MILITARY READINESS

Navy Needs to Reassess Its Metrics and Assumptions for Ship Crewing Requirements and Training

Why GAO Did This Study

Since 2000, the Navy has undertaken a number of initiatives to achieve greater efficiencies and reduce costs. For example, it has reduced crew sizes on some of its surface ships and has moved from instructor-led to more computer-based training. In House Report 111-166, which accompanied the National Defense Authorization Act for Fiscal Year 2010, the House Armed Services Committee directed GAO to review the training, size, composition, and capabilities of the Navy's ship crews. This report assesses the extent to which the Navy (1) used valid assumptions and standards in determining crew sizes for cruisers and destroyers, and (2) has measured the impact of changes to its training programs, including on the time it takes personnel to achieve various qualifications. To do so, GAO analyzed Navy procedures for determining crew size compared to guidance, analyzed current Navy metrics to measure training impact, and interviewed relevant officials and conducted visits to 11 ships.

What GAO Recommends

GAO is recommending that the Navy validate the underlying assumptions and standards it uses to calculate workforce requirements, and as necessary, based on this assessment, reevaluate its cruiser and destroyer workload requirements. GAO is also recommending that the Navy develop additional metrics to measure the effectiveness of Navy training. DOD agreed with these recommendations.

View GAO-10-592 or key components.
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What GAO Found

Since 2001, in an effort to achieve greater efficiencies and reduce costs, the Navy has reduced the requirements and size of crews for some types of ships. For example, from fiscal years 2001 to 2009, enlisted requirements declined by about 20 percent and crew sizes declined by about 16 percent on cruisers and destroyers. The Navy made these reductions based on an initiative it referred to as optimal manning as well as a decision to change certain standards it uses to translate estimated workload into workforce requirements. During pilot tests and the implementation of its optimal manning initiative, the Navy considered several elements, such as job task analysis and work studies, called for in its guidance. However, it analyzed only at-sea workload data because of a long-standing Navy assumption that at-sea workload exceeds in-port workload. While best practices require that valid and reliable data are used to assess workforce requirements, the Navy has not tested the validity of its assumption for excluding in-port data. Additionally, GAO was told by shipboard personnel that in-port workload has been increasing. Furthermore, when changing standards, such as increasing the standard workweek from 67 to 70 hours, the Navy did not conduct the types of analysis called for in its guidance to verify that these changes were warranted. Without performing additional analysis to determine that the assumption and standards it uses to determine personnel requirements are valid, the Navy cannot be assured that it has appropriately sized crews to maintain material readiness and accomplish necessary tasks aboard its ships.

The Navy has made significant changes to its training programs and evaluated some aspects of these changes, specifically those related to cost and training time. However, it lacks outcome-based performance measures and complete data necessary to fully evaluate the impact changes to training have had on trainees' job performance and the time required for personnel to achieve various qualifications. For example, in 2003, the Navy replaced its 6-month division officer course with computer-based training and officials told GAO that this change has resulted in decreases in class length and saved the Navy about $50 million annually. While important, these input and output-based metrics do not enable the Navy to determine how its training programs are affecting the level of the trainees' job performance, knowledge, skills, and abilities once they report to their ships. The time it takes for personnel to achieve qualification standards is a potential metric the Navy could use to evaluate its training programs, however data on actual qualification times, while improving, are incomplete. GAO met with leaders from 11 different ships who told GAO that the sailors and officers taught using new methods such as computer-based training, required more on-the-job training when they arrived onboard than those who had previously received classroom instruction. They also noted that because of reductions in crew sizes, there are fewer personnel available to provide this on-the-job training. Without additional outcome-based performance measures to supplement its current metrics, the Navy cannot fully determine the effectiveness of the training changes it has implemented and whether further adjustments are necessary.

_____ **United States Government Accountability Office**