

DEHAVILLAND DHC-3 Model Guide

DEHAVILLAND DHC-3 is the de Havilland Canada Otter, listed as a single-engine piston aircraft. Registry data for the DHC-3 family shows up to 12 passengers, up to 3600 kg MTOW, up to 124 kt cruise, up to 900 nm range and a 20500 ft ceiling. The documents supplied cover turbine-conversion service bulletins and a STOL kit, so check which modifications a given airframe carries.

KEY TAKEAWAYS

- Family-level maxima: 12 passengers, 900 nm range, 124 kt cruise, 20500 ft ceiling. These are not figures for any one airframe.
- Many Otters carry aftermarket changes: Texas Turbine conversions and the Baron STOL kit. Confirm the STCs and flight manual supplements on the aircraft.
- Early Texas Turbine conversions had a fuel check-valve problem. Confirm that SB-DHC3-01 was done.
- The optional parallel/series start system cuts start time and start temperature, but it adds weight.

FUEL SYSTEM CHECK (TURBINE CONVERSIONS)

Service Bulletin SB-DHC3-01 (April 25, 2003) covers Texas Turbine conversions made before October 1, 2002. Faulty check valves could stop fuel feeding from the aft tanks. The fix was due within 100 hours or at the next 100-hour inspection, and it returns the fuel system to the original DeHavilland layout. Ask for proof of compliance.

BARON STOL KIT SUPPLEMENT

The Stolairus Baron STOL kit supplement (revision 3, 05/22/2015) is compatible with any approved wheel, ski or float installation. It is also compatible with any approved engine installation, piston or turbine. It changes the aft CG limit. The supplement says performance meets or exceeds the basic flight manual. With some floats fitted, avoid intentional side slips with flaps down.

OPTIONAL START SYSTEM UPGRADE

Service Bulletin TTC-SB-DHC3-03-REV-A (October 1, 2006) is optional. It raises starter voltage from 24V to 48V during the start only. It cuts start time by as much as 20 seconds and start temperature by as much as 100C, which helps water operations. Installation takes up to 16 man-hours. The kit adds 5.3 pounds at station 42.0.

SPECIFICATIONS

Family Max Passengers	12
Engine Type	piston

PERFORMANCE

Family Max Range Nm	900
Family Max Cruise Speed Kt	124
Family Max Service Ceiling Ft	20500

WEIGHT & BALANCE

Start System Kit Added Weight Lbs	5.3
Minimum Takeoff Fuel Lbs	134

SAFETY NOTES

- Under SB-DHC3-01, do not take off with less than 134 lbs (20 U.S. gal.) of fuel in all three tanks.
- Burn from the front tank for takeoff and landing. After takeoff, burn from the aft tank forward.
- Use the electric boost pump for takeoff, landing, fuel tank selection and operations above 10,000 feet.