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No. CF-85-12R3

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-85-12R3 DE HAVILLAND

Applies to all Boeing Canada, de Havilland Division Model DHC-6 Twin Otter aircraft fitted with aluminum wing-to-fuselage front adaptor fittings.

Compliance is required as indicated.

Reports have been received from several operators of cracks being found in the wing-to-fuselage forward adaptor aluminum fittings. Failure of these fittings could result in loss of the aircraft.

To prevent such a failure, accomplish the following:

Part A

On aircraft with aluminium fittings (P/N C6WM1031-1 and -2, C6WM1162-1 and -2) and unworked fittings (P/N C6WM1133-1 and -2), at intervals not exceeding 500 hours time in service; and

On aircraft with aluminium fittings (P/N C6WM1133-1 and -2) reworked per de Havilland Service Bulletin A6/476, at intervals not exceeding 250 hours time in service:

1) Gain access to the wing-to-fuselage aluminium front adaptor fittings (P/N C6WM1031-1 and -2, C6WM1133-1 and -2, C6WM1162-1 and -2). Inspect the adaptor fittings for cracks using an approved dye penetrant method and a 10 power magnifying glass.

(a) Fittings (P/N C6WM1031-1 and -2) are subject to stress corrosion or fatigue cracking. Accordingly, attention must be paid to all fitting faces, junction of the fork inner faces and for cracks radiating from the upper edges.

(b) Fittings (P/N C6WM1133-1 and -2, C6WM1162-1 and -2) are subject to fatigue cracking. Accordingly, particular attention is to be paid to the junction of the fork inner faces and the main body of the adaptor, horizontal and vertical faces, for cracks radiating from the upper edges.

2) Where a crack is present replace the fitting before further flight. Where a fitting has been reworked in accordance with de Havilland Service Bulletin 6/476, provided no cracks are present, the fitting must be replaced within 500 hours. All replacement fittings must be steel ones in accordance with de Havilland Service Bulletin 6/500.

Part B

On all aircraft, prior to 1 September 1995, install steel adapter fittings (P/N C6WM1162-3 and -4) in accordance with de Havilland Service Bulletin 6/500, Revision C dated 11 May 1990, or later revision approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.

The installation of steel adaptor fittings (P/N C6WM1162-3 and -4) in accordance with de Havilland Service Bulletin 6/500, provides terminating action for this directive.

Alternative means of compliance with this directive may be used only if approved by the Director, Airworthiness Branch, Transport Canada, Ottawa. Any application should be made to the appropriate regional office.

This revision supersedes Airworthiness Directive CF-85-12R2 issued on 16 December 1988.

This directive becomes effective 1 June 1991.

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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