

# Air Force Tanker Strategy Changes

Updated November 5, 2021

As discussed in the CRS report [Air Force KC-46A Pegasus Tanker](#), the Air Force is in the process of replacing its fleet of 396 KC-135 Stratotanker refueling aircraft, built in the 1950s and 60s, and 59 KC-10 Extenders, which entered service in 1981. Recent announcements indicate that the planned replacement program is changing significantly from its original form, which Congress may consider in evaluating the FY2022 defense budget requests.

The Air Force originally envisaged replacing the current tanker fleet in three stages.

- An initial acquisition of 179 new aircraft procured through the KC-X competition (won by the Boeing KC-46A) would replace roughly one-third of the KC-135 fleet.
- A further 179 tankers were projected to be procured in a second solicitation called KC-Y; initially projected as a new competition based on what aircraft were available at the time, it was subsequently recast as a continuation of KC-46A procurement.
- A third program, KC-Z, was to be a replacement for the KC-10 fleet, a larger tanker than the KC-46. Subsequently, the Air Force dropped plans for the KC-Z, envisioning it instead as [a third tranche of KC-46s](#).

However, it now appears that tanker procurement plans have changed in at least two ways.

One is that the KC-Y program is now to be a full and open competition rather than a follow-on KC-46 contract. The Air Force released a “sources sought” notice on June 16, 2021, seeking a commercial derivative tanker aircraft. The requirement for commercial derivative, as opposed to new design, would seem to limit the field to the KC-46 and the Airbus A330 Multi-Role Tanker Transport, a variant of which is being marketed in the U.S. by Lockheed Martin as the “LMXT.” An earlier version of the A330 tanker lost to Boeing after three rounds of a protracted and controversial [KC-X competition](#).

The Air Force is referring to this prospective procurement as a “Bridge Tanker,” to fill in between the current KC-X and future KC-Z; it is not clear how or whether that nomenclature distinguishes the program from the already-scheduled KC-Y.

On December 12, 2019, the Air Force held [an industry day](#), where interested vendors could offer briefings on aerial refueling services and discuss requirements with military officials. A [second industry day](#) was scheduled for a year later. [An Air Force briefing](#) about the program indicated a contract solicitation could

**Congressional Research Service**

<https://crsreports.congress.gov>

IN11537

be expected in June 2020. The service now projects issuing a formal request for proposals for the Bridge Tanker by the end of calendar 2022.

In another change, the Air Force view of KC-Z has been evolving for some time, and the Bridge Tanker sources sought announcement recast KC-Z as an “Advanced Air Refueling Tanker,” albeit without further detail. This follows recent remarks by service leaders indicating an interest in focusing the former KC-Z less on the size of the tanker than on other attributes, such as stealth, autonomy, and/or whether it should carry crew.

In a third difference from previous plans, the Air Force is actively exploring the notion of contract aerial refueling. Under this construct, the Air Force would hire private contractors to supply and operate aerial refueling aircraft to support training missions and other deployments, although not in combat areas. The U.S. Navy has used similar services since 2001, and [the United Kingdom](#) entered into a similar arrangement in 2008. The Department of Defense has increasingly moved to contract services for a variety of previously military support tasks, such as [airlift](#) and [adversary air combat training](#).

The search for a “bridge” tanker solution is driven in part by the increasing challenge of keeping the current KC-135 fleet airworthy, and by delays in [delivery of fully operational KC-46s](#). The Air Force sees a gap between demand and the supply of available tankers, particularly over the next five to seven years.

The report accompanying the House version of the FY2020 Defense Authorization Act, H.Rept. 116-120, required “the Secretary of the Air Force, in coordination with the Commander of U.S. Transportation Command, to provide a report to the House Committee on Armed Services not later than April 15, 2020, assessing the feasibility, affordability, and advisability of expanding the use of contractor-operated aerial refueling aircraft to support Air Force receiver requirements.” [The Air Force’s response](#) was issued in April 2020. It concluded that the Secretary of the Air Force “believes commercial contract air refueling is feasible if all legal, policy and budgetary concerns are overcome.” It identified five options for structuring contract aerial refueling, with different advantages, disadvantages, and timelines:

- Government furnished equipment, in which contractors would operate Air Force aircraft.
- Government sale or lease of surplus aircraft, where contractors would purchase retired Air Force tankers.
- Foreign government surplus tankers, with contractors owning and operating aircraft formerly operated by other countries’ militaries.
- Modification of existing commercial aircraft with a boom and associated air refueling systems, converting civilian cargo jets to tankers, as used by the contractor Omega Air in its work for the U.S. Navy.
- Commercial off-the-shelf tanker, where contractors would purchase and operate new, purpose-built tankers like the A330 MRTT and KC-46.

Overall, these changes to the Air Force’s tanker roadmap mean that the previous two-tanker fleet, which was expected to evolve for a time to a single model, could eventually become a three-tanker fleet (KC-46, Bridge Tanker, and Advanced Air Refueling Tanker) plus whatever types contractors operate. This may have implications for Air Force overhead spending, as each type would have unique parts and support requirements. (The cost of maintaining the contracted aircraft would presumably be included in the contract price.)

Realization of these new plans could affect whether, from where, and when new tankers are acquired; Air Force personnel levels; the location and staffing levels of tanker bases; and the viability of private sector aerial service businesses, among other issues.

## Author Information

Jeremiah Gertler  
Specialist in Military Aviation

---

## Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.