

DOUGLAS DC-3 Model Guide

DOUGLAS DC-3 is a piston-powered, twin-engine, tailwheel transport. The registry family spans variants such as DC3A-S1C3G and DC3C-S4C4G and carries up to 32 passengers. The only airframe detail available is one crew chief's notes on a single older passenger example, so treat the figures as indicative and verify them against your own aircraft's records.

KEY TAKEAWAYS

- DOUGLAS DC-3 family: up to 32 passengers, up to 151 kt cruise, up to 300 nm range, up to 24000 ft ceiling (family maxima, not one variant).
- Three welded metal fuel tanks of about 200 gallons each; the example in the notes burns about 85 gallons per hour.
- Taxiing needs skill: there is no direct link between the rudder pedals and the tailwheel, so the pilot steers with engine blast.
- Review all AD and service bulletin compliance, including the SB262 wing attach angle rework, and check for corrosion.

FAMILY FIGURES (UP TO, NOT PER VARIANT)

The registry shows the DC-3 family at up to 32 passengers, up to 12700 kg max takeoff weight, up to 151 kt cruise, up to 300 nm range and up to 24000 ft service ceiling. Variants include DC3-G102, DC3A-SCG, DC3C-R-1830-90C and DC3D-R-1830-90C. Wright and Pratt & Whitney engine fits both appear in the notes.

WHAT TO INSPECT

The notes' example needed a heavy airframe overhaul with the SB262 wing attach angle rework. About 3% of fuselage rivets had popped heads from corrosion, and stringers and window frame corners needed repair. Also check the fabric-covered control surfaces, brakes rusted onto the axles, a long-leaking brake, and the flap selector valve, which can let the flaps bleed down in flight.

SYSTEMS AND CABIN NOTES

It is a 24 volt DC airplane with two 12-volt batteries and a 200 amp generator on each engine. Hydraulics run at 600-800 psi, and the relief valve opens at 1000 psi. Tire pressure is 50 psi on the mains and 35 psi on the tail. The example had no toilet, no under-floor baggage, no oxygen installed and no deice boots, so confirm the equipment on any aircraft you consider.

SPECIFICATIONS

Wingspan Ft	95
Length Ft	65
Height Ft	23
Fuel Tank Capacity Gal	200

PERFORMANCE

Fuel Burn Gph	85
Family Max Cruise Speed Kt	151
Family Max Range Nm	300
Family Max Service Ceiling Ft	24000

WEIGHT & BALANCE

Empty Weight Lbs	18000
Weighed Weight Lbs	17750

SAFETY NOTES

- An AD requires flight manual limits for severe icing. Exit severe icing at once, keep the autopilot off, and do not extend flaps while holding in icing.
- Fuel caps can leak water in rain. Sump the tanks before an engine run; one operator lost an airplane on takeoff due to water in the fuel.
- The hamburger door is forward of the propeller, so do not use it with the left engine turning.