

Cessna 152 Aerobat Model Guide

The Cessna 152 Aerobat (Model A152) is a two-seat, single-engine piston trainer built from 1978 to 1985 and certificated for aerobatics. The 1978 handbook lists a 110 BHP Lycoming O-235-L2C, a 1670 lb maximum weight, a 545 lb useful load and a 106 knot cruise at 75% power at 8000 ft.

KEY TAKEAWAYS

- Two seats, 110 BHP, 1670 lbs maximum weight. The 1978 handbook lists a 545 lb useful load and a 120 lb baggage limit.
- Performance is modest: 715 fpm climb at sea level and a 14,700 ft service ceiling. A veteran instructor calls climb rate the major setback at high density altitude.
- Extra structure (doublers, rivets) makes the Aerobat about 16 lbs heavier empty than a standard 150/152.
- Usable fuel is 24.5 gal with standard tanks or 37.5 gal with long-range tanks. Confirm which tanks the airplane has.

PERFORMANCE (1978 A152 HANDBOOK)

Maximum speed is 109 knots at sea level and cruise is 106 knots at 75% power at 8000 ft. These figures assume optional speed fairings, which add about 2 knots. Takeoff takes 725 ft ground roll and 1340 ft over a 50-ft obstacle. Landing takes 475 ft ground roll and 1200 ft over a 50-ft obstacle. Power-off stall is 48 knots flaps up and 43 knots flaps down (CAS).

AEROBATIC USE

The Aerobat carries added structure, with larger wing struts and thicker skin in many areas. An instructor with about 2,500 hours in it says its roll and pitch rates are similar to other general aviation airplanes. The reverse Cuban 8 is approved, entered at 100 knots. The split-S was left out of the training manual because the pilot may exceed the redline. The control wheel must turn 90 degrees for full aileron.

AIRWORTHINESS AND MODIFICATIONS

The 152 and A152 are covered by FAA Type Certificate 3A19, with a Lycoming O-235-L2C or -N2C engine. Airworthiness Bulletin AWB 51-003 covers cracking of the fin attach bracket and horizontal stabiliser spar on all 150, 152 and A152 aircraft. A tailwheel conversion STC kit is advertised at 40 to 55 hours of installation. Ask for records of any such modification.

SPECIFICATIONS

Engine Power Hp	110
Propeller Diameter Inches	69
Fuel Capacity Standard Gal	26
Fuel Capacity Long Range Gal	39
Usable Fuel Standard Gal	24.5
Usable Fuel Long Range Gal	37.5

PERFORMANCE

Max Speed Sea Level Kts	109
Cruise Speed 75pct 8000ft Kts	106
Rate Of Climb Fpm	715
Service Ceiling Ft	14700
Takeoff Ground Roll Ft	725
Takeoff Over 50ft Ft	1340
Landing Ground Roll Ft	475
Landing Over 50ft Ft	1200

V-SPEEDS

Vne Kt	149
Vno Kt	111
Va Kt	98
Vfe Kt	85
Vx Kt	55
Vg Kt	65

WEIGHT & BALANCE

Max Takeoff Weight Lbs	1670
Standard Empty Weight Lbs	1125
Max Useful Load Lbs	545
Baggage Allowance Lbs	120

SAFETY NOTES

- Ask for AD/CESSNA 150/31 Amendment 4 inspection records. Spar cracks are hidden from view, and seven incidents of cracking are reported in the type's history.
- Stay within approved maneuvers. The split-S was excluded from the training manual because the pilot may exceed the redline if the airplane is not slowed enough.
- The V-speeds shown come from a club checklist that is not authoritative. Verify them against the airplane's own handbook.