

T-6 Texan

T-6 Texan/SNJ/Harvard



Type Trainer aircraft

Manufacturer [North American Aviation](#)

Maiden flight [1935-04-01](#)

Number built 15,495

Variants [CAC Wirraway](#)

The **T-6 Texan** was a single-engine advanced [trainer aircraft](#) designed by [North American Aviation](#), used to train [fighter](#) pilots of the [United States Army Air Forces](#), [United States Navy](#), [Royal Air Force](#) and other [air forces](#) of the [British Commonwealth](#) during [World War II](#). The T-6 is known by a variety of designations depending on the model and operating air force. The USAAC called it the "AT-6", the US Navy, the "SNJ", and British Commonwealth air forces, the **Harvard**. It remains a popular [warbird](#) aircraft.

Development

The T-6 originated from the [North American NA-16](#) prototype (first flown on [April 1, 1935](#)) which, modified as the NA-26, was submitted as an entry for a [USAAC](#) "Basic Combat" aircraft competition in March, [1937](#). The first model went into production and 180 were supplied to the USAAC as the **BC-1** and 400 to the RAF as the **Harvard I**. The US Navy received 16 modified aircraft, designated the **SNJ-1**, and a further 61 as the **SNJ-2** with a different engine.

A further 92 **BC-1A** and three **BC-2** aircraft were built before the shift to the "advanced trainer" designation, **AT-6**, which was equivalent to the BC-1A. The differences between the AT-6 and the BC-1 were new squared-off wingtips and a straight-edged rudder, producing the definitive Texan appearance. The AT-6 was designated the **Harvard II** for RAF/RCAF orders and 1,173 were supplied by purchase or [Lend Lease](#), mostly operating in [Canada](#) as part of the [Empire Air Training Scheme](#).



WAVES washing a SNJ at NAS Jacksonville.



A SNJ-5 variant flying in an airshow in 2004.

Next came the **AT-6A** which was based on the NA-77 design and was powered by the [Pratt & Whitney R-1340-49](#) Wasp radial engine. The USAAF received 1,549 and the US Navy 270 (as the **SNJ-3**). The **AT-6B** was built for gunnery training and could mount a .30 in [machine gun](#) on the forward fuselage. It utilised the R-1340-AN-1 engine which was to become the standard for the remaining T-6 production. Canada's [Noorduyn Aviation](#) built a R-1340-AN-1 powered version of the AT-6A which was supplied to the USAAF as the **AT-16** (1,500 aircraft) and the RAF/RCAF as the **Harvard IIB** (2,485 aircraft), some of which also served with the [Fleet Air Arm](#).

The NA-88 design resulted in 2,970 **AT-6C** Texans and 2,400 as the **SNJ-4**. The RAF received 726 of the AT-6C as the **Harvard IIA**. Modifications to the electrical system produced the **AT-6D** (3,713 produced) and **SNJ-5** (1,357 produced). The AT-6D, redesignated the **Harvard III**, was supplied to the RAF (351 aircraft) and Fleet Air Arm (564 aircraft). Subsequently the NA-121 design gave rise to 25 **AT-6F** Texans for the USAAF and 931, as the **SNJ-6** for the US Navy. The ultimate version, the **Harvard 4** (often erroneously referred to as the Harvard IV), was produced by Canada Car and Foundry during the 1950s, and supplied to the RCAF, USAF and Bundeswehr.

Production

A total of 15,495 T-6s of all variants were built.

Service record



RNZAF North American Harvards at Onerahi Aerodrome, near Whangarei, New Zealand in 1961.

During the [Korean War](#) and to a lesser extent, the [Vietnam](#) war, T-6's were pressed into service as [forward air control](#) aircraft. These aircraft were designated T-6 "Mosquito"s.^[1] The RAF used the Harvard in Kenya against the [Mau Mau](#) in the 1950s where they operated with 20 lb bombs and

machine guns against the gangs. Some operations took place at altitudes around 20,000 ft [asl](#). A Harvard was the longest-serving RAF aeroplane, with an example, taken on strength in 1945, still serving in the 1990s (as a chase plane for helicopter test flights - a role the Shorts Tucano's high stall speed was ill-suited for). The T-6G was also used in a light attack or [counter insurgency](#) role by France during the [Algerian war](#) in special Escadrilles d'Aviation Légère d'Appui (EALA), armed with machine guns, bombs and rockets. At its peak there were 38 EALA's active. The largest unit was the Groupe d'Aviation Légère d'Appui 72, which consisted of up to 21 EALA's. Portugal also used ex-French aircraft during the [Portuguese Colonial War](#).

Since the Second World War, the T-6 has been a regular participant at [air shows](#), and was used in many [movies](#). For example, in [Tora! Tora! Tora!](#) and [The Final Countdown](#), converted single-seat T-6s painted in [Japanese](#) markings represent [Mitsubishi Zeroes](#). The [New Zealand Warbirds "Roaring 40s"](#) aerobatic team use ex-[Royal New Zealand Air Force](#) Harvards.

On September 7, 2007, Jan Wildbergh, 74, [Freeport military stunt pilot](#) from [Long Island](#) plunged to his death from the [sky](#) over [runway](#) at [Naval Air Station Oceana](#) in [Virginia Beach](#) (12:25 p.m., prepping for an [air show](#)) using his [World War II-era vintage plane](#) SNJ-2.^[2]

Operators

-  [Argentina](#)



AT-6C Harvard IIA in [RNZAF](#) markings



T-6 Texan in [Portuguese Air Force](#) museum



SNJ-4 Texan in [SAAF](#) markings



T-6 Texan in [RAF](#) desert camouflage colour scheme

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Specifications (T-6G / Harvard)



T-6 Texan at the 2005 Reno Air Races



□ T-6 Texan converted to resemble a Mitsubishi Zero as flown by the [Commemorative Air Force](#)
Data from Jane's Fighting Aircraft of World War II^[3]

General characteristics

- **Crew:** two (student and instructor)
- **Length:** 29 ft (8.84 m)
- **Wingspan:** 42 ft (12.81 m)
- **Height:** 11 ft 8 in (3.57 m)
- **Wing area:** 253.7 ft² (23.6 m²)
- **Empty weight:** 4,158 lb (1,886 kg)
- **Loaded weight:** 5,617 lb (2,548 kg)
- **Powerplant:** 1x [Pratt & Whitney R-1340-AN-1 Wasp radial engine](#), 600 hp (450 kW)

Performance

- **Maximum speed:** 208 mph at 5,000 ft (335 km/h at 1,500 m)
- **Cruise speed:** 145 mph (233 km/h)
- **Range:** 730 miles (1,175 km)
- **Service ceiling:** 24,200 ft (7,400 m)
- **Rate of climb:** ft/min (m/s)
- **Wing loading:** lb/ft² (kg/m²)
- **Power/mass:** hp/lb (kW/kg)

Armament

- Provision for 1x 0.30 in (7.62 mm) [machine gun](#)

References

1. [^ AF Museum - North American T-6D "Mosquito"](#)
2. [^ Mydailynews.com, Long Island pilot killed in Virginia stunt plane crash](#)
3. [^ Jane, Fred T. "The North American Texan." *Jane's Fighting Aircraft of World War II*. London: Studio, 1946. p. 251. ISBN 1 85170 493 0.](#)

External links

- [The Canadian Harvard Aircraft Association](#)

- [Backgrounder on the Harvard 4 \(includes photographs\)](#)
- [Canadian Harvard Aerobatic Team](#)
- [AT-6: School Marm With an Attitude \(pilot report\)](#)
- [Warbird Alley: T-6/SNJ/Harvard page](#) - History, photos, specs, and links
- [\[11\] Mosquito Korea website](#)
- [WW2DB: T-6 Texan](#) - 14 pics, 3 in color

Related development

[CAC Wirraway](#)

Comparable aircraft

[Miles Master](#)

Designation sequence

[T-2](#) - [T-6 Texan](#) - [T-28](#)

See also

- [T-6 Texan II](#)
- [List of military aircraft of the United States](#)
- [List of aircraft of the RAF](#)
- [List of aircraft of the RNZAF](#)