

Beechcraft D17S Staggerwing Model Guide

The Beechcraft D17S Staggerwing is a four- to five-seat, retractable-gear cabin biplane with negative stagger, meaning the lower wing sits forward. The D17S was approved on September 1, 1937 under US Type Certificate A-649. It uses a Pratt & Whitney Wasp Jr (or military equivalent) and a Hamilton Standard 2D30 propeller. Maximum certificated takeoff weight is 4250 lb (1928 kg).

KEY TAKEAWAYS

- Max takeoff weight is 4250 lb (1928 kg). Power is a Pratt & Whitney Wasp Jr or military equivalent turning a Hamilton Standard 2D30 propeller.
- D-series changes from 1937 added flaps on the lower wing, a rudder trim tab, standard toe brakes and an 18-inch longer fuselage. Optional tanks reach 174 gal.
- Support is thin. Publication D170039 is the only factory technical publication currently available, and no flight manual was required originally.
- Check the control wheel shaft. AD DCA/B17/1 covers Beech half-circle wheels. Replace the shaft if the counterbore is over 1 7/16 inches.

CONSTRUCTION AND HERITAGE

The Model 17 has a welded steel tube fuselage with wooden formers and stringers. Its wing spars are steel tube trusses with wood ribs, and the fabric covering was known for its finish. Between 1937 and 1944 the U.S. Army bought 105 and the U.S. Navy 320 Staggerwings, so some airframes have military history (UC-43/GB-2 equivalents).

DOCUMENTS AND PARTS SUPPORT

The original Aero Bulletin 7A certification basis has no flight manual requirement. The manual used in New Zealand, the Beechcraft Model D17S Operations Manual, is undated and has no list of effective pages. Maintenance data includes poor photocopies of military handbooks bound in one volume. The Staggerwing Club holds the Model 17 drawings and provides copies to proven owners.

KNOWN AIRWORTHINESS DIRECTIVE

DCA/B17/1 (FAA AD 48-51-01, effective 7 May 1999) applies to D17S aircraft with Beech half-circle control wheels. It does not apply to bow-tie wheels with a three-bolt flange. Inspection means drilling a 3/8-inch hole in the wheel hub and measuring the shaft counterbore. A counterbore over 1 7/16 inches means the shaft must be replaced.

SPECIFICATIONS

Max Takeoff Weight Lbs	4250
Optional Fuel Capacity Max Gal	174
Fuselage Stretch Inches	18

PERFORMANCE

Family Max Range Nm	590
Family Max Cruise Speed Kt	185
Family Max Service Ceiling Ft	20000

WEIGHT & BALANCE

Max Takeoff Weight Lbs	4250
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SAFETY NOTES

- Control wheel shaft: AD DCA/B17/1 requires counterbore measurement. Over 1 7/16 inches deep means replace the shaft.
- When drilling the hub for the check, do not let the drill go more than 1 inch into the hub, or the securing pin will be damaged.
- Confirm which flight manual applies to the specific airframe. The Operations Manual seen in New Zealand was undated and its source could not be confirmed.