



No.	CF-2009-05	1/2
Issue Date	29 January 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) 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-2009-05

Subject: Wing Fuel Tank Skin Without Aluminum-Loaded Paint

Effective: 18 March 2009

Applicability: Bombardier Inc. DHC-8 Aircraft, Models 102, 103, 106, 201, 202, serial numbers 003 through 663

Compliance: When indicated, unless already accomplished.

Background: During a puncture voltage test of the aluminum-loaded paint on an in-service DHC-8 aircraft, conducted to validate an SFAR 88 related task, Bombardier Aerospace (BA) discovered that the top wing fuel tank skin between Yw171.20 and Yw261.00 was painted with a non-aluminized enamel coating due to a misinterpretation of the painting instructions in the Structural Repair Manual (SRM).

With this type of paint application, it is possible that, in the worst case scenario, a lightning strike could puncture the wing skin and create an ignition source in the fuel tank.

Corrective Actions: Within 18 months after the effective date of this directive:

1. For Pre-Mod 8/0024 airplanes, perform a functional check of the dielectric properties of the upper and lower wing fuel tank skin between Yw171.20 and Yw261.00 in accordance with the Accomplishment Instructions of Bombardier Service Bulletin (SB) 8-57-46, dated 29 September 2008 or later revisions, approved by the Chief, Continuing Airworthiness, National Aircraft Certification, Transport Canada.
2. For Post-Mod 8/0024 airplanes, perform a functional check of the dielectric properties of the upper wing fuel tank skin between Yw171.20 and Yw261.00 in accordance with the Accomplishment Instructions of Bombardier SB 8-57-46, dated 29 September 2008 or later revisions, approved by the Chief, Continuing Airworthiness, National Aircraft Certification, Transport Canada.
3. If the functional check indicates that the aluminum-loaded primer and aluminum-loaded enamel coating have been properly applied, restore the protective finish on the areas where the surface finish was removed for the functional check in accordance with the Accomplishment Instructions of Bombardier SB 8-57-46, dated 29 September 2008 or later revisions, approved by the Chief, Continuing Airworthiness, National Aircraft Certification, Transport Canada. No further action is required.
4. If the functional check indicates that the aluminum-loaded primer and aluminum-loaded enamel coating have not been applied or have not been properly applied, the aircraft may be returned to service provided that the following have been accomplished:
 - a) Strip the affected wing skin surfaces to bare metal and apply alodine to those areas in accordance with the instructions of the DHC-8 Structural Repair Manual, PSM 1-8-3, Chapter 51-20-16 or PSM 1-82-3, Chapter 51-20-16.
 - b) At intervals not to exceed 90 hours air time, perform a detailed visual inspection of the stripped areas for any sign of corrosion or deterioration of the protective alodine coating. Re-apply the protective alodine coating as deemed necessary.

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

