models, generally states that IOC should be declared only after successful operational testing that demonstrates performance.