



No.	<b>CF-2012-15</b>	1/2
Issue Date <b>30 April 2012</b>		

# 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-2012-15
- Subject:** Chafing of the Nacelle Fire Detection Wire on the Main Landing Gear Yoke
- Effective:** 14 May 2012
- Applicability:** Bombardier Inc. DHC-8 aeroplane models 400, 401 and 402, serial numbers 4001 through 4382.
- Compliance:** As indicated below, unless already accomplished.
- Background:** There have been two (2) in-service reports of chafing found on the main landing gear (MLG) yoke. The chafing was attributed to contact between the nacelle fire detection wire and the MLG yoke. This chafing may lead to cracking and subsequent failure of the MLG yoke.
- Failure of the MLG yoke could adversely affect the safe landing of the aeroplane. In addition, failure of the fire detection wire could prevent the detection of a fire in the nacelle assembly.
- This AD mandates the inspection of the nacelle fire detection wires and MLG yoke for damage and the installation of new brackets to secure the fire detection wire to prevent chafing against the MLG yoke.
- Corrective Actions:** Within 6000 hours air time or 36 months, whichever occurs first, from the effective date of this AD, perform the following:
- A. Perform a detailed visual inspection (DVI) of the left and right nacelle fire detection wire in accordance with the Accomplishment Instructions in Bombardier Service Bulletin (SB) 84-26-11, Revision A, dated 25 January 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
    1. If any damage is found on a fire detection wire, before further flight, remove and replace it with a new fire detection wire, both in accordance with the Accomplishment Instructions in the above-mentioned SB. Proceed to paragraph B of this AD.
    2. If no damage is found, proceed to paragraph B of this AD.
  - B. Perform a DVI of the MLG yoke in accordance with the Accomplishment Instructions in the above-mentioned SB.
    1. If no damage is found on the MLG yoke, proceed to paragraph C of this AD.

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](http://www.tc.gc.ca/civilaviation/communications/centre/address.asp)

2. If the damage found on the MLG yoke is within the limitations specified in Figure 8, of the above-mentioned SB, before further flight, repair the damaged area in accordance with the Accomplishment Instructions in Figure 9, Steps 1-10, of the above-mentioned SB. Proceed to paragraph C of this AD.
  3. If the damage found on the MLG yoke exceeds the limitations specified in Figure 8, of the above-mentioned SB, before further flight, contact the Bombardier Q Series Help Desk for approved repair instructions. The approved repair must specifically reference this AD. Proceed to paragraph C of this AD.
- C. Install the new nacelle brackets and associated hardware, in accordance with the Accomplishment Instructions in the above-mentioned SB.

**Authorization:** For the Minister of Transport, Infrastructure and Communities

*ORIGINAL SIGNED BY*

Derek Ferguson  
Chief, Continuing Airworthiness

**Contact:** Mr. Robert Farinas, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail [ADs@tc.gc.ca](mailto:ADs@tc.gc.ca) or any Transport Canada Centre.