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More than 15,000 of the various North American T-6 models were built. The Air Force called them T-6 Texans, the Navy SNJs, and in the United Kingdom and Canada, they were known as the Harvard.

PROFICIENCY

CHRIS ROSE

Still sneaky after all these years

Teaching the enigmatic T-6

BY DAVE HIRSCHMAN

THE NORTH AMERICAN T-6 Texan checkout has been a rite of passage for generations of pilots—and it's as humbling, bewildering, gratifying, and exciting today as it ever was.

The imposing airplane mercilessly punishes sloppy or improper technique with tire squealing, bouncing, and/or roaring go-arounds. It also provides incomparable sounds, sensations, and a sense of being part of an honored legacy when things go right. I recently

reacquainted with the T–6/SNJ by tak- one on a 1,200-nm ferry flight, and then pping in the backseat and checking out PA colleague Mark Evans.

It was an unusual turnabout since ns is a seasoned corporate pilot with ltiple type ratings and far more flying e than me. He came with the advantages a tailwheel endorsement, lots of radial- ine experience, boundless enthusiasm, a healthy respect for the airplane. His dvantage was many years flying corpo- jets. Why is jet time a liability? Because ts accustomed to high wing loading and cycle landing gear develop "elephant t." This affliction causes jet pilots to ly heavy, ponderous rudder pressure ead of the quick, jab-like taps a lightly g-loaded tailwheel airplane demands. pilots also tend to slap throttle levers und like foul-tempered interrogators ead of giving them the gentle, kid-glove tment they deserve.

After Evans sat through my favorite truisms: "This airplane was built by ear-olds for 18-year-olds"; "It has more onalities than Sybil"; and "Don't flare higher than you're willing to fall," we down to aviating.

He made my job easy by keeping the lane arrow straight during the 14-sec- takeoff roll and not exceeding the ifold pressure limit of 36 inches. (This icular airplane has an oversized super- rger that makes it easy to over boost.)

"No elephant feet for me," he said. "I've my dancing shoes on."

Anyone's first stall series in a T–6 is an -opener—even when you know what xpect. A coordinated power-off stall ks straight ahead with lots of buffet- to let you know it's coming. But in a p right turn at cruise power, the stall ks sharply and the right wing drops beyond 90 degrees of bank. The pilot to force himself not to use aileron to up the down wing. Recovery requires ering the angle of attack (forward stick, matter the airplane's attitude) and g "top" rudder to lead the return to flight.

Positive-G aerobatics are a delight, especially in the warm Florida air with the front canopy open, and the unusual attitudes are a confidence boost to new T-6 pilots who get to experience the magnificence of the airplane throughout its full, three-dimensional range.

Three-point and wheel landings each present their own challenges. When botched, however, the fix is the same: takeoff power and go around for another try. When the landings work, they are sublime things of beauty.

In the 1940s, T-6s were advanced trainers used to teach military pilots the lethal arts of air combat maneuvering, aerial gunnery, and ground attack. In the 1950s and 1960s, they became primary trainers, and many thousands of aspiring young Air Force, Navy, and Marine pilots made their first flights in these demanding aircraft. Today, restored T-6s are prized by civilian warbird pilots and collectors, and a few firms such as Stallion 51 and Warbird Adventures in Kissimmee, Florida, and Gauntlet Warbirds in the Chicago area, specialize in producing twenty-first-century T-6 pilots.

(After two flights with me, Evans finished his checkout with Steve Larmore at Stallion 51.)

For an instructor, the rear cockpit of a T-6—despite its complete lack of forward visibility—is a peerless perch. You're well aft of the pivot point, so you feel every bit of yaw; you're behind the trailing edge of the wing, so downward visibility is fantastic, and the sliding canopy provides instant air conditioning. The only hard part, and it's a big one, is allowing students to make mistakes without letting them go too far—and that's a very fine line.

I once met an accomplished World War II aviator whose flight jacket carried many decorations. But the one he said he treasured most was a small, blue oval indicating he had given 1,000 hours of dual instruction in T-6s without a mishap.

And that, he said, was a claim few instructors of the day could make. **AOPA**

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The truth about radials

Their low, rumbling sound, symmetrical appearance, and illustrious history give radial engines an undeniable mystique. From Charles Lindbergh's flight to Paris until the jet age, radial engines evolved to ever more powerful and high-flying variants. For pilots, operating these sometime cantankerous beasts can be demanding.

Before starting, radial engines require turning the propeller by hand to clear the lower cylinders of pooled oil. On large radials, that can be a workout in itself. Actually starting these engines is a black art requiring closely timed adjustments of the primer, magnetos, throttle, and mixture control. Once flying, radials are intolerant of throttle jockeying and power mismanagement. But when operated properly, these air-cooled engines reward pilots and passengers with smooth, reliable, rumbling sounds and sensations that connect them to an earlier era.

There are lots of sayings noting the plain truth that radial engines are leaky and tend to spew oil. "Fill it with oil and check the fuel."

"If there's no oil leaking out, there must not be any inside."

"It's not leaking oil. It's just a radial engine marking its territory."

"Oil was cheap and plentiful when radial engines were designed—and so was soap and water."

The bottom cylinders tend to pool with oil, and it gets pushed out the exhaust pipes when the engine starts. Internal tolerances are fairly loose, and some leakage is expected. Fortunately, their designers anticipated this fact and installed voluminous oil tanks, most of which measure oil in gallons—not quarts. *—DMH*