

Extended term of service

KC-10 turns 25; introduced widebody tanker/cargo concept



Boeing archives photos

The first 25 KC-10s were delivered in an eye-catching white and blue paint scheme. The KC-10 fleet switched to a less-conspicuous gray after the aircraft began supporting operations in potential combat areas.



Silhouetted against the rising sun, the first KC-10A refuels a Boeing B-52 bomber during a 1981 test flight over Edwards Air Force Base, Calif. The smaller aircraft in the background at right is a McDonnell Douglas F-4 Phantom II fighter, which served as a chase plane.

By LARRY MERRITT

One fall morning 25 years ago, a U.S. Air Force tanker from Barksdale Air Force Base, La., refueled a B-52 bomber high above the Gulf of Mexico. It was the first operational squadron mission for the Air Force's new advanced tanker/cargo aircraft, the KC-10A Extender.

Built in Long Beach, Calif., by McDonnell Douglas, now part of Boeing, the KC-10 was based on the commercial DC-10 Series 30 Convertible Freighter. The KC-10, which this year celebrates its 25th year of service, continues a 70-year tradition of DC airliners donning military paint.

The idea of a widebody commercial aircraft that could double as a military tanker and heavy-cargo transport originated in 1972. Using the first Boeing 747 fitted with a flying boom, the Air Force carried out a series of refueling trials. The tests proved jumbo jets would not only make excellent tankers to augment the KC-135 fleet but also could supplement C-5 and C-141 transports in the airlift role. The need for such an aircraft grew in 1975 when Air Force planners considered how to meet global commitments in future conflicts, should overseas refueling stops become off-limits to U.S. military cargo planes.

At first the Air Force considered buying a combination of 747s and DC-10s. But with billions of dollars trimmed from the defense

budget, the Air Force could select only one.

In 1977, it was announced that a military version of the DC-10 would carry out the new tanker/cargo mission. Officials cited price, life-cycle costs and maintainability as key selection criteria. Another factor was size: Smaller than the 747, the DC-10 could operate from more airports.

Entering operational service in October 1981, the KC-10 offered some distinct advantages. It was the first aerial tanker designed with two independent refueling systems, a flying boom and a hose-and-drogue, and thus could refuel aircraft using either

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system on a single mission. Aerial refueling operators liked the KC-10 because their job was less fatiguing on long flights. Unlike earlier tankers, in which they had to lie prone for refueling, operators performed their tasks in the KC-10 while seated in an air-conditioned compartment.

The KC-10 was nicknamed "Extender," and the aircraft's performance showed the moniker fit well. In February 1985, a KC-10 made a nonstop, unrefueled flight of 8,982 miles (14,155 kilometers) from Saudi Arabia to California. In addition, the KC-10 played

a key role in some of the longest fighter deployments ever made up to that time. These included the flight of two Royal Australian Air Force F/A-18 Hornets some 7,700 miles (12,400 kilometers) nonstop from California to Australia, and the movement of six U.S. Air Force F-15 Eagles 8,100 miles (13,000 kilometers) from Japan to Florida.

The first 25 KC-10s sported a white paint scheme with a broad blue stripe running the length of the fuselage. But after taking part in operations in potential combat areas, the gleaming paint job proved problematic. As one Air Force officer put it, "It sticks out like a sore thumb." So the remaining 35 flew in a less-conspicuous gray.

During Operation Desert Storm in 1991, in addition to conducting refueling missions, KC-10s moved thousands of tons of cargo and thousands of troops in support of the Persian Gulf buildup. They consistently achieved mission readiness rates above 95 percent, one of the highest of any coalition aircraft.

KC-10s went on to play a prominent role in the NATO air campaign in the Balkans and in the ongoing global war on terrorism. As part of operations Enduring Freedom and Iraqi Freedom, KC-10s have flown more than 1,400 refueling and cargo missions.

Boeing continues to support the KC-10 tanker fleet by providing maintenance, logistics support, repair and modification services, as well as aircrew training. ■

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