

GAO Highlights

Highlights of [GAO-18-353](#), a report to congressional requesters

Why GAO Did This Study

The KC-46 tanker modernization program, valued at about \$44 billion, is among the Air Force's highest acquisition priorities. Aerial refueling—the transfer of fuel from airborne tankers to combat and airlift forces—is critical to the U.S. military's ability to effectively operate globally. The Air Force initiated the KC-46 program to replace about a third of its aging KC-135 aerial refueling fleet. Boeing was awarded a fixed-price-incentive contract to develop the aircraft. Among other things, Boeing was contractually required to deliver 18 fully capable aircraft (KC-46 aircraft with 9 sets of wing aerial refueling pods that allow for simultaneous refueling of 2 aircraft) by August 2017. The program plans to eventually field 179 aircraft in total.

GAO was asked to monitor the KC-46 program because of problems Boeing is experiencing developing the aircraft. This is GAO's 7th report on the KC-46 program. This report assesses program progress and challenges toward achieving its cost goals and delivery schedule.

GAO analyzed cost, schedule, development, and test information contained in program documents; and discussed results with officials from the KC-46 program office, other defense offices, the Federal Aviation Administration (responsible for certifying the design of the KC-46), and Boeing.

What GAO Recommends

GAO believes the Department of Defense should implement a prior recommendation to document lessons learned given the program's challenges.

View [GAO-18-353](#). For more information, contact Michael Sullivan at (202) 512-4841 or sullivanm@gao.gov.

April 2018

KC-46 TANKER MODERNIZATION

Program Cost Is Stable, but Schedule May Be Further Delayed

What GAO Found

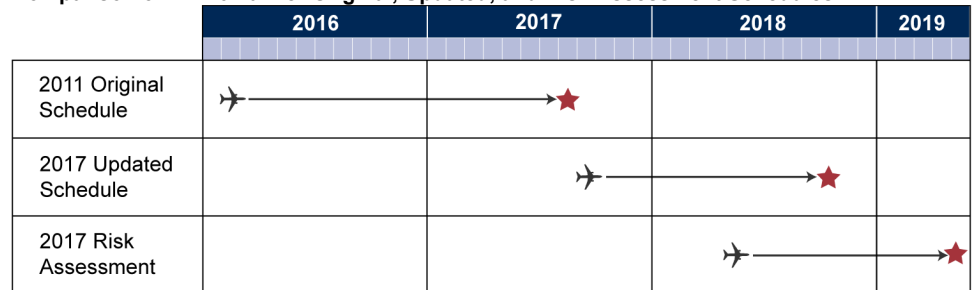
The total acquisition cost estimate for the KC-46 refueling tanker aircraft remained stable over the last year at \$44.4 billion. As shown in the table below, the estimate has decreased about \$7.3 billion, or 14 percent, since the initial estimate. This decrease is due in part to stable requirements.

	February 2011	October 2017	Percent change
Development	7,149.6	5,835.1	-18.4
Procurement	40,236.0	35,523.8	-11.7
Military construction	4,314.6	2,999.8	-30.5
Total	51,700.2	44,358.7	-14.2

Source: GAO presentation of Air Force data. | GAO-18-353

The program updated its delivery schedule in 2017 to allow Boeing to delay delivery of the first 18 fully capable aircraft from August 2017 to October 2018—14 months. A schedule risk assessment, as well as GAO's analysis, however projects that deliveries could slip to May 2019, 21 months from the original schedule, if risks are not mitigated. See figure.

Comparison of KC-46 Tanker Original, Updated, and Risk Assessment Schedules



✈ Delivery of first aircraft ★ First 18 fully capable aircraft

Source: GAO analysis of KC-46 program data. | GAO-18-353

Boeing faces the following risks and challenges and is trying to address them:

- updating test aircraft to the correct configuration to complete remaining tests;
- completing flight tests at a pace that is almost double its monthly average;
- updating test plans to reflect a more realistic schedule for certifying aircraft, such as F-16 fighters and C-17 cargo planes, to be refueled by a KC-46;
- retrofitting production aircraft to their final configuration for delivery; and
- fixing a critical deficiency to keep the boom from contacting receiver aircraft outside the refueling receptacle.

Because of the terms of the contract, Boeing, not the government, is responsible for nearly \$1 billion in additional development costs already incurred. Boeing is also providing additional training for KC-46 pilots, among other things, to compensate the Air Force for delivery delays. Meanwhile, the Air Force is continuing to use KC-135 and KC-10 tankers for refueling missions.