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| No. | CF-2009-45 | 1/2 |
| Issue Date | 11 December 2009 | |

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) 521 Division X**. 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), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF- 2009-45

Subject: Aileron Terminal Quadrant Support Bracket Cracking

Effective: 7 January 2010

Applicability: Bombardier Inc. DHC-8 Aircraft, Models 301, 311, 314, and 315, Serial Numbers 100 through 530.

Compliance: When indicated, unless already accomplished.

Background: Several cases of aileron terminal quadrant support brackets that were manufactured using sheet metal have been found cracked on DHC-8 Series 300 aircraft. Investigation revealed that the failure of the support bracket was due to fatigue. Failure of the aileron terminal quadrant support bracket could result in an adverse reduction of aircraft roll control.

This directive mandates the replacement of the aileron terminal quadrant support bracket with a new and improved machined part.

- Corrective Actions:**
1. For aircraft with an aileron terminal quadrant support bracket, part number (P/N) 85711569 that have accumulated 30 000 hours air time or more at the effective date of this directive, incorporate Modsum 8Q101250 within 3 000 hours air time after the effective date of this directive. Bombardier Service Bulletin (SB) 8-57-43, Revision B, dated 7 October 2009, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for incorporating Modsum 8Q101250.
 2. For aircraft with an aileron terminal quadrant support bracket, part number (P/N) 85711569 that have accumulated less than 30 000 hours air time at the effective date of this directive, incorporate Modsum 8Q101250 within 6 000 hours air time after the effective date of this directive but not greater than 33 000 hours air time. Bombardier SB 8-57-43, Revision B, dated 7 October 2009, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for incorporating Modsum 8Q101250.

Note: Incorporation of Modsum 8Q101250 in accordance with Bombardier SB 8-57-43, Initial Issue, dated 9 August 2002 or Revision A, dated 17 January 2003 satisfies the requirement of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Philip Tang for

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Mr. Anthony Wan, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail [CAW WEB Feedback@tc.gc.ca](mailto:CAW_WEB_Feedback@tc.gc.ca) or any Transport Canada Centre.

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

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| No. Nº | CF-2009-45 | 2/2 |
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