



No.	CF-2011-46	1/1
Issue Date	20 December 2011	

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-2011-46
- Subject:** Burnt Alternating Current Wire Bundle Under Floor - Cockpit Door Area
- Effective:** 9 January 2012
- Applicability:** Bombardier Inc. DHC-8 Aeroplane Models 400, 401 and 402, Serial Numbers 4095 through 4391.
- Compliance:** As indicated below, unless already accomplished.
- Background:** There have been several reports of the loss of certain Alternating Current (AC) systems along with the tripping of associated circuit breakers. During maintenance troubleshooting, the same AC power wire bundle was found burnt. All AC systems and AC Generators could be affected by damage to this AC power wire bundle resulting in the loss of ice protection systems for the angle of attack vanes, pitot probes, engine inlets or windshields. In icing conditions, the loss of the ice protection systems could affect continued safe flight.
- This Airworthiness Directive (AD) mandates the detailed inspection of the AC power wire bundle and segregation of the wires within the affected AC power wire bundle to prevent a dual system loss.
- Corrective Actions:** Within 600 hours air time or 90 days, whichever occurs first, from the effective date of this AD, perform a detailed inspection of the affected AC power wire bundle for damage, repair as applicable and segregate the AC power wire bundle into two bundles, all in accordance with Bombardier Service Bulletin 84-24-52, dated 22 November 2011, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- Authorization:** For the Minister of Transport, Infrastructure and Communities
- ORIGINAL SIGNED BY*
- Derek Ferguson
Chief, Continuing Airworthiness
- Contact:** Miss Helen Tsai, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail CAWWEBFeedback@tc.gc.ca or any Transport Canada Centre.