

BELLANCA CITABRIA 7GCBC Model Guide

The BELLANCA CITABRIA 7GCBC is a two-seat, single-engine piston tailwheel airplane (the "C" package), approved in the Normal and Acrobatic categories. It has a 150 hp Lycoming O-320-A2B. Max gross weight is 1650 lbs and the baggage limit is 100 lbs. Flight is day or night VFR only, with no flight into known icing. Figures come from the Bellanca manual and an older Champion POH.

KEY TAKEAWAYS

- Two seats, 150 hp Lycoming O-320-A2B (or A2D), 1650 lb max gross, Normal and Acrobatic categories.
- Older POH lists 1075 lb empty and 575 lb useful load. Confirm against the airplane's own weight and balance sheet.
- Fuel placard reads 35 gal usable (older POH: 39 gal). Minimum 80/87 octane; 100/130 is approved.
- Before buying, check the gear oleo fluid level, fabric condition, tailwheel and shimmy dampener.

ENGINE AND OPERATING LIMITS

The engine is a Lycoming O-320-A2B or A2D rated 150 hp at 2700 rpm (red line 2700). Oil pressure: green arc 60-100 psi, minimum 25 psi. Oil temperature red line is 245 F and cylinder head temperature red line is 500 F. Run-up at 1800 rpm allows a 200 rpm maximum mag drop and 50 rpm maximum differential. The older POH recommends an oil change every 50 hours.

FLYING IT

Normal takeoff: full throttle, lift off at 55-60 MPH, climb at 75-80 MPH. Obstacle takeoff: flaps at the 2nd notch, lift off at 50-55 MPH, climb at 58 MPH. Recommended glide and approach speed is 60-65 MPH. The older POH gives a gross-weight stall of 50 MPH without flaps and a demonstrated crosswind of 40 MPH. Wheel brakes are very sensitive in a level attitude, so steer with rudder.

WHAT TO INSPECT

Main gear oleo: 8 1/2 fluid ounces of MIL-H5606; the level should be 1 5/8 in below the cylinder end. Overfilling causes hydraulic lock. Check the tailwheel shimmy dampener at the 100 hour inspection. Look at the fuselage fabric for oil and battery acid leakage. Drain the fuel sumps and gascolator, and check the pitot-static tube and fuel vent are clear. Battery service is due every 50 hours of normal flight and every 10 hours of acrobatic flight.

SPECIFICATIONS

Rated Power Hp	150
Fuel Usable Gal	35
Fuel Total Gal	39
Baggage Capacity Lbs	100

PERFORMANCE

Service Ceiling Ft	17000
Climb Rate Fpm	1145
Fuel Burn Gph	9

V-SPEEDS

Vne Mph	162
Vno Mph	120
Va Mph	120
Vfe Mph	90
Best Angle Climb Mph	58
Stall Mph	50

WEIGHT & BALANCE

Max Gross Weight Lbs	1650
Empty Weight Lbs	1075
Useful Load Lbs	575
Baggage Max Lbs	100
Cg Forward At Max Weight Inches	14.2
Cg Forward At 1325 Lbs Inches	10.5
Cg Aft Normal Inches	19.2
Cg Aft Acrobatic Inches	16.3

SAFETY NOTES

- Approved aerobatics require no baggage and the CG within the acrobatic limits. Inverted flight is listed for the 7KCAB only.
- After an engine failure on takeoff, do not turn back toward the runway unless sufficient altitude has been reached. Maintain flying speed.
- A gradual RPM loss suggests carburetor icing. Keep carburetor/alternate air at FULL HOT while icing is suspected.