



Beechcraft T-34 Mentor

Beechcraft's beautiful T-34 *Mentor* is an agile, tandem two seat primary trainer with a definite military bearing and history that separates it forever from the ordinary. With its delightful handling qualities and reasonable cost of operation, the airplane is both a joy to fly and generally affordable, in an era of escalating operational costs. The no-nonsense, purely functional nature of the *Mentor*, and its famous Beechcraft design have earned it a reputation as a highly sought after warbird with honest and straight-forward handling characteristics in flight as well as on the ground.

Thousands of aviation cadets, over a twenty five year period of time in its military training history, have mastered the art of primary flying in the "Magnificent Mentor," in either Air Force or Navy colors. And many of those same, at one time cadets, are proud owners of a T-34 today.

The T-34 was the brainchild of Walter Beech, founder and owner of the Beech

Aircraft Corporation. Walter and his wife Olive Ann established the Beech Aircraft Corp. in 1932 and promptly set to work developing some of the more enduring aircraft in the history of flight. An early example of the Beech Aircraft style of ingenuity is the highly vaunted *Staggerwing* that flew for the first time in 1932. Unconventional for its day, the unusual location of its wings relative to the airplanes fuselage made for one of the fastest production bi-planes in history. Mated with the Pratt and Whitney 985, the aircraft was capable of achieving more than 200 miles per hour in level flight-no small feat in the early 1930's.



Following on the heels of the *Staggerwing* came the venerable Beech "18" series. The upstart Beech organization challenged other more established companies with this cabin class twin and came out on top. Modified for the role and known at the time as the AT-11, the versatile *Twin Beech* was drafted into the military at the start of World War II and became the training instrument for thousands of bomber pilots, navigators, and bombardiers. As testament to the durability of the design, many

civilian and military versions of the Beech "18" are flying today, more than 60 years later.

While the Beechcraft factory was running at full steam during the war, development of new products did not subside. By 1943 flight testing had begun on an advanced ground attack aircraft that would have outrun virtually any fighter type in existence at the time. The mammoth Wright 3350 engines, with more than 2200 horsepower each, powered the prototype XA-38 and production would have been certain had the Boeing B-29 program not gobbled up the lion's share of 3350 engine supply from Wright Aircraft.

Following the war, the inspiration of Walter Beech led to the development of the now world famous Bonanza series of aircraft. The earliest versions of the ultimate personal airplane were much simpler than they are today but their basic design, that spawned the T-34, lives on nearly sixty years later.

In the late '40's Walter Beech recognized that the basic trainers of WWII would not suffice in a world turning to jet powered aircraft and tri-cycle gear, as opposed to the tail-dragger trainers and fighters of the early war years. It occurred to him that a version of the early Bonanza might be just what the military training command needed, and he could not have been more right-on.

Without a cent of government money funding his effort, Beech made the necessary modifications to the Bonanza airframe and the caterpillar of Bonanza and military parts were tossed into the cocoon of aircraft technology emerging as the YT-34. And while the absolute component commonality is only slightly larger than 20 percent, the Bonanza lineage is not in doubt. Beechcraft offered the airplane to the Air Force, which liked the idea well enough to procure competitive bids from other

manufacturers for a similar trainer. Temco offered its Swift variant known as the T-35, Buckaroo, while Fairchild promoted their own aircraft tagged the T-31, *Plebe*.

The fact that Beech's competitors offered tail-draggers and less sophisticated aircraft in general may have prompted the Air Force to ultimately award the contract to Beech but not before Walter's marketing people stepped in to help speed the process along.

Beech made certain that the YT-34 was visible at every aviation event staged across the country during 1949 and 1950. Notable aviators and aviatrixes, including female air-racing personality Betty Skelton, flew aerobatic demonstrations from sea to shining sea in support of the fledgling trainer. Ultimately the Air Force purchased 450 T-34A's and the Navy followed on with an order for 423 T-34B's, a slightly modified version of the "A" model that matched the Navy's particular needs.

Introduced to Air Force cadets for the first time in 1953, the T-34 was an immediate hit. Gone was the T-6, known somewhat less than affectionately as the "Slug," to be replaced by an enormously more nimble tri-gear trainer that looked and felt much more like the jets they would soon be flying.

While the Air Force would abandon the T-34 in the very early "sixties," in favor of the Cessna T-37 *Tweetybird*, the Mentor soldiered on much longer in the service of the US Navy. The "B" model, introduced to the Navy training command in 1955, would outlast the careers of many of those who trained in them before finally retiring with military pensions.

It was not until 1977 when the turbine powered T-34C was put into service that the last of the "B" models would be put out to pasture, many with more than 10,000 hours on the Hobbs meter. No doubt, one of the more

illustrious demonstrations of aeronautical engineering excellence helped train a full generation of Navy pilots.

Today, there are approximately 200 T-34's still flying, in the hands of private owners across the country. Virtually all of them, in addition to hundreds of *Mentor* aficionados from around the world, are members of the T-34 Association. Founded nearly thirty-five years ago, the association is a non-profit group dedicated to preserving the airplane and its history for all time. Befitting the pedigree, the individual owners are a devout group who lavish their airplanes with the lavish care and attention they so richly deserve.

Over the years the T-34 Association and its members have contributed significantly to the warbird movement in this country. Ours was the first group to promote formation flight among its members, and a small group of our members authored and published the first formation manual for civilian warbird flight. That first treatise has evolved and become the standard for all civilian warbird groups today.



Along the way the T-34 Association became well known for the larger than life formations

flown at the annual EAA convention in Wisconsin. In 1987 the group launched the *Flight of 34 T-34's* to the delight of the crowd, only to be topped by our 1999 fiftieth anniversary flight of 58 (see accompanying photo). The discipline of good formation flight is a source of tremendous pride and a venue for great camaraderie for those within our organization.



Today the T-34 takes center stage at many airshows around the country. Our primary goodwill ambassadors, in the form of Julie Clark and the LIMA LIMA team, have entertained millions from coast to coast and in several foreign countries, demonstrating the versatility of the venerable *Mentor*. And the fun has just begun.

No finer example of aeronautical history exists today in the numbers that it does, and in the respect it commands, from all those involved in the civilian military aviation movement. Join us today.

Please visit our website at "T-34.com" for more.