



Highlights of [GAO-07-566T](#), a testimony to House Committee on Armed Services, Air and Land Forces Subcommittee

Why GAO Did This Study

The Department of Defense (DOD) has continuing efforts to modernize its airlift and tanker fleets by investing billions of dollars to modify legacy airlift systems, such as the C-5 and C-130, and procure new aircraft, such as a tanker replacement. Acquisition has been on GAO's list as a high risk area since 1990. GAO has reported that elements contributing to a sound business case for an acquisition are missing or incomplete as DOD and the services attempt to acquire new capabilities. Those elements include firm requirements, mature technologies, a knowledge-based acquisition strategy, a realistic cost estimate, and sufficient funding. Acquisition problems that include failure to limit cost growth, schedule delays, and quantity reductions persist, but fiscal realities will not allow budgets to accommodate these problems any longer.

Today's testimony addresses (1) the analyses supporting the Department of Defense's (DOD) mobility capabilities and requirements and (2) actions that are needed to improve the outcomes of weapon system acquisitions.

For this testimony, GAO drew from issued reports, containing statements of the scope and methodology used, as well as recently completed work not yet reported. GAO's work was performed in accordance with generally accepted government auditing standards.

www.gao.gov/cgi-bin/getrpt?GAO-07-566T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact William M. Solis at (202) 512-8365 or solisw@gao.gov and Michael J. Sullivan at (202)-512-4841 or sullivanm@gao.gov.

DEFENSE ACQUISITIONS

Issues Concerning Airlift and Tanker Programs

What GAO Found

Past GAO reports, including two recently issued, raise concerns about the quality of analyses underpinning the programmatic decision-making surrounding DOD's airlift requirements. In September 2006, GAO issued our report (GAO-06-938) on DOD's Mobility Capabilities Study (MCS). The MCS determined that the projected mobility capabilities are adequate to achieve U.S. objectives with an acceptable level of risk during the period from fiscal years 2007 through 2013; that is, the current U.S. inventory of aircraft, ships, prepositioned assets, and other capabilities are sufficient, in conjunction with host nation support. GAO's report stated that conclusions of the MCS were based on incomplete data and inadequate modeling and metrics that did not fully measure stress on the transportation system. GAO further observed that the MCS results were incomplete, unclear, or contingent on further study, making it difficult to identify findings and evaluate evidence. It was not clear how the analyses done for the study support DOD's conclusions and GAO suggested that decision makers exercise caution in using the results of this study to make programmatic decisions. In March 2007, GAO reported (GAO-07-367R) on the lack of mandatory analyses to support a passenger and cargo capability for the new replacement refueling aircraft, the KC-X tanker. Contrary to mandatory Air Force implementing guidance, the Air Force proposed a capability without analyses identifying an associated gap, shortfall, or redundancy. GAO believes that without sound analyses, the Air Force may be at risk of spending several billion dollars unnecessarily for a capability that may not be needed to meet a gap or shortfall and made recommendations to the Secretary of Defense that included conducting the requiring analyses necessary to establish capabilities.

Successful acquisition programs make sound decisions based on critical product knowledge to ensure that program investments are getting promised returns—on time delivery, within estimated costs, and with expected capabilities. However, GAO has shown in its work that DOD practices diverge from best development practices intended to produce good outcomes and, as a result, have experienced significant cost growth and schedule delays. DOD expects to invest over \$12 billion in new and improved capabilities in four airlift programs discussed in this testimony between now and 2013—C-5 Avionics Modernization Program, C-5 Reliability Enhancement and Reengining Program, C-130 Avionics Modernization Program, and the C-130J acquisition program. GAO found that all four programs failed at basic systems engineering practices to 1) fully analyze the resources needed to integrate proven commercial technologies, 2) achieve a stable design before beginning system demonstration, and 3) demonstrate the aircraft would work as required before making large production investments.