

# Son of a Beech 18



BY SAM LONGO, AME, A&P

The Beechcraft Model 18 prototype first flew on January 15, 1937. After 9,000 aircraft had rolled out, the Wichita, Kansas, company ceased production of the venerable twin-tailed twin in 1970 . . .

**I**ts record still stands today, as the longest running, continuous production piston aircraft in aviation history. Speaking of history, Centennial's E18S Model was the queen of their fleet for most of my tenure teaching at the college, only recently upstaged by a newer Beechcraft King Air. Given proper care and feeding, that old "bug smasher" never failed to start and run like a champ – a true testament to the tried-and-true combination of Pratt and Whitney R985 engines mated to bulletproof Hamilton Standard Hydromatic propellers.

Although I have never actually left terra firma in a Beech 18, as fate would have it, I quite possibly have more cockpit ground-run time in one than many seasoned pilots.

The second-year students couldn't wait for their turn to do a ground run, usually slated for early spring, just before graduation. Pushing the throttles to full power, unleashing all 900 Horsepower, became a rite of passage, and if it set off the car alarms in the adjacent parking lot, all the better. For the few foolish instructors who ventured forth to run it, the starting ritual became ingrained in our memories. Like a finicky antique British motorcycle, the old girl rewarded a familiar touch with consistently clean starts (if you can call a thick shroud of white smoke, a clean start).

During 22 years of teaching in Centennial College's Aerospace Department, I did thousands of ground runs with many thousands of students, and despite my NOW poor hearing and weak kidneys, the starting drill remains crystal clear. Without the benefit of a checklist, it went something like this:

Once the aircraft was fueled and oiled, it would be nosed into the wind and chocked. With magneto switches verified OFF the props were pulled through a minimum of two complete revolutions to check for hydraulic lock.

Once inside the cockpit with two students, the process began. Parking brake on and set. Fuel selectors on. All circuit breakers checked.

Engine prep: cowl flaps full open, oil cut-off open, oil coolers in bypass, manifold heat to cold, props full fine, mixture full rich, throttle #1 cracked slightly open (half a knob), master and battery switches ON. Establish "All Clear" from the posted fireguard to start port engine.

Select #1 electric boost pump on. Verify fuel pressure on gauge. Engine select switch to #1 position.

Hold down Start and Induction Vibrator buttons and count passing of 4 to 5 prop blades, and while simultaneously holding the electric prime button, switch on both magnetos. As soon as the engine catches, release all three buttons and check for oil pressure. Turn electric boost pump off (engine driven pump takes over). Increase engine RPM slightly to clear plugs and warm up engine. Repeat entire procedure for starboard engine.

Once both engines had oil and cylinder temps in the "green" all standard parameter checks were carried out: live magneto check, mag drop check, idle check, carburetor heat, prop cycling, generator checks, etc. Once the process got rolling we could initiate about three to four students per hour, often for many hours at a time. Though often hot and always noisy the ground runs remained an enjoyable perk of my teaching routine. For some students it was clearly overwhelming. Fortunately, most took it in stride and gleaned all they could from the experience, while we patiently guided them through the process, struggling to communicate over the din of the barely muffled radial engines.

This past spring I was at a shopping mall not far from Centennial's Ashtonbee Campus. As I came out of a store, I heard a familiar sound in the distance, and it was the very first time I felt any remorse from my retirement. The Beech 18 was wailing away at full power, and I was just a little melancholy, knowing that someone else was having all the fun. It was a great old airplane and a terrific job with many great memories. Running that classic Beech 18 will always remain one of the highlights. I guess I'll always have a soft spot for round engines that drip oil. Despite many years of working on airliners with modern turbine engines, my heart still gravitates towards vintage piston engines like those good old Pratt and Whitney R985s.

Who knows, one of these days I may actually go for a flight in a Beech 18. It's definitely on the bucket list, but until then I will count myself as one lucky "Son of a Beech" to have had 22 fabulous years to play with one.

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