

Cessna 303 Crusader Model Guide

The Cessna 303 Crusader is an all-metal, low-wing, retractable-gear twin built from 1981 to 1986. It has two turbocharged 250 hp Continental engines and a cruciform tail. It seats 4 to 6 and has a cabin with an aisle and an airstair door. It looks like a cabin-class twin but is a light twin by weight.

KEY TAKEAWAYS

- Max takeoff weight is 5,150 lbs and the zero-fuel limit is 4,850 lbs. Cabin space exceeds useful load, so check weight and balance on every flight.
- Fuel capacity is 155 gal total, 153 usable, 100/130 avgas. Family-level data shows up to 810 nm range and up to 196 kt cruise.
- Known-icing certification arrived during production. Check whether a given aircraft has the icing kit (dual prop boot timers, larger stall vane heater).
- A UK nose gear collapse was traced to cracked actuator locking lugs. Review the nose gear AD and the nose gear checks in the maintenance manual.

CABIN AND LOADS

The cabin is nearly square, just under 4 feet high and wide, with an aisle and four comfortable but slightly narrow cabin seats. The airstair door opening is 24 inches. The optional cargo door is 56 inches, adds 19.5 lbs and lengthens the cabin. Baggage space is in the nose, a locker behind each engine and behind the rear seats. Limits are 150 lbs forward and 200 lbs aft.

ENGINES AND SYSTEMS

Power is two Continental TSIO-520-AE or LTSIO-520-AE engines, rated 250 hp with a 2,400 rpm maximum. Cessna adds the AiResearch turbochargers. The cruciform tail keeps the stabilizer out of prop wash, and cruise power settings can go as low as 2,100 rpm. Limits include 460 F cylinder head and 240 F oil temperature. Standard avionics were an IFR suite with a 4000 autopilot/flight director.

WHAT TO CHECK WHEN BUYING

Verify compliance with the NZ-listed Airworthiness Directives: nose gear actuator attachment fitting (repeat inspection every 50 hours until modified), fuel inlet float valve, auxiliary fuel pump wiring, alternate static source selector and seat adjustment mechanism. Service experience led to changes in the turbocharger mounting block, main gear shock struts and right crew door hinges. Check that those changes were done.

SPECIFICATIONS

Engine Power Hp	250
Fuel Capacity Total Gal	155
Fuel Usable Gal	153
Airstair Door Opening Inches	24
Cargo Door Opening Inches	56
Cargo Door Weight Lbs	19.5

V-SPEEDS

Va Kts	148
Vne Kts	210
Vno Kts	175
Vmca Kts	65
Vs Kts	66
Vso Kts	58
Vy Kts	103
Vyse Kts	97

WEIGHT & BALANCE

Max Takeoff Weight Lbs	5150
Max Zero Fuel Weight Lbs	4850
Max Baggage Forward Lbs	150
Max Baggage Aft Lbs	200

SAFETY NOTES

- Engine failure on takeoff below 80 kts: close throttles. Above 80 kts: feather the dead engine, bank 5 degrees toward the good engine, fly 97 kts (93 with obstacles).
- Vmca is 65 kts. Below it on one engine, retard throttles and lower the nose to regain speed. Spins are prohibited.
- If the red door-open light comes on, keep airspeed below 110 kts and return for a normal landing.