

## KC-46 TANKER AIRCRAFT

### Acquisition Plans Have Good Features but Contain Schedule Risk

#### Why GAO Did This Study

Aerial refueling is essential to global U.S. military operations. The backbone of the nation's tanker forces—the KC-135 Stratotanker—is over 50 years old on average with age-related problems and increasing support costs that could ground the fleet. Given this, the Air Force has initiated the \$51.7 billion KC-46 program to start replacing the current fleet. Plans are to produce 18 tankers by 2017 and 179 aircraft through 2027. Other follow-on procurements are anticipated to replace all KC-135s (see graphic).

The National Defense Authorization Act for Fiscal Year 2012 requires GAO to annually review the KC-46 program through 2017. This report addresses (1) the program's acquisition strategy, including its contracting approach; (2) the major schedule and technical risks; and (3) the extent the program's acquisition strategy and documentation comply with policy, legislation, and best practices. To address these areas, GAO reviewed key documents on the program's contract and cost baseline. GAO discussed the major schedule and technical risks with program office officials and examined an independent technology readiness assessment. GAO also assessed the acquisition plan and required documentation to determine compliance with acquisition legislation, policy, and best practices.

#### What GAO Recommends

GAO recommends DOD leadership monitor the progress and outcomes of this contract to provide lessons learned for future acquisition programs, and the program fully implement metrics to track achievement of key performance parameters. DOD fully concurred.

View [GAO-12-366](#). For more information, contact Michael J. Sullivan at (202) 512-4841, or [sullivanm@gao.gov](mailto:sullivanm@gao.gov).

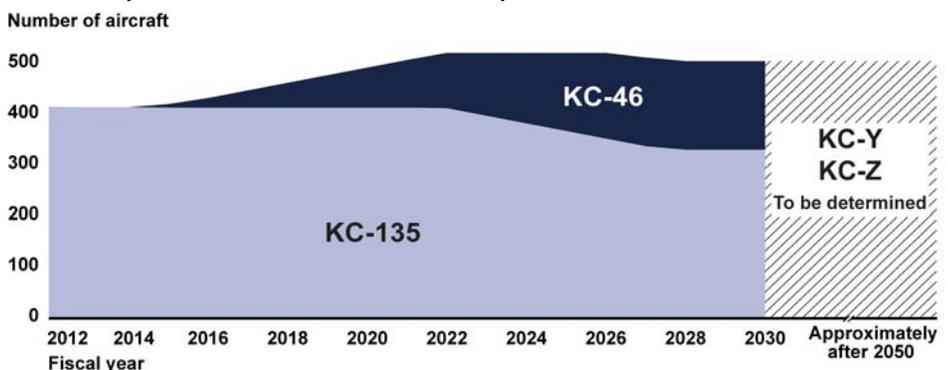
#### What GAO Found

The KC-46 program has established its acquisition strategy for development and production, including total cost, procurement quantities, and key milestone dates. The program is using a \$4.4 billion fixed-price incentive (firm target) development contract that provides contractor incentives to control costs and limits the government's liability for increased costs over a certain amount. While estimated development costs are currently \$900 million higher than the February 2011 contract award amount, the government's share of these extra costs is limited to about \$500 million. The program has identified key performance parameters, but has not yet fully implemented the metrics for tracking their achievement.

There is broad agreement that KC-46 schedule risk is a concern. In GAO's assessment, significant concurrency, or overlap, among development and production activities add risk to the program. The Air Force and contractor have assessed overall schedule risk as moderate, citing concerns about software and the ability to complete development flight testing on time. Further, the DOD's chief testing official finds the testing schedule not executable as currently planned. While designing a new tanker using a modified commercial platform is not as technically challenging as a more revolutionary weapon system, the program still faces some technical risks, including technologies that have not yet been demonstrated during flight.

The KC-46 program's acquisition strategy provides a good framework for meeting GAO's knowledge-based best practices, and generally adheres to defense policy guidance and recent acquisition reform legislation. DOD waived the requirement for a preliminary design review before the program began system development and demonstration, but this design review is planned for March 2012. Although the program's three critical technologies have not yet achieved the level of maturity indicated in best practices, they have reached a level of maturity consistent with DOD policy. Given that the KC-46 is one of only a few major programs in recent years to use a fixed-price incentive contract and the importance of tanker replacement to national security, rigorous monitoring of the program's progress will be essential.

**Notional Representation of Air Force Plans to Replace Tanker Fleet**



Source: GAO presentation of Air Force data.