Courtesy Aircraft's Educational Series Featuring:
Beechcraft T-34 Mentor

The Beech T-34

HISTORY

The Model 45 primary trainer was based on the successful civilian Beech Model 35 Bonanza. Although first built in 1948 in response to an expected demand by the Air Force, a fly-off competition was required before the decision was made to purchase it. At this time the USAF was trying to figure out the best way to train new pilots; whether to have them start in jets or use piston powered craft for the transition phase of training. The latter choice was made and in March of 1953 the Model 45 was selected under the designation T-34 Mentor. Eventually a total of 450 T-34As were built for the Air Force. A year later the first of 423 T-34B trainers were delivered to the U.S. Navy, these with increased horsepower.

Consideration was given to arming the craft with machine guns and bomb racks for a potential close support role, but no orders materialized. Eventually, most piston engines were phased out in favor of an all-jet training regimen. However, the Navy decided in 1973 to buy 184 T-34'swithupgradedturbine power. This allowed the service to keep the tried and true Mentor airframe, with its excellent and forgiving handling qualities, while providing students with the required experience. The first T-34C Turbo-Mentor began student training in January 1978 and production of this model reached 353. A number of countries have purchased a variation of this model to provide forward air control and tactical strike capability. Japan licensed and built the T-3 version of the aircraft, and also built a four-seat liaison version (LM-1/LM-2), often informally referred to as the "Fuji."

After their retirement from active duty with the US Air Force, many Mentors went on to serve with the Civil Air Patrol as spotter and general-purpose utility aircraft. About 100 of the 1,300 T-34s built still remain in military service today. In the last ten years, the T-34 has developed a loyal following among warbird owners and operators, with well over a hundred now in private hands. Its good looks, maneuverability, and relative economy of operation have captured the interest of the warbird community, and despite recent US regulations limiting its operation, promises to live on for generations to come.

[History by Jeff VanDerford]

MODIFICATIONS

There are many modifications available for both models of the aircraft. Some of the most common are upgrading the 225 hp or 260 hp O-470 to the more powerful 285 hp IO-520 BB, 300 hp IO-550 B, or 310 hp IO-550R. The addition of 15 gallon tip tanks is also one of the common modifications to accommodate the thirstier large engines (standard fuel is 25 gallons per side) providing 80 gallons of usable fuel and a gross weight increase from 2,950 lbs to 3,200 lbs on the “A” models. Some aircraft have been modified with larger wing bladders holding 80 gallons internally and a few have external under wing tanks of an additional 26 gallons per side. Many of the aircraft have updated instruments and avionics as well as autopilots.
(Information provided by the T-34 Association)

MODELS:

YT-34
Prototype, three built.

T-34A
US Air Force trainer, (Production - 450 units) Used as a primary trainer until replacement by the Cessna T-37 around 1960.

T-34B
US Navy trainer, (Production - 423 units) Used as a primary trainer until early 1970s when it was replaced by the T-34C. Many T-34Bs were flown by pilots assigned to the Navy Recruiting Command until the mid-1990s.

T-34A / (B45)
Export models, (total world wide production - 475 units).

YT-34C
Two T-34Bs fitted with turboprop engines, and were used as T-34C prototypes.

T-34C Turbo-Mentor
(Production - 280 units) US Navy primary trainer, two-seat primary trainer, fitted with a turboprop engine.

T-34C-1 Export Turbo-Mentor
(Production - 75 units) Equipped with hardpoints for training or light attack, able to carry 1,200 lb (540 kg) of weapons on four underwing pylons. The armament could include flares, incendiary bombs, rocket or gun pods and antitank missiles. Widely exported.

Turbo-Mentor 34C
Civilian version

SPECIFICATIONS (T-34B):

Engine: One 225-hp Continental O-470-4 flat-six piston engine
Weight: Empty 2,055 lbs., Max Takeoff 2,900 lbs.
Wing Span: 32ft. 10in.
Length: 25ft. 10in.
Height: 10ft. 0.25in.
Performance:
Maximum Speed: 188 mph
Range: 770 miles
Armament: None

NICKNAMES

"The Radial Interceptor"; Komadori ("Robin") (Japanese Air Self-Defense Force nickname for Fuji-built version called the T-3); Harukaze ("Spring Breeze") (Japanese Ground SDF nickname for LM-1/LM-2 Nikko four-seat liason version.)

**Information provided by Warbird Alley, with permission of Buck Wyndham*

WATCH THE T-34 IN ACTION!

Beechcraft T-34 Mentor, Fly with owner Jim Wallace as he talks about his experiences with his T-34 Mentor. By Gray Hill Films

Julie Clark T-34 Aerobatics - EAA AirVenture Oshkosh 2019 By AirshowSfuffVideos

SHOULD YOU BE INTERESTED IN THE BEECH T-34, CONTACT DARCY KAAPKE AT 815-229-5112 OR EMAIL DARCY@COURTESYAIRCRAFT.COM

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