



Missouri fixed-base operator John Reine in the cockpit of his 1944 "Bamboo Bomber." He bought the elderly Cessna T-50 Bobcat in good condition for \$3,000 to offer twin-engine flight instruction, but expects to use it for charter work as well.

Photos by the author

BARGAIN BASEMENT LIGHT TWIN

by AL EBBERS

An antiquated Cessna T-50 has given a Missouri fixed-base operator the capability to offer twin-engine flight instruction at a price both he and students can afford

■ ■ For initial purchase price alone, the five-place Cessna T-50 *Bobcat* is probably the best buy on the bargain twin market today. With prices ranging from \$2,500 upwards, these "Bamboo Bombers" still are suitable transports and make nice multi-engine time builders for individuals as well as for flying clubs.

Flight instructor John Reine of Warrensburg, Mo., recently purchased a 1944 *Bobcat* in good condition for \$3,000. Reine, a one-man flight service and aircraft maintenance operation at Bear Creek Airport near Warrensburg, bought the low-cost twin to round out the curriculum at his flight school. He believes the aircraft will offer his students a chance to cut their teeth inexpensively on a no-nonsense multi-engine trainer. Reine figures on charging \$250 to \$300 for a multi-engine course in the *Bobcat*, or around \$30 an hour—well below today's average market cost.

"That's a lot of airplane there for \$3,000," said Reine, pointing to the blue and white *Bobcat* parked on the grass near the field's solitary hangar.

Object of his affection is a stubbed-nose, radial engine aircraft faced permanently towards the sky by its main gear and tail wheel. Big and bulky by today's light twin standards, the 23-year-old craft fills out the tape measure to a length of 32.8 feet, a wing span of 41.9 feet and a height of nearly 10 feet. It can fly off the runway at 5,700 pounds gross weight. Of this, 1,400 pounds is useful load.

Designed and developed in the late thirties, the T-50 represents one of the most important planes in the history of Cessna Aircraft Company. Fabric covered and made of steel tubing and wood,

the aircraft not only was the company's first twin and retractable gear plane, but with \$5.03 in the firm's bank account, it represented, to an important extent, the future of Cessna.

The *Bobcat* paid off handsomely when Dwane Wallace, then Cessna president, sold the Canadians on using the T-50 as a trainer for bomber pilots. A Wichita bank loaned money to finance production and 870 T-50 *Cranes* winged their way to the Royal Canadian Air Force between 1940 and 1941. Total T-50 production between 1940 and 1944, according to Cessna records, amounted to 5,402. This figure includes the AT-8, AT-17, and UC-78 series purchased by the U.S. Army Air Force, and the Navy's JRC series.

Although fame came to the *Bobcat* in the service, where it was dubbed the "Bamboo Bomber," equal recognition came during the postwar years when "Sky King" flew across home video screens in a crook-catching *Bobcat* named "Songbird."

"Why not buy a *Bobcat*?" suggested a friend and former *Bobcat* owner to Reine when limited purchase funds curtailed the latter's plan to add a multi-engine craft to his two single-engine trainers. To a man in the flying game with a growing volume of students, an old bird in hand can make more money than its younger contemporary in the bush, so Reine went on the hunt for a *Bobcat*.

Reine is the 12th owner of *Bobcat* N53358. Separated from the USAAF as a UC-78, the craft had recorded a total of 1,557 hours on its airframe when sold as surplus in 1946 for \$1,660 to an Ogden, Ut., owner. The other 10 civilian owners over the years ranged

from business firms to flying services.

The plane came into Reine's hands after he practically bought the *Bobcat* sight unseen through an advertisement from a New Mexico flying service. By mutual consent, it was agreed that Reine would pay \$200 for transportation costs if the plane were unacceptable to him after the *Bobcat* was ferried to Missouri for inspection. Reine, who holds an A & P license, knew that if the twin could make the 900-mile flight, it certainly would be worthwhile to examine.

In checking a *Bobcat* prior to purchase, Reine recommends that besides the engine and general condition of the aircraft, the wood wing spar, fabric and landing gear system should come under close scrutiny. The landing gear system should be carefully checked for worn threads on the chain-driven screw as well as for worn sprockets on the sprocket wheel, said Reine.

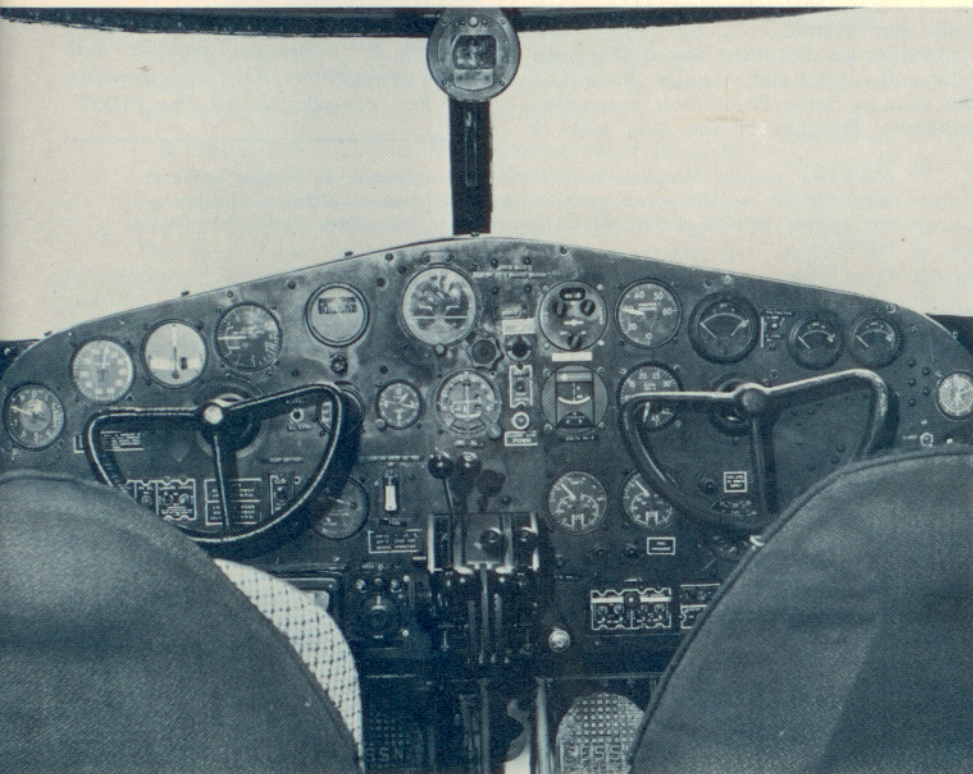
As it turned out, the plane was in good condition. The Jacobs R-775-9 engines had only 450 hours each since overhauled USAAF engines were installed in 1963. Thus, Reine became a new *Bobcat* booster.

First look inside the *Bobcat* gives the impression that a mistake was made in designing the passenger compartment. A long, upholstered, bench type of seat holds three comfortably, but leaves nearly enough space between the seat and the flight deck to watch an in-flight movie. And directly behind the seat and the rear compartment wall is enough room to haul two or three prone bodies or 350 pounds of baggage.

Realization that the *Bobcat* is an antiquated aircraft really sinks in with a glance at the unwieldy layout of the instrument panel and the arrangement of levers on the throttle quadrant. Flight deck seats, though, are roomy and comfortable and ground visibility isn't bad for a tail wheel twin.

Taxiing in the T-50 is accomplished by differential use of engines with a faint assist from the rudder. Brakes are used sparingly since they quickly overheat through prolonged use. On a *Bobcat* this is strictly verboten as the overheating is known to damage the tires and can result in tire failure. A handy tail wheel lock aids in straight taxiing. Again on takeoff, the throttles are used differentially to keep straight and true down the runway.

Keeping near the center of the runway is imperative on the 2,300-foot sod strip at Bear Creek. The east-west strip is 60 or 70 feet wide and runs slightly downhill to the east, accumulating in a total altitude difference of 25 feet between ends. Halfway down the strip is a short slanting slope of about 10° dipping downwards through a small rise of ground which is almost at wing level. It could be considered a *faux pas* at this spot to stray near the edge of the strip,



John Reine's bargain basement *Bobcat* boasts a grab-bag full of panel goodies, but reflects its age in their arrangement.

especially if an aircraft's wing tips are irreplaceable.

Bobcat takeoff procedure calls for breaking ground at 60 m.p.h., climbing to about 10 feet, retracting gear, and leveling off at full throttle until 90 m.p.h. is reached. Between 60 and 90 is the critical period for directional control, should an engine fail. On this plane, 90 m.p.h. represents the best angle of climb speed as well as the recommended minimum single-engine control speed.

At full throttle, the *Bobcat* isn't exactly a slouch on takeoff. Both seven-cylinder Jacobs engines have 245 h.p. available for the takeoff run. Once airborne, the T-50 reacts like any twin of similar size and is quite stable. At 75% power, Reine's *Bobcat* averaged slightly over 140 m.p.h. indicated for a true airspeed of 151 m.p.h. on this particular day.

With the right engine cut at 3,000 feet and the airspeed stabilized at 90, the rate-of-climb indicator struggled up to a momentary peak of 100 feet per minute (perhaps with aid of a helpful thermal) and varied between 50 and 100 f.p.m. thereafter. Incidentally, the props don't feather on the *Bobcat*; they go into high pitch and windmill at around 700 r.p.m. at 90 m.p.h. A 5,000-foot density altitude is listed as the single-engine ceiling for a *Bobcat* equipped with Hamilton Standard constant-speed propellers.

One of the highlights of the first flight in a *Bobcat* is the noise associated with the chain-operated landing gear. Gear extension emits a unique clatter which closely resembles the lowering of a castle drawbridge. The landing wheels are simultaneously extended by means of a single electric motor and two irreversible chain-driven screws. Reine terms the operation as a "very safe gear system."

Another good feature here is that both pilot and copilot can visually check that the gear is down from their respective windows. Position of the gear also is

shown by an indicator on the instrument panel. The plane's wooden flaps also are actuated by an electric motor through roller chains and drive screws.

Don't worry about forgetting the landing gear in a *Bobcat*. Throttle retardation with gear up brings on an obnoxiously deafening blare from an auto-like horn which seemingly not only has the capability to blast unsuspecting occupants into near panic but also to disturb the neighbors down below.

Recommended approach speed for landing is 90 m.p.h., but 100 m.p.h. wouldn't hurt. At full gross weight the *Bobcat* stalls around 66 m.p.h. Following touchdown, a deft jockeying of throttles is necessary to maintain directional control when the rudder becomes ineffective.

"If it weren't for the gas and oil, this would be the perfect low-cost multi-engine aircraft," reflected Reine. He estimates oil consumption runs four quarts an hour, about two quarts an engine. An hour's operation also siphons off between 25 and 30 gallons from the plane's 150-gallon fuel capacity.

But even without adding up assets against liabilities of flying a *Bobcat*, Reine knows his students will be bona fide multi-engine pilots when they earn their rating in the T-50. □

THE AUTHOR

Al Ebbers, a commercial pilot with multi-engine and instrument ratings, free-lances from Wichita, Kan., where for many years aviation has been an integral part of his life. A former news and publicity supervisor for Cessna Aircraft Company, he keeps in his hand at flying through performance of duty with a U.S. Army National Guard unit. He has sold articles to numerous popular and trade publications, but this represents his first contribution to The PILOT.

Distinctive lines of five-place Cessna T-50 *Bobcat* reflect its rugged workhorse capability. At its 5,700-pound gross weight, it handles a 1,400-pound useful load and cruises handily at 140 m.p.h. indicated at 75% power, owner John Reine claims.

