

Transports Canada Canada

No. CF-98-37R1

AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to Canadian Aviation Regulation (CAR) 593. Pursuant to CAR 605.84 and the further details of CAR Standard 625, Appendix H, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable Ads. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with CAR 605.84 and the above- referenced Standard.

This AD has been issued by the Continuing Airworthiness Division (AARDG), Aircraft Certification Branch, Transport Canada, Ottawa, telephone (613) 952-4357.

CF-98-37R1 BOMBARDIER

Applies to all models of Bombardier Inc. (formerly de Havilland) DHC-2 "Beaver" and "Turbo Beaver" aircraft.

Compliance is required as indicated.

Operators have reported numerous incidents of corrosion of the DHC-2 front fuselage struts on either side of the flight compartment windshield. The original directive mandated a 15-year life limit on the strut. The purpose of this revision is to allow repetitive detailed visual and ultrasonic inspections as an alternative to the 15-year life limit.

To preclude failure of these structural members, accomplish either Part A or Part B below.

Part A. Strut Replacement

Within 12 months after the effective date of this directive, unless previously accomplished since 30 April 1985, replace installed front fuselage struts with replacement part number struts listed in the accompanying table.

<u>Installed P/N</u>	Replacement P/N		Description
C2FS209 or C2FS3281A	C2FS3281A	K	Strut Assembly Front Fuselage, Left
C2FS210 or C2FS3282A	C2FS3282A		Strut Assembly Front Fuselage, Right

In accordance with PSM 1-2-2, Part 5, Temporary Revision 2-22, and PSM 1-2T-2, Part 5, Temporary Revision 2T-6, both dated 3 August 1998, replaced struts have a life limit of 15 years from the date of installation.

Note 1: Use of repaired instead of new struts may be authorized through an alternative means of compliance approved by Transport Canada in accordance with CAR Standard 625, Appendix H.

Part B. Repetitive Strut Inspections

Inspect the front fuselage struts as follows:

- 1. Initially within 12 months after the effective date of this directive, unless previously accomplished, and every 12 months thereafter, perform a detailed visual inspection of the front fuselage struts and all fittings attached to the frame for damage (corrosion, cracks, dents) using an inspection light, inspection mirror and 10X magnifying glass. On completion of the inspection clean the drain holes around the bottom end fitting and protect the tube internally with an appropriate corrosion preventative spray (LPS #3 recommended).
- 2. (a) Initially within 24 months after the effective date of this directive, unless previously accomplished, and every 5 years thereafter, perform an ultrasonic thickness measurement of all surfaces on the front

fuselage struts. Although the inspection procedure detailed in Bombardier Service Bulletin 2/49 Revision C does not include inspection of the front fuselage struts, a procedure which follows a similar calibration procedure and measures strut thickness on all four surfaces at 1-inch intervals is acceptable to Transport Canada. There is a 4-inch surface on the outboard side of each strut which is not accessible.

(b) Before next flight, replace any struts found below minimum thickness of 0.030 inch with new struts in accordance with Part A of this directive.

Note 2: The 15-year life limit does not apply for struts inspected in accordance with Part B of this directive.

This revision supersedes Airworthiness Directive CF-98-37 issued 29 September 1998.

This directive becomes effective 30 September 1999.

Pursuant to CAR 202.51 the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address. To request a change of address, contact the Civil Aviation Communications Centre (AARC) at Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or http://www.tc.gc.ca/civilaviation/communications/centre/address.asp.

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