



Highlights of GAO-09-103, a report to congressional requesters

December 2008

DEFENSE INVENTORY

Management Actions Needed to Improve the Cost Efficiency of the Navy's Spare Parts Inventory

Why GAO Did This Study

Since 1990, GAO has designated the Department of Defense's (DOD) inventory management as a high-risk area. It is critical that the military services and the Defense Logistics Agency effectively and efficiently manage DOD's secondary inventory to ensure that the warfighter is supplied with the right items at the right time. It is also imperative that they maintain good stewardship over the billions of dollars invested in their inventory. GAO reviewed the Navy's management of secondary inventory and determined (1) the extent to which on-hand and on-order secondary inventory reflected the amount needed to support current requirements and (2) causes for the Navy's having secondary inventory in excess of current requirements or, conversely, for having inventory deficits. To address these objectives, GAO analyzed Navy secondary inventory data (spare parts such as aircraft and ship engines and their components and accessories) from fiscal years 2004 through 2007.

What GAO Recommends

GAO recommends that the Navy strengthen inventory management by incorporating cost-efficiency metrics and goals, evaluating and improving demand forecasting procedures, revising inventory management practices to better accommodate demand fluctuations, and enhancing oversight though the chief and deputy chief management officers. DOD concurred with GAO's recommendations.

To view the full product, including the scope and methodology, click on [GAO-09-103](#). For more information, contact William M. Solis at (202) 512-8365 or solisw@gao.gov.

What GAO Found

For the 4-year period GAO examined, the Navy had significantly more inventory than was needed to support current requirements. The Navy also experienced some inventory deficits, though to a far lesser extent. GAO's analysis of inventory data identified an annual average of about \$18.7 billion of Navy secondary inventory for fiscal years 2004 to 2007, of which about \$7.5 billion (40 percent) exceeded current requirements. About half of the \$7.5 billion of inventory exceeding current requirements was retained to meet anticipated future demands, and the remainder was retained for other reasons or identified as potential excess. Based on Navy demand forecasts, inventory that exceeded current requirements was sufficient to satisfy several years, or even decades, of anticipated supply needs. Also, a large proportion of items that exceeded current requirements had no projected demand. The Navy also had an annual average of about \$570 million of inventory deficits over this 4-year period. Some items experienced persistent deficits for the 4 years covered in GAO's review.

Navy inventory did not align with current requirements over this 4-year period because (1) the Navy has not established the cost efficiency of its inventory management, (2) its demand forecasting effectiveness is limited and requirements for items may change frequently after purchase decisions are made, and (3) it has not adjusted certain inventory management practices in response to the unpredictability in demand. As a result, the Navy had billions of dollars in excess inventory against current requirements each year. DOD's supply chain management regulation requires the military services to take several steps to provide for effective and efficient end-to-end materiel support. For example, the regulation directs the components to size secondary item inventories to minimize DOD investment while providing the inventory needed. However, while the Navy has performance measures related to meeting warfighter needs, it lacks metrics and targets for tracking and assessing the cost efficiency of its inventory management. In addition, although Navy managers most frequently attributed the accumulation and retention of inventory exceeding current requirements to changes in demand, the Navy has not systematically evaluated the effectiveness of its demand forecasting. Problems with demand forecasting that contribute to excess inventory include incomplete and inaccurate data and a lack of communication and coordination among key personnel. Finally, the Navy has not adjusted certain management practices—in areas such as initial provisioning, modifying purchase decisions for inventory that is on order and not yet in its possession, and retention—to provide flexibility for responding to changes in demand. First, initial provisioning of spare parts based on engineering estimates can result in the purchase of unneeded stock when these estimates prove to be inaccurate. Second, the Navy's management practices for on-order items limit flexibility in modifying purchase decisions in cases where demand has changed. Third, although prior studies have identified weaknesses in inventory retention practices, the Navy has not implemented recommended corrective actions. Also, the Navy's designation of new chief and deputy chief management officer positions provides an opportunity for enhanced oversight of inventory management improvement efforts. Strengthening the Navy's inventory management—while maintaining high levels of supply availability and meeting warfighter needs—could reduce support costs and free up funds for other needs.