



**JEFF SKILES**

COMMENTARY / CONTRAILS



# The Bull Stearman

A pleasant flying cruiser

BY JEFF SKILES

**OKAY, I ADMIT IT.** I'm not wild about Stearmans. Or maybe I should say that I'm not wild about the Stearman Model 75 Kaydet trainers. Sacrilegious, I know. It's like saying you don't like mom, the flag, or apple pie. Well — actually — I don't care for apple pie much either. Just a contrarian I guess. But people look askance when you dare to utter such an opinion about this iconic aircraft. In aviation, the only equivalent blasphemy would be saying you don't like Cub yellow. For the record — I don't mind Cub yellow.

It's not like I have anything against the Stearman. It's a good-looking aircraft, I admit. I particularly like the Army trainers with the bright blue fuselage and yellow wings. They are very striking aircraft indeed! Stearmans have a decent amount of power for what they are, and the open cockpit is sheltered enough to be comfortable yet still exposed enough for a thrill. They fly nicely in the air and aren't horribly blind on landing. It's just that the narrow, short-coupled main gear, high center of gravity, and tall tail wheel make them just too dang hard to land.

Even Stearman fans acknowledge that they aren't the easiest aircraft to land. This is usually explained away by saying they were designed to be a trainer. The logic being, apparently, that if you learn in something hard, everything else will be easy. This is kind of like saying that if you start out with calculus in kindergarten, addition and subtraction will be a breeze once you get to college. Maybe so, but with that logic, most people will never see the first grade. I know it's supposed to be manly to fly a Stearman, but personally, I think trainers should be easy to fly. You can always move up to harder aircraft as you gain experience.

## PT-13 STEARMAN

We have a PT-13 Stearman in my Commemorative Air Force squadron. The PT-13 moniker defines a Stearman Kaydet with a Lycoming engine. The most produced model was the Continental-powered PT-17, but the PT-13 wasn't far behind. I have observed that there seem to be an awful lot of people in the squadron who are technically checked out in the PT-13, yet next to no one actually hops ride flights in it on tour. Flying the Stearman is largely left to two clearly exceptional pilots whose skills are matched to the task. Perhaps this is for the best, but it does lead me to believe that my assessment of the aircraft isn't too far off the norm.

I just don't think it needs to be this way. I have about 750 hours of tailwheel time in a variety of aircraft. Not a tremendous amount, but enough in my mind to make sweeping and, perhaps arguable, judgements. There are many nice flying tailwheel aircraft out there — Wacos, Cessnas, Aeroncas, and Pipers — all are very fine aircraft. The Fairchild F-24 is a standout in my opinion. My particular hands-down favorite is the Aviat Husky, a superb aircraft all around.

#### LLOYD STEARMAN

I realize that you can't really blame Lloyd Stearman for the landing qualities of the most prolific aircraft bearing his name. By the time the PTs came off the assembly line, the Stearman Aircraft Company had long since become a division of Boeing. Lloyd himself moved on in the early 1930s to become the president of Lockheed Aircraft Company producing the sleek aluminum twin-engine Lockheed 10 Electra, in which Amelia Earhart would famously disappear, and the Lockheed 12 Electra Junior.

## “This is the best airplane I ever built.”

Lloyd Stearman

The PT military Stearmans built by Boeing were based on Lloyd Stearman's Model 6 Cloudboy design of the early 1930s, but only a handful of Cloudboys were ever produced. The design had lain dormant until the plans were dusted off by Boeing engineers to meet the need for military training aircraft in the years leading up to World War II.

Frankly, though, even when Lloyd Stearman ran the Stearman Aircraft Company, his aircraft weren't exactly known for being sweet flyers. I've never flown an early mail-plane Stearman like the C3, but people who have don't seem to be raving about their flying qualities. And, that is why I was surprised when I came across a Stearman that I really liked.



#### THE BULL STEARMAN

Keith Scott was a businessman who had need to travel frequently between Los Angeles and Reno, Nevada, where he had an auto dealership. He was an aviator in the 1920s with quite a stable of aircraft. He had a Ford Tri-Motor just for taking the family on vacations. He had a Fokker 10 and a C3 Stearman, too. But, Keith hated circling to gain altitude before crossing the mountains west of Reno into California. He wanted an aircraft that had the power to climb straight out and crest the ridgeline directly. So, in 1929, he bought a brand new Stearman 4E Junior Speedmail as his personal transportation. The Model 4 was originally designed as a mail plane and carried its cargo in an overly large baggage area where the front cockpit would otherwise be. This aircraft was known as the Senior Speedmail. The passenger version with a two-place front cockpit was named the Junior Speedmail. Today Keith Scott's son, Ben, EAA Lifetime 261235, owns this very same Model 4, and it still flies today.

The Speedmail Junior is a big, big airplane standing more than 10 feet tall with a wingspan of 38 feet. A big airplane needs a big engine to haul it around. This particular Junior Speedmail was part of a small group of Stearman Model 4s equipped with the Pratt & Whitney R-1340 Wasp powerplant. This variant of the Wasp puts out 450 hp and has a tremendous amount of torque from its massive displacement. The P&W 1340 equipped Speedmails were known as 4Es and were nicknamed the “Bull” Stearman. My friend Larry flies Ben's 4E around the country displaying it for appreciative aviators and was thoughtful enough to take me up for a ride.



**Above:** My friend Larry.

**Left:** The rear cockpit that includes original finish on instrument panel, flare tubes, and an aperiodic compass.

#### A RIDE IN A CLASSIC

The 4E has its own sound as the loafing high-displacement engine powering its massive 114-inch propeller veritably drags the airframe into the air. It's a brute! But in the air, its controls are surprisingly light and particularly well-harmonized. The ailerons are amazingly responsive, notably so since they are only on the upper wing.

The power is evident as the propeller winds the airspeed indicator up to 160 mph indicated, a blazing speed for a big biplane with innumerable drag-producing features. Belying its name, the Bull Stearman is fast and certainly a pleasure to fly.

The only real negative in this harmonious picture is the cockpit visibility. That big engine up in front blocks out a lot of sky. As Larry said, “You know when you line up on final in that little PT-13 and the nose blocks out the runway? On the 4E the nose blocks the whole airport.” Larry must approach the field in a big sweeping slip from base to final to keep the runway in view. He never really aligns with the runway until inches above the grass when he kicks the rudder to bring it straight. The big forgiving cantilever gear, however, leads to the softest of touchdowns. It's a lot like a Fairchild 24. The gear extends so far below the aircraft that you're still flying even with the wheels running along the ground. Eventually it settles gently on its big gear struts and slows to a stop. A real delight!

#### NICEST FLYING STEARMAN

The 4E certainly takes the prize as the nicest flying Stearman to ever roll off the factory floor. Keith took delivery at the Wichita factory and flew it home to Southern California in 1930, a mere quarter century after the Wright brothers' notable first flight. Yet, this aircraft seems millennia ahead in speed, capability, and finesse. Both on the ground and in the air the Junior Speedmail is a polished airplane far ahead of its time. In fact, Ben has a photo of the aircraft signed by Lloyd Stearman that simply states, “This is the best airplane I ever built.” *EAA*

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