



DEFENSE ACQUISITIONS

Changes in E-10A Acquisition Strategy Needed before Development Starts

Highlights of [GAO-05-273](#), a report to the Chairman, Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

The Air Force is on the verge of making a major commitment to the multi-billion dollar E-10A Multi-sensor Command and Control Aircraft program. Due to the substantial investment needed and technological challenges in developing the aircraft, the Subcommittee on Tactical Air and Land Forces asked GAO to examine the soundness of the E-10A business case as well as the risks associated with the current acquisition strategy.

What GAO Recommends

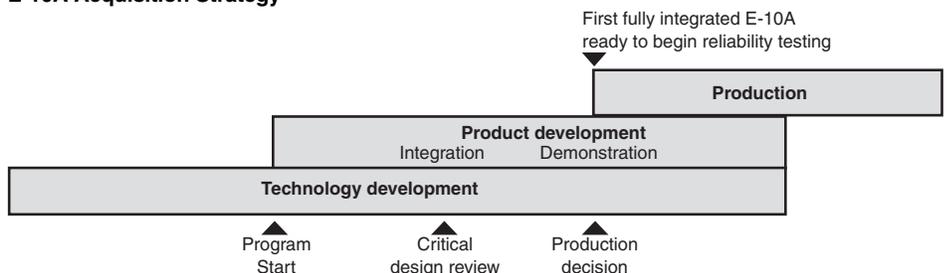
GAO recommends that the Secretary of Defense ensure that open questions about the E-10A business case are answered before the program advances into the development and demonstration phase and officially begins. GAO also recommends that if the E-10A program goes forward adequate time be allotted to test a prototype before moving into production. DOD concurred with the first recommendation, but noted that the questions may not be resolved until the Milestone B decision, which could now be delayed until 2010. DOD partially concurred with the second recommendation, stating that DOD policy did not require demonstration of a design at that point in the acquisition process. GAO disagrees with this interpretation.

What GAO Found

As the E-10A Multi-sensor Command and Control Aircraft program nears its official starting point, questions remain regarding critical elements of its business case, including the need for the aircraft, the maturity level of its technology, and its funding. Plans call for the E-10A to couple a new radar system with a sophisticated and software intensive battle management command and control system aboard a Boeing 767. E-10A is planned to fill a current gap in U.S. capabilities and provide a defense against weapons such as cruise missiles. The Office of the Secretary of Defense is still working on a study to determine whether the E-10A program is the most cost-effective way to fill that gap. E-10A program funding plans changed dramatically in December 2004 when the DOD proposed reducing the total program budget by about 45 percent for the next 2 fiscal years. The business case for starting a development program requires demonstrated evidence that (1) the warfighter need exists and that it can best be met with the chosen concept and (2) the concept can be developed and produced within existing resources—including design knowledge, demonstrated technologies, adequate funding, and adequate time to deliver the product. E-10A requirements and resources are still in flux.

GAO found risks associated with the current E-10A acquisition strategy that could lead to costly changes later in the program. The program is set to move into production before critical knowledge is acquired. For example, the first fully assembled E-10A, outfitted with its radar and battle management command and control systems, would not be delivered in time to complete testing before the decision is made to begin production. Testing and production are scheduled to start at the same time in 2010. Furthermore, four of six E-10As are scheduled to begin production before the results of testing are available. By not demonstrating that the system can perform as expected before entering production, the program increases the risk of changes and delays later in the program. This strategy requires significant concurrency among the technology development, product development, and production phases.

E-10A Acquisition Strategy



Source: GAO analysis of Air Force data.

www.gao.gov/cgi-bin/getrpt?GAO-05-273.

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