

BELLANCA CITABRIA 7ECA Model Guide

The BELLANCA CITABRIA 7ECA is a two-seat, single-engine piston tailwheel airplane. It has a Lycoming O-235-C1 rated 115 hp at 2800 rpm and is approved in the Normal and Acrobatic categories. Maximum weight is 1650 lbs. The Aeronca 7 family, which includes the 7ECA, is listed in the registry at up to 111 kt cruise and up to 550 nm range. Treat those as family maxima, not 7ECA figures.

KEY TAKEAWAYS

- Lycoming O-235-C1, 115 hp at 2800 rpm; maximum weight 1650 lbs; baggage limit 100 lbs.
- Fuel is 26 gal total and 22 gal usable in two tanks. The checklist gives a typical burn of 7.5 GPH.
- Limits: VNE 162 mph, VNO 120 mph, stall 51 mph. Load factors are +5.0 and -2.0 G.
- Tailwheel airplane with sensitive brakes. Check strut drain holes, fabric and the tailwheel before buying.

LIMITS AND LOADING

The Pilot's Operating Manual (POH) and checklist list a 1650 lb maximum weight. Normal-category CG range is 14.2 to 19.2 in at 1650 lbs, and 10.5 to 19.2 in at 1325 lbs or less. Acrobatic range is 14.2 to 17.3 in at 1650 lbs. Maximum baggage is 100 lbs, and acrobatics are approved with no baggage. Occupy the front seat when flying solo.

FLYING IT

Lift-off is at 55-60 mph. Best angle of climb is 58 mph, best rate is 69 mph, and normal climb is 75-80 mph. Approach is 60-70 mph, and best glide is 65 mph. Stall characteristics are conventional, but aileron response in a full stall is marginal, so use rudder. Brakes are very sensitive with the tail up, so steer with the rudder. Full-stall landings are recommended on soft or rough fields.

WHAT TO INSPECT

The preflight lists front and rear wing lift struts for straightness and dents. Check that strut drain holes are open and that the struts hold no water. Check fabric for oil and battery acid leakage, plus the brace wires, tailwheel and tires. Magneto check at 1800 rpm allows a 200 rpm maximum drop and a 50 rpm maximum difference. Oil pressure must show within 30 seconds of start.

SPECIFICATIONS

Engine Power Hp	115
Max Takeoff Weight Lbs	1650
Fuel Capacity Gal	26
Usable Fuel Gal	22
Baggage Limit Lbs	100
Fuel Burn Gph	7.5
Max Rpm	2800

PERFORMANCE

Stall Speed Mph	51
Best Glide Speed Mph	65
Best Angle Climb Speed Mph	58
Best Rate Climb Speed Mph	69
Normal Climb Speed Mph	80
Fuel Burn Gph	7.5

V-SPEEDS

Vne Mph	162
Vno Mph	120
Va Mph At 1650 Lbs	120
Va Mph At 1250 Lbs	104
Vs Mph	51
Vx Mph	58
Vy Mph	69
Best Glide Mph	65

WEIGHT & BALANCE

Max Weight Lbs	1650
Baggage Limit Lbs	100
Cg Fwd Limit At 1650 Lbs Inches	14.2
Cg Aft Limit Inches	19.2
Cg Fwd Limit At 1325 Lbs Inches	10.5

SAFETY NOTES

- Takeoff is prohibited with any fuel indicator at 1/4 or less. Flight into known icing is prohibited.
- Do not exceed 120 mph in rough air. Spin recovery builds airspeed fast, so avoid abrupt elevator movement.
- After any overstress, fly at 60-70 mph to a landing and have a mechanic inspect the aircraft before the next flight.