

Vintage photos of the aircraft behind USAF's worldwide reach.

## Tankers Through the Years

Photos compiled by Warren Thompson

A erial refueling is in many ways synonymous with the Air Force's ability to project power around the globe, putting virtually any spot on earth within reach of a nonstop flight. The capability was conclusively demonstrated with Carl A. "Tooey" Spaatz' Question Mark week-long flight in 1929.

[1] The KC-97 was a variation of the B-29 and B-50 bombers, and was the first tanker to range far overseas. Here, a KC-97 refuels a much faster F-4 Phantom jet fighter over Bitburg AB, Germany, in 1969. Note the F-4's nose-high attitude to keep from overtaking the KC-97. [2] A B-52 from Diego Garcia slides up to a KC-135 during a mission in Operation Desert Storm, 1991.







[3] A B-58 Hustler of the 305th Bomb Wing hooks up with a KC-135. The doublesonic Hustler was fast, but had limited range, and was dependent on tankers to reach even the closest intercontinental targets. [4] A 116th Fighter Bomber Wing F-84 Thunderjet prepares to refuel over Japan in summer 1953. [5] A KB-29 passes fuel to a 116th FBW F-84 over the Sea of Japan in late 1953. Note the use of the probe-and-drogue method of filling the fighter's wingtip tanks. The Air Force would later adopt the "flying tailboom" method of fuel transfer, which permitted tanking at higher airspeeds.











**[1]** An F-117 Nighthawk tops off at the Saudi Arabian border before pressing on for another Desert Storm attack in 1991. The F-117s hit most of the targets struck within Baghdad, but were based well out of range of Iraq's Scud missiles, making the tanker a compulsory part of each mission, often several times. **[2]** An FB-111 from the 380th Bomb Wing gasses up behind a then-new KC-10 in its original high-visibility paint scheme, in October 1990. **[3]** The boom operator's "office" in the KC-97, in 1970. **[4]** An F-100 of the 356th Tactical Fighter Squadron attempts a probe-and-drogue refueling over the Adriatic Sea in 1960. **[5]** As jet fighter aircraft became the USAF norm, the KB-29 was superceded by the KB-50, which augmented its turboprop engines with jets on the outer wings. This KB-50 is refueling F-100s over France in 1959.





**[1]** A KC-97 tanks up A-37s from Hurlburt Field, Fla., over the Gulf of Mexico en route to Howard AFB, Panama, in a 1970 exercise. **[2]** A B-2 Spirit hooks up with a KC-135. The B-2 fleet flew combat missions round-trip from Whiteman AFB, Mo., to targets in Serbia during Operation Allied Force and to Afghanistan in Enduring Freedom. Despite having the longest "legs" in the Air Force, the B-2s needed several refuelings on such missions.





[3] An F-15 of the Air National Guard 159th Fighter Group, New Orleans, fuels up over the Gulf of Mexico in 1987. [4] This 116th FBW F-84 shows off its unique refueling hardware. The type was part of an experiment in fighter aerial refueling during the Korean War.



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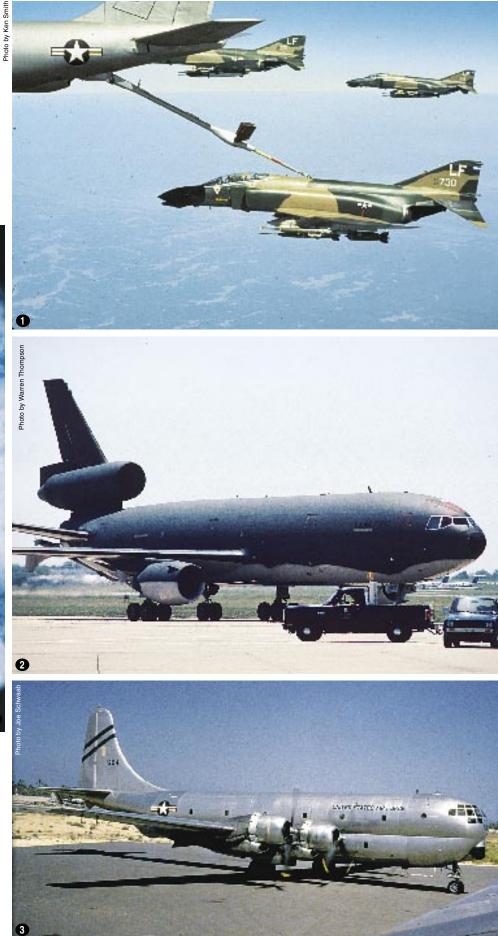
**[1]** View from the front office of a B-1B taking on gas from a KC-135 somewhere over the southwest US in 1989. **[2]** The KC-97 boom operator's space was tight, austere, and uncomfortable. Only with the introduction of the KC-10 did boom operators get to sit upright, instead of lying prone. **[3]** A KB-29M at Yokota AB, Japan, in June 1953. The 98th Bomb Wing aircraft participated in refueling tests of fighter aircraft. **[4]** A KC-135 Stratotanker tops off a KC-10 Extender: They have carried the USAF aerial refueling mission since the 1950s and 1980s, respectively. The two are escorting a flight of Marine Corps F/A-18s across the US to a California exercise. **[5]** With its mix of turboprop and jet engines, the KB-50 was a transitional tanker. Here, one forms up with George AFB, Calif., F-104s deployed over Spain.







*[3]* A KC-97 on the tarmac at Wheelus AB, Libya, in July 1954. In the 1950s, there was a steady transit of Europeanbased fighters to Libya for range training. *[4]* The last B-52G to fly out of Eaker AFB, Ark.—nicknamed Memphis Belle III—is shown tanking en route to its new home, Barksdale AFB, La., in 1991.



*[1]* An A-10 armed with AGM-65 Maverick missiles takes on fuel during a training hop over the Gulf of Mexico in the early 1990s. The aircraft was assigned to the 926th Tactical Fighter Group of the Air Force Reserve, operating from Barksdale AFB, La. *[2]* A KB-50 prepares to connect with F-100s over North Africa. The KB-50s were converted from B-50A and RB-50B bombers deemed excess to the fleet when the B-36 went operational. *[3]* A 1987 view of a B-1B from Dyess AFB, Tex., taking on fuel from a Tennessee Air Guard KC-135.









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*[4]* Several KC-97s of the 308th Air Refueling Squadron, sometime in the 1950s. *[5]* The A-7D was the last jet fighter USAF flew with a refueling probe; the aircraft was adapted from a Navy design. This one, from the 3rd Tactical Fighter Squadron at Korat AB, Thailand, is filling up en route to a mission in the latter part of the Vietnam War. A KC-135 is delivering the fuel. ■