Jim Wickham

When you think about it, it's practically inescapable.

When an area is the home for one of the world's leading aircraft design and manufacturing companies, you're going to end up with a lot of people with the desire and know-how to both design and build their *own* airplanes, too.

Take the Puget Sound area, for instance. You've got the Kasperwing and the Barracuda. You've got the Fly Baby and the Glasair. From open-cockpit fun planes like the Bakeng Deuce to the jet-powered Zipper.

Not all of the local designers are engineers, or even employed by Boeing. But when they are...well, things tend to turn out a bit special.

Jim Wickham was a prime example. He spent a lifetime designing airplanes for Boeing...while designing and building is own aircraft, at the same time.

He'd gone to college in the early 1930s, first at Ohio State University, then eventually graduating from MIT as an aeronautical engineer. After working a few years at Chance-Vought, he switched to Boeing in 1938 and stayed there for the next four decades.



We don't know what led him to design and build his own aircraft. But with his first flight hours coming in a homebuilt glider during his college days, Wickham obviously had a love of flight. Engineering is a hard profession to "turn off" after work; for an aeronautical engineer, using one's skills and knowledge for one's own project is probably as pleasurable as more-conventional forms of recreation.

Starting in the 1950s, Wickham started designing and building his own series of homebuilt aircraft. Most builders start with something small, a one- or two-seater. Back then, most builders stayed with the time-proven wood or steel tube construction, too.



Jim Wickham (Continued)

Not Jim Wickham. His first homebuilt, the Model A "Bluebird," was a four-seat, all-metal 135 HP cross-country machine. It first flew in 1955. Remember, the CAA's Amateur-Built rules had been enacted just a few short years before.

Once the Bluebird was flying, he didn't just rest on his laurels. Two years later, he started an even more ambitious project...the Model B Twin.

The Bluebird had stood out merely from being an all-metal four-seater in a sea of wooden homebuilts. Adding a <u>second</u> engine back then was nearly unheard of...unless the designer used cruddy little lawn-mower engine conversions. Not so for the Model B...Wickham designed it for Lycomings.

Wickham's design process stood out from the typical homebuilding one in another way: The intense amount of detail and planning.

Back then, many homebuilt designers worked mostly "by ear"...they'd draw some sketches of a fuselage or how the wing might be laid out, then head to the shop. They'd solve the little problems...control cable routing, aileron hinging, window layout...with tools in their hands.



Not Jim Wickham. He approached the designing of his own airplane just like the B-47, B-52, and the other airplanes he worked on for Boeing. He <u>designed</u> the airplane before construction started. And that meant detailed drawings, of practically production quality.

After over ten years of construction, the Wickham Twin first flew in 1968. It's interesting to contrast the Twin with the 21st Century RV-10. The Twin has an empty weight and a gross weight both about 300 pounds heavier than the Van's kitplane....just about the weight of the second engine! Of course, as Ross, the Twin's current owner, can attest, the Twin doesn't quite match the performance of the Van's bird.

Curiously, after the twin, Wickham switched from metal cross-country cruisers to single-seat, all wood VW-powered fun airplanes. The Model C was a great success, and he sold the Model D before even completing it.

The Model E brought Wickham to his second brush with fame...while spin-testing it prior to sale, he found he couldn't recover. At the age of 68, Wickham joined the "Caterpillar Club" by bailing



out of the stricken aircraft.

After the Model E, Wickham returned to his roots. He began design of the Model F, an ambitious upgrade of the Twin. Large cabin, high wing, all metal, and this time powered by two converted Mazda rotary engines. Ever the perfectionist, he started with a detailed full-scale wooden cockpit mockup.

Sadly, Wickham's health didn't permit its completion. He passed away in 2000.