



No.	CF-2006-15	1/2
Issue Date	14 June 2006	

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.

- Number:** CF-2006-15
- Subject:** Electrical Wire Chafing at Wing Root to Fuselage Aft Seal Assemblies
- Effective:** 21 July 2006
- Applicability:** Bombardier Inc. DHC-8 aircraft, Models 102, 103, 106, 201, 202, 301, 311, 314 and 315, Serial Numbers 003 through 606.
- Compliance:** As detailed below, unless already accomplished.
- Background:** An incident has been reported in which a DHC-8 aircraft encountered an un-commanded propeller feathering during climb, resulting in an emergency landing. Investigation revealed that the wing-to-fuselage aft seal assembly had chafed through the wires associated with the auto-feather control system. Both the left and right wing-to-fuselage aft seal assemblies could potentially exhibit this condition.

Chafing and/or grounding of the wiring against the aft seal assemblies may interrupt the operation of various aircraft systems, including propeller feather control, AC electrical power, and/or standby hydraulic power, resulting in potential flight safety hazards.

Corrective Actions: Within 6000 hours air time after the effective date of this directive, accomplish:

1. Inspection and Repair of Right and Left Wiring Harnesses:

In accordance with the instructions contained in Bombardier Service Bulletin (SB) 8-24-83, Revision A, dated 2 August 2005, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, visually inspect for damage and repair as required:

- (a) The left electrical cable harness assembly 82440073-001 (DHC-8 Models 100/200) or 82440073-301 (DHC-8 Models 300) located on the left wing root to fuselage aft seal assembly 85350712-001 at station Yw43.00; and
- (b) The right electrical cable harness assembly 82440074-001 (DHC-8 Models 100/200) or 82440074-301 (DHC-8 Models 300) located on the right wing root to fuselage aft seal assembly 85350711-001 at station Yw43.00.

2. Modification.

Install Bombardier ModSum 8Y122031 to rework the seal assemblies to create a clearance between the electrical cable assemblies and the edge of the fairing panel. Bombardier SB 8-24-83, Revision A, dated 2 August 2005, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, contains approved instructions for incorporating Modsum 8Y122031.

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 www.tc.gc.ca/civilaviation/communications/centre/address.asp



NOTES:

1. Prior inspections of the wiring harnesses and modification of the seal assemblies (before the effective date of this directive) in accordance with the original issue of Bombardier SB 8-24-83, satisfy the requirements of this directive.
2. Incorporation of Bombardier ModSum IS8Q2400005 (before the effective date of this directive) is equivalent to Bombardier ModSum 8Y122031, and satisfies the requirements of this directive.

Authorization: Minister of Transport, Infrastructure and Communities

R. William Taylor
for B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Robin Lau, Continuing Airworthiness, Ottawa, telephone 613-952-4461, facsimile 613-996-9178 or e-mail laur@tc.gc.ca or any Transport Canada Centre.