

Lockheed T-33 “Shooting Star”

The Hickory Aviation Museum’s T-33A Tail #529 is on loan from the National Museum of the AF. It came from the VFW in Russellville, KY. Coordinated by Kyle Kirby.



Role	Training aircraft
Manufacturer	Lockheed
Designer	Clarence "Kelly" Johnson
First flight	22 March 1948
Primary users	United States Air Force United States Navy Japan Air Self Defense Force German Air Force
Produced	1948–1959
Number built	6,557
Propulsion	1 x Allison J33-A-35 turbojet engine...later enhanced
Developed from	Lockheed P-80 Shooting Star
Variants	Lockheed T2V SeaStar Canadair CT-133 Silver Star
Developed into	Lockheed F-94 Starfire Boeing Skyfox

The Lockheed T-33 Shooting Star (or T-Bird) is an American jet trainer aircraft. It was produced by Lockheed and made its first flight in 1948 piloted by Tony LeVier. The T-33 was developed from the Lockheed P-80/F-80 starting as TP-80C/TF-80C in development, then designated T-33A. It was used by the U.S. Navy initially as TO-2 then TV-2, and after 1962, T-33B. As of 2015, Canadian-built examples were still in-service with the Bolivian Air Force.

General characteristics

Crew: Two
Length: 37 ft 9 in (11.51 m)
Wingspan: 38 ft 10 ½ in (11.85 m)
Height: 11 ft 8 in (3.55 m)
Wing area: 234.8 sq ft (21.81 m²)
Empty weight: 8,365 lb (3,794 kg)
Loaded weight: 12,071 lb (5,475 kg)
Max. takeoff weight: 15,061 lb (6,832 kg)
Powerplant: 1 × Allison J33-A-35 centrifugal compressor turbojet, 5,400 lbf (24.0 kN)

Performance

Maximum speed: 600 mph (521 knots, 965 km/h) at sea level
Cruise speed: 455 mph (396 knots, 732 km/h)
Range: 1,275 mi (1,110 nmi, 2,050 km)
Service ceiling: 48,000 ft (14,630 m)
Rate of climb: 4,870 ft/min (24.7 m/s)

Armament

Hardpoints: 2 with a capacity of 2,000 lb (907 kg) of bombs or rockets (AT-33)

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Design and development

The T-33 was developed from the Lockheed P-80/F-80 by lengthening the fuselage by slightly over three feet and adding a second seat, instrumentation and flight controls. It was initially designated as a variant of the P-80/F-80, the TP-80C/TF-80C. Design work for the Lockheed P-80 began in 1943 with the first flight on 8 January 1944. Following on the Bell P-59, the P-80 became the first jet fighter to enter full squadron service in the United States Army Air Forces. As more advanced jets entered service, the F-80 took on another role—training jet pilots. The two-place T-33 jet was designed for training pilots already qualified to fly propeller-driven aircraft.

Originally designated the TF-80C, the T-33 made its first flight on 22 March 1948 with U.S. production taking place from 1948 to 1959. The US Navy used the T-33 as a land-based trainer starting in 1949. It was designated the TV-2, but was redesignated the T-33B in 1962. The Navy operated some ex-USAF P-80Cs as the TO-1, changed to the TV-1 about a year later. A total of 6,557 Shooting Stars were produced, 5,691 by Lockheed, 210 by Kawasaki and 656 by Canadair.

Operational history

U.S. Air Force and U.S. Navy

The two-place T-33 proved suitable as an advanced trainer, and it has been used for such tasks as drone director and target towing. The U.S. Air Force began phasing the T-33 out of front line pilot training duties in the Air Training Command in the early 1960s as the Cessna T-37 Tweet and Northrop T-38 Talon aircraft began replacing it under the Undergraduate Pilot Training (UPT) program. The T-33 was used to train cadets from the Air Force Academy at Peterson Field (now Peterson Air Force Base in Colorado Springs). The T-37 replaced the T-33 for Academy training in 1975. USAF and USN versions of the T-33 soldiered on into the 1970s and 1980s with USAF and USN as utility aircraft and proficiency trainers, with some of the former USN aircraft being expended as full scale aerial targets for air-to-air missile tests from naval aircraft and surface-to-air missile tests from naval vessels. Several T-33s were assigned to USAF McDonnell F-101 Voodoo, Convair F-102 Delta Dagger and Convair F-106 Delta Dart units, to include similarly equipped Air National Guard units, of the Aerospace Defense Command as proficiency trainers and practice "bogey" aircraft. Others later went to Tactical Air Command.

Military use by other nations

Some T-33s retained two machine guns for gunnery training, and in some countries, the T-33 was even employed as a combat aircraft: the Cuban Air Force used them during the Bay of Pigs Invasion, scoring several kills. The RT-33A version, reconnaissance aircraft produced primarily for use by foreign countries, had a camera installed in the nose and additional equipment in the rear cockpit. T-33s continued to fly as currency trainers, drone towing, combat and tactical simulation training, "hack" aircraft, electronic countermeasures and warfare training/test platforms right into the 1980s.

https://en.wikipedia.org/wiki/Lockheed_T-33