



Highlights of [GAO-09-199](#), a report to congressional requesters

## 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 effectively and efficiently manage DOD's secondary inventory to ensure that the warfighter is supplied with the right items at the right time and to maintain good stewardship over the billions of dollars invested in their inventory. GAO reviewed the Army'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 Army having secondary inventory that exceeded current requirements or, conversely, for having inventory deficits. To address these objectives, GAO analyzed Army data on secondary inventory (spare parts such as aircraft and tank engines) from fiscal years 2004 through 2007.

## What GAO Recommends

GAO recommends that the Army strengthen inventory management by incorporating cost efficiency metrics and goals, evaluating and improving demand forecasting procedures, monitoring the effectiveness of providing operational information to item managers, and enhancing oversight of inventory management through the Army's chief management officer. DOD agreed with three of GAO's recommendations but disagreed that the chief management officer should exercise oversight.

To view the full product, including the scope and methodology, click on [GAO-09-199](#). For more information, contact William M. Solis at (202) 512-8365 or [solisw@gao.gov](mailto:solisw@gao.gov).

## DEFENSE INVENTORY

### Army Needs to Evaluate Impact of Recent Actions to Improve Demand Forecasts for Spare Parts

#### What GAO Found

For the 4-year period GAO examined, the Army had significantly more inventory than was needed to support current requirements. At the same time, the Army had substantial inventory deficits. GAO's analysis of Army data reflected an annual average of about \$16.3 billion of secondary inventory for fiscal years 2004 to 2007, of which about \$3.6 billion (22 percent) exceeded current requirements. On average, approximately 97 percent of the inventory value exceeding requirements was on hand and the remaining 3 percent was on order. Based on Army demand forecasts, inventory that exceeded current requirements had enough parts on hand for some items 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 Army also had an annual average of about \$3.5 billion of inventory deficits over this 4-year period.

Army inventory did not align with current requirements over this period because of (1) a lack of cost-efficiency metrics and goals and (2) inaccurate demand forecasting. DOD's supply chain management regulation requires the military services to take a number of steps to provide for effective and efficient end-to-end materiel support. For example, the regulation directs the components to size secondary inventory to minimize DOD's investment while providing the inventory needed. Although the Army has supply support performance measures for meeting warfighter needs, it has not established metrics and goals that can measure the cost efficiency of its inventory management practices. Furthermore, the Army's demand forecasts have frequently been inaccurate. The Army uses a computer model to forecast its spare parts requirements, but when demand data are inaccurate or untimely, the result is a misalignment between inventory and current requirements. As a result, the Army has accumulated billions of dollars in excess inventory against current requirements for some items and substantial inventory deficits in other items. Without accurate and timely demand data, managers cannot ensure that their purchasing decisions will result in inventory levels that are sized to minimize DOD's investment needed to support requirements. The Army has acknowledged that challenges exist in its forecasting procedures and has begun to take steps to address shortcomings. In October 2008, the Army issued guidance directing managers to reduce the forecast period from 24 months to 12 months to better account for changes in the size of the force and the resulting changes in demands. The guidance also directs managers to update forecast models to match actual quantities of weapon systems being used in Southwest Asia; previous models were updated based on estimates that were not always timely or accurate. These two changes constitute steps toward improving the accuracy of demand forecasts, but GAO was unable to assess their effectiveness because this guidance was issued as GAO was completing its audit work. Also, the Army's recent designation of the Under Secretary of the Army as its chief management officer responsible for business transformation provides an opportunity for enhanced oversight of inventory management improvement efforts. Strengthening the Army'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.