No. CF-2004-07 Issue Date 14 April 2004

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 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.

Number: CF-2004-07

Subject: Bombardier DHC-8 Series 400 - Fuel and Hydraulic Tubes Chafing

Effective: 28 May 2004

Applicability: Bombardier Inc. DHC-8 Series 400 aircraft serial numbers 4003 through 4089.

Compliance: Compliance is required as indicated, unless already accomplished.

Background:

Service difficulty reports indicate there is a potential for chafing of fuel and hydraulic tubes with the fairlead plate where the tubes pass through the firewall. Titanium plates attached to the fairleads have close tolerance holes to provide isolation between fire zones. If the tubes are not centered in the fairlead plate, nacelle flexing can cause a fouling condition, which may cause chafing of the tubes.

Bombardier Inc. has issued System Drawings SYD 84-28-002 (for the fuel tubes), and SYD-84-29-006 (for the hydraulic tubes), to provide temporary rework instructions (to enlarge the tolerance holes) for the fairlead plates, in order to avoid chafing with the tubes which pass through the fairlead plates. Production rework Modsum 4-184079 (for the hydraulic tubes) and Modsum 4-184081 (for the fuel tubes) were issued to introduce the intent of SYDs 84-28-002 and 84-29-006 for production aircraft. In addition, Bombardier Inc. Service Bulletin (SB) 84-54-09 was issued to introduce modified fairlead plate assemblies to rectify the fuel and hydraulic tubes chafing problem.

Corrective Actions:

- 1. Within 500 hours air-time after the effective date of this directive:
 - (a) For aircraft without Bombardier Systems Drawings SYD 84-28-002, Issue 1, or later approved revisions, and SYD 84-29-006, Issue 1, or later approved revisions incorporated; or
 - (b) For aircraft without Modsum 4-184079 and Modsum 4-184081 incorporated:

Install Bombardier Modsum 4-113438 (modified fairlead plate assemblies). Bombardier Service Bulletin (SB) 84-54-09, dated 23 January 2004, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for incorporating Modsum 4-113438.

- 2. Within 4,000 hours air-time after the effective date of this directive:
 - (a) For aircraft with Bombardier Systems Drawings SYD 84-28-002, Issue 1, or later approved revisions, and SYD 84-29-006, Issue 1, or later approved revisions incorporated; or



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(b) For aircraft with Modsum 4-184079 and Modsum 4-184081 incorporated;

Install Bombardier Modsum 4-113438 (modified fairlead plate assemblies). Bombardier Service Bulletin (SB) 84-54-09, dated 23 January 2004, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for incorporating Modsum 4-113438.

Authorization: For Minister of Transport Canada

B. Goyaniuk

Chief, Continuing Airworthiness

Bohdon Hayanuk

Contact: Mr. Robin Lau, Transport Canada, Continuing Airworthiness, Ottawa, telephone

(613) 952-4461, facsimile (613) 996-9178 or e-mail laur@tc.gc.ca or any Transport

Canada Centre.