Airpower Classics

Artwork by Zaur Eylanbekov

F-104 Starfighter



It was called "a missile with a man in it." Radically new for its day, Lockheed's slender, stubby-winged F-104 Starfighter was the first of USAF's Mach 2 fighters. It was designed by the legendary Kelly Johnson and his Skunk Works team, which produced a lightweight, high-speed fighter unlike anything seen before.

The spur for development of the Starfighter was the debut, in 1950, of the swift MiG-15 in the Korean War. The F-104 design emerged in late 1952, and it entered service in 1958. It soon set world records for speed (1,404.19 mph), altitude (103,395 ft), and time-to-climb. Though extremely fast, it was unforgiving and hard to fly. Also, USAF was never entirely sold on the lightweight idea. It bought fewer than 300 copies for itself. Indeed, the F-104 was more numerous overseas—especially in Germany, Italy, Japan, and Turkey. However, the German F-104 force was

hampered by an alarming accident rate—292 of 916 crashed, killing 115 pilots—and controversy dogged it for years.

Truth to tell, F-104s were never a significant factor in combat. USAF deployed some to Florida during the 1962 Cuban Missile Crisis. Moreover, Starfighters flew 5,206 sorties in Vietnam, where 14 were lost. It was used in a variety of roles, including interceptor, air superiority, weather recce, Wild Weasel escort, and close air support. Despite a slender combat record, however, the F-104 is remembered as one of the most distinctive air weapons of the entire Cold War.

-Walter J. Boyne





Starfighter in action.

In Brief

Designed by Lockheed \star built by Lockheed, Canadair, Fiat, Fokker, MBB, Mitsubishi, SABCA \star first flight March 4, 1954 \star crew of one or two \star number built 2,578 (296 USAF) \star **Specific to F-104C:** one GE J79 turbojet engine \star armament one 20 mm cannon; two 1,000-lb bombs or four air-to-air missiles \star max speed 1,320 mph \star cruise speed 575 mph \star max range 1,250 mi \star weight (loaded) 27,853 lb \star span 21 ft 11 in \star length 54 ft 10 in \star height 13 ft 6 in.

Famous Fliers

World record setters: USAF Capt. Walter Irwin (speed), USAF Maj. Howard Johnson (altitude), USAF Maj. Robert Smith (altitude), USAF Capt. Joe Jordan (time-to-climb). Other Notables: Neil Armstrong, Thomas Delashaw, Iven Kincheloe Jr., Robert Lawrence Jr., Steve Ritchie, Chuck Yeager, Joseph Walker.

Interesting Facts

Awarded 1957 Collier Trophy ★ first to hold altitude and speed records at same time ★ nicknamed Zip 104 and Zipper in USAF; Eikou (Glory) in Japan; Fliegender Sarg (Flying Coffin), Erdnagel (Ground Nail), Witwenmacher (Widowmaker) in Germany; Spillone (Hatpin) in Italy ★ used for astronaut training ★ featured in films "The Starfighters" (1964) and "The Right Stuff" (1983) ★ flown in combat by Pakistan in 1965 Indo-Pakistani War ★ built with downward-firing ejection seats, later switched to upward-firing ★ influenced later U-2 design.