

GAO Highlights

Highlights of [GAO-14-122](#), a report to congressional committees

Why GAO Did This Study

The Navy expects to spend about \$15 billion per year to provide its fleet with the most advanced ships to support national defense and military strategies. Problems with recently delivered ships have focused attention on quality issues.

House Report No. 112-110, accompanying the Department of Defense Appropriations Bill, 2012, mandated that GAO review the Navy's quality assurance processes for new ship construction. This report discusses, among other issues, (1) quality problems in constructing recently delivered ships and Navy actions to improve quality and (2) key practices employed by leading commercial ship buyers and shipbuilders to ensure quality and how these compared with Navy practices.

GAO analyzed Navy data on ship quality from 2006 to May 2013 and spoke with Navy officials and shipbuilders. GAO also reviewed deficiency data for commercial ships and spoke with buyers and builders.

What GAO Recommends

To improve the construction quality of ships delivered to the Navy, GAO is recommending, among other things, that the Navy clarify policy on when deficiencies should be addressed, provide guidance on contract quality requirements, and assess applicability of certain commercial practices to Navy shipbuilding. DOD agreed with two recommendations and partially agreed with three, stating for example that current policy is adequate but that the Navy would monitor deficiency trends. GAO believes that the recommendations remain valid as discussed in the report.

View [GAO-14-122](#). For more information, contact Michele Mackin at (202) 512-4841 or mackinm@gao.gov.

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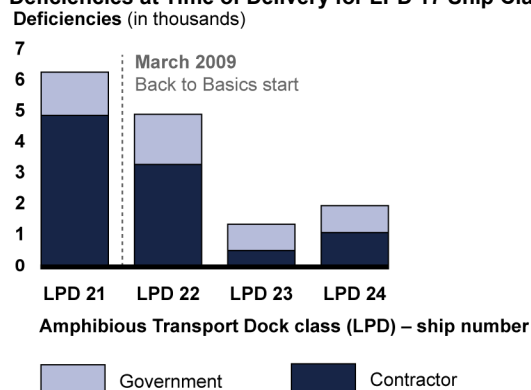
NAVY SHIPBUILDING

Opportunities Exist to Improve Practices Affecting Quality

What GAO Found

The Navy has experienced significant quality problems with several ship classes over the past several years. It has focused on reducing the number of serious deficiencies at the time of delivery, and GAO's analysis shows that the number of deficiencies—particularly "starred" deficiencies designated as the most serious for operational or safety reasons—has generally dropped. Nonetheless, the Navy continues to accept ships with large numbers of open deficiencies (see figure below as an example; although total deficiencies have declined for this ship class, the last ship still had about 1,000 deficiencies that the shipbuilder was responsible for correcting). Accepting ships with large numbers of uncorrected deficiencies is a standard practice and GAO found that there are varying interpretations of Navy policy with regard to when the defects should be resolved. In 2009, the Navy organization that oversees ship construction launched the Back to Basics initiative to improve Navy oversight of ship construction. However, a key output of the initiative promoting consistent and adequate quality requirements in Navy contracts has yet to be implemented.

Deficiencies at Time of Delivery for LPD 17 Ship Class



Source: GAO analysis of Navy data.

Although the environment in which leading commercial ship buyers and builders operate differs in many ways from the Navy's, some commercial practices aimed at helping to ensure that ships are delivered with a minimum number of deficiencies may be informative for the Navy. Throughout the course of commercial shipbuilding projects, significant numbers of quality defects and instances of non-conforming work are identified. However, leading commercial ship buyers and shipbuilders make great efforts to ensure that these issues are resolved prior to delivery. Further, commercial ship buyers establish clear lines of accountability and hold their personnel responsible for ensuring the shipbuilder delivers a quality vessel. While commercial ship buyers focus on regularly witnessing in-process work through roaming patrols and impromptu inspections, Navy processes at the shipyards place less emphasis on in-process work. Moreover, leading commercial shipbuilders have strong quality management processes that track quality problems to the worker or supervisor level. Navy shipbuilding contractors have historically experienced difficulties in holding production workers and supervisors accountable for their work, but some of the shipyards reported they are making progress on increasing worker accountability.