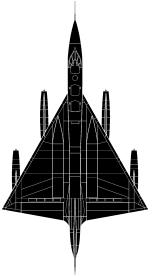
Airpower Classics

Artwork by Zaur Evlanbekov

B-58 Hustler



The gorgeous B-58 Hustler was the world's first operational supersonic bomber and also the first bomber to achieve the epochal speed of Mach 2. However, the combination of a high accident rate and huge maintenance demands, along with the advent of the intercontinental ballistic missile, served to cut its career to 10 years.

In its development of this bomber, Convair used its experience with the XF-92, F-102, and F-106 to push delta wing research. The B-58 had no internal weapons stowage and made use of stainless-steel honeycomb construction for lower weight and greater strength. The B-58 featured a conical camber delta wing with four pylon-mounted jet engines, no horizontal tail, and a dual-purpose, two-part streamlined pod to carry fuel and weapons under a long, narrow fuselage. The fuel portion of the pod was jettisoned in-bound to the target. In addition, the B-58 featured electronic controls considered highly advanced for the day, with automated voice messages and warnings. SAC delayed acceptance

of the aircraft because of equipment malfunctions, structural fatigue, high cost, and bombing system inadequacies. These difficulties continued even after 116 aircraft had been procured.

The aircraft was recognized as a notable aerodynamic achievement, and its crews were fiercely loyal. Yet it was a victim of circumstances. The B-58 was built to fly at high altitudes and high speeds to avoid Soviet fighters, and Moscow's introduction of deadly SAMs forced the B-58 into low-level penetration roles that negated its speed and limited its range. In December 1965, Secretary of Defense Robert S. McNamara directed a phaseout of the entire B-58 force by mid-1970.

-Walter J. Boyne





A B-58 Hustler takes off for a test flight.

In Brief

Designed and built by Convair ★ first flight Nov. 11, 1956 ★ crew of three (pilot, bomb-nav, weapon system officer) ★ number built 116 ★ bomb load 19,450 lb ★ Specific to B-58A: four General Electric J79-GE-5B engines ★ armament one M-61 Gatling gun; one MB-1C pod with W39Y1-1 warhead or two-component pod with Mk 53 warhead, four Mk 43 weapons on external pylons ★ max speed 1,385 mph (Mach 2.1) ★ cruise speed 611 mph ★ max unrefueled range 1,550 mi ★ weight (loaded) 163,000 lb ★ span 56 ft 10 in ★ length 96 ft 9 in ★ height 31 ft 5 in.

Famous Fliers

Record setters: Elmer Murphy, Eugene Moses, David Dickerson (1,302.7 mph/1,073 km closed course); William Payne, William Polhemus, Raymond Wagener (NY-Paris, 3 hr 19 min 58 sec); Payne, Polhemus, Wagener (DC-Paris, 3 hr 39 min 49 sec); Fitzhugh Fulton, C. R. Haines, Payne (altitude 85,360 ft); Robert Sowers, Robert MacDonald, John Walton, transcontinental round-trip (LA-NY, 1,214.7 mph, NY-LA, 1,081.8 mph).

Interesting Facts

Equipped with advanced inertial and star-tracking navigation systems ★ used live bear in ejection tests ★ featured voice of actress/singer Joan Elms—known by crew as "Sexy Sally"—in automated voice warnings ★ cost three times as much to maintain as B-52 ★ racked up high accident rate, 26 of 116 lost ★ appeared in 1964 Sidney Lumet film, "Fail Safe" ★ flown by record-setting pilot Henry Deutschendorf, father of singer John Denver.