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No. CF-99-22

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-99-22 BOMBARDIER

Applies to Bombardier Inc. (formerly de Havilland) DHC-8 Series 100, 200 and 300 aircraft, serial numbers 003 to 531.

Compliance is required as indicated, unless already accomplished.

An investigation of the collapse of the main landing gear of a DHC-8 aircraft identified the cause as an external hydraulic fluid leak in the landing gear selector valve (P/N 57420-5) due to a fracture of the spool endcap. Further, in-service experience with landing gear selector valves that have not had Modification 8/0530 incorporated (have not been upgraded to the P/N 57420-5 configuration) are more susceptible to internal leaks, and excessive internal leaks can also contribute to the collapse of the landing gear.

To preclude the collapse of the undercarriage due to leaks of the landing gear selector valve, accomplish the following:

A. Within 100 flight cycles after the effective date of this directive, perform a visual leak check on the endcaps (P/N 34629) of the landing gear selector valve (P/N 57420-1, 57420-3 or 57420-5 for Series 100 and 200 aircraft and P/N 57420-5 for Series 300 aircraft). Approved instructions for the conduct of the visual inspections are detailed in the Accomplishment Instructions of Bombardier Alert Service Bulletin (ASB) A8-32-145 dated 28 June 1999 or later revision approved by the Director, Aircraft Certification, Transport Canada.

B. If the visual leak inspection, carried out per paragraph A above, shows leaking of hydraulic fluid at either endcap, replace, prior to further flight, either the leaking endcap(s) or the complete selector valve. Approved instructions for replacing the endcaps and for replacing the selector valve are detailed in the Accomplishment Instructions of the aforementioned ASB or later Transport Canada approved revisions.

C. Repeat the inspection per paragraph A above at intervals not to exceed 400 hours flight time or at each 'A' check, whichever occurs later.

D. Within 12 months after the effective date of this directive, comply with the requirements of paragraph 1 or 2 below:

1. For aircraft with landing gear selector valve P/N 57420-5 installed, rework the valve to P/N 57420-5A (ModSum 8Q100802) or remove the valve and install valve P/N 57420-5A.

2. For aircraft with landing gear selector valve P/N 57420-1 or 57420-3 installed, remove the valve and replace it with valve P/N 57420-5A.

Approved instructions for incorporating ModSum 8Q100802 and for replacing the valve are detailed in the above referenced ASB A8-32-145.

E. Installation of landing gear selector valve P/N 57420-5A provides terminating action to the inspection requirements of this directive.

This directive becomes effective 1 October 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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