

CESSNA 185 Model Guide

The CESSNA 185 is a single-engine piston, high-wing, tailwheel utility aircraft with six seats. The library data lists a Continental IO-520-D engine of 300 hp, a McCauley D3A34C403 propeller and a maximum takeoff weight of 3350 lbs. Library figures give a 130 kt cruise and an 820 nm range. It is also common as a floatplane, so check which gear and tank configuration a given airplane has.

KEY TAKEAWAYS

- Library data lists 130 kt cruise, 149 kt maximum speed and 820 nm range on 84 gallons of fuel.
- Useful load is listed at 1575 lbs against an empty weight of 1625 lbs and a 3350 lb maximum takeoff weight. Baggage allowance is 300 lbs.
- Fuel capacity varies by airplane: 65 gallons standard and 84 gallons long range. A factory bulletin warns that some 1973-1975 tanks hold less than the published capacity.
- Check the mandatory tailcone and horizontal stabilizer inspection (SEL-55-01) and the tailwheel assembly records.
- Floatplane airplanes need a supplemental flight manual for the installed floats, such as the Aerocet 3400 supplement.

WHAT IT CARRIES AND HOW IT PERFORMS

The CESSNA 185 has a listed empty weight of 1625 lbs, a useful load of 1575 lbs and a maximum takeoff weight of 3350 lbs. Maximum landing weight is listed at 3200 lbs. The CG range is 34 to 40 inches. Listed takeoff distance over a 50 ft obstacle is 1115 ft and landing distance over 50 ft is 959 ft. The service ceiling is listed at 18000 ft and the rate of climb at 850 fpm. Cruise fuel burn is listed at 13.2 gph. The 1974 owner's manual covers the A185F, which is certificated under FAA Type Certificate 3A24 with 300 rated BHP at 2850 RPM (5-minute takeoff rating) and 285 BHP at 2700 RPM maximum continuous.

FUEL SYSTEM AND RANGE

The 1974 owner's manual lists 65 gallons total on standard tanks and 84 gallons on optional long range tanks. The 1962 Army evaluation also describes 84-gallon long range tanks and 65-gallon standard tanks. A revised fuel quantity notice in the 1974 manual says that, because of changes in tank manufacturing, 1973 (serial 18502263 and on), 1974 and 1975 airplanes hold less than the published capacity. Verify the actual usable fuel and the placards on any airplane you consider. One floatplane worksheet (N900JB) shows 88 gallons total with 4 unusable, giving 84 usable. It uses about 16 gallons per hour for training below 1500 ft. Allow for burn well above the library figure of 13.2 gph when planning.

MAINTENANCE AND AIRWORTHINESS ITEMS TO CHECK

Textron service letter SEL-55-01 is mandatory. It covers the tailcone and horizontal stabilizer on airplanes with more than 3000 total hours or 10 years in service. It reports cracks in the tailcone reinforcement angle, stabilizer hinge bracket and stabilizer. It must be done at the next 100-hour or 12-month inspection, then repeated every 500 hours or 5 years, whichever comes first. The New Zealand AD schedule for the 185 series lists items including mainplane rear spar cracking inspection (DCA/CESS185/110) and flexible fuel tanks inspection (DCA/CESS185/129). Ask for the full FAA AD compliance record. The tailwheel assembly is inspected at 50 hour intervals, and steel hardware and aluminum structure are susceptible to rust and corrosion. This matters most on airplanes operated near salt water.

FLOATPLANE AND MODIFIED AIRPLANES

Many 185s carry float or tailwheel modifications. The Aerocet 3400 amphibious float supplement (FAA approved, STC SA01257SE) must be carried in the airplane when those floats are installed, and it supersedes the basic markings where they differ. Wipline 4000 floats have their own service manual covering the A185E and A185F. Check for the correct supplements, the

SPECIFICATIONS

Engine Model	Continental IO-520-D
Engine Hp	300
Propeller	McCauley D3A34C403
Wingspan Ft	35.77
Length Ft	25.5
Height Ft	7.5
Empty Weight Lbs	1625
Max Takeoff Weight Lbs	3350
Fuel Capacity Gal	84
Service Ceiling Ft	18000
Rate Of Climb Fpm	850
Range Nm	820
Cruise Speed Kts	130
Max Speed Kts	149

PERFORMANCE

Cruise Speed Kts	130
Max Speed Kts	149
Fuel Burn Gph	13.2
Takeoff Distance Ft	1115
Landing Distance Ft	959
Max Crosswind Kts	15
Best Glide Speed Kts	75
Stall Speed Clean Kts	60
Stall Speed Landing Kts	55

V-SPEEDS

Vx Kts	57
Vy Kts	88
Vs1 Kts	60
Vso Kts	50
Vno Kts	145
Vne Kts	175
Vref Kts	65

WEIGHT & BALANCE

Empty Weight Lbs	1625
Useful Load Lbs	1575
Max Takeoff Weight Lbs	3350
Max Landing Weight Lbs	3200
Baggage Allowance Lbs	300
Cg Min Inches	34
Cg Max Inches	40

SAFETY NOTES

- Treat figures as unverified until checked against the flight manual and placards for the specific airplane. The library and the source documents disagree in places, for example Va is listed as 100 in the library but 118 knots at 3350 lbs on a checklist.

float and gear hydraulic maintenance records, and any tailwheel modification paperwork such as the XPM1 series. Note that the McFarlane XPM1 instructions say the tailwheel lock is optional.

- Compliance with the mandatory tailcone and horizontal stabilizer inspection (SEL-55-01) should be confirmed in the logbooks, because undetected cracks could result in loss of control in flight.
- Aircraft Spruce bulletin SB24-01 says worn ACS keyed ignition switches may let the key be removed in a position other than OFF, leaving a magneto ungrounded. It recommends a test every 100 hours or at annual and replacement at 1000 hours or 10 years.
- Floatplanes: takeoff with a known hull leak or structural damage is prohibited per the Aerocet supplement.