



No.	CF-2003-07	1/2
Issue Date 19 March 2003		

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-2003-07

Subject: BOMBARDIER – CL-600-2C10 – Wing Anti-Ice Ducts

Effective: 25 March 2003

Applicability: Bombardier CL-600-2C10 (CRJ 700), serial number 10004 through 10119

Compliance: As indicated below unless already accomplished.

Background: Service Difficulty Reports have been received regarding failure of wing anti-ice ducts in three aircraft. Failure analysis indicates that the wing anti-ice ducts, located in the under-floor pressurized area, can collapse due to insufficient strength for the applied differential pressure. Crushing of the wing anti-ice ducts can result in duct cracks that leak hot air in the under-floor area of the fuselage.

Corrective Actions: **Part A - MMEL Revisions**

1. Within 48 hours of the effective date of this directive, amend the MMEL/MEL (as appropriate) by making the following changes or by inserting a copy of this directive:

- A. Item 30-12-06 - amend the relief for the Anti-Ice/Bleed Leak Detection Controller (AILC) channels as follows:

Remarks or Exception;

Delete

One may be inoperative as indicated by “WING A/I FAULT” status message on EICAS.

Add

One may be inoperative as indicated by “WING A/I FAULT” status message on EICAS provided:

- (a) Wing Anti-Ice switch is selected OFF, and
- (b) Operations are not conducted into known or forecast icing conditions.

- B. Item 36-21-07 - amend the relief for the Wing/Fuselage Anti-Ice Bleed Leak Detection Loops as follows:

Remarks or Exception;

Delete

One loop (A or B) may be inoperative

Add

One loop (A or B) may be inoperative provided:

- (a) Wing Anti-Ice switch is selected OFF, and**
- (b) Operations are not conducted into known or forecast icing conditions.**

Part B – Duct Inspections

2. Accomplish the following in accordance with Bombardier Alert Service Bulletin (ASB) A670BA-30-007 dated 18 March 2003, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada:
 - (a) before accumulating 150 hours air time after the effective date of this directive, conduct a detailed inspection of the four (4) suspect anti-ice ducts part numbers (P/Ns GG670-80504-3 & -4, and GG670-80312-1 & -2) for damage;
 - (b) before further flight, replace any damaged ducts ensuring that any replacement ducts acquired from spares inventory are free of any dents or other handling damage; and
 - (c) within 14 days of completing this inspection, report the inspection results to Bombardier as detailed in the aforementioned ASB.

Note: Replacement of all four ducts, with new wing anti-icing ducts (P/Ns GG670-80504-5 & -6 and GG670-80312-3 and -4) under paragraph 2.(b) of this directive, provides compliance with Part C, paragraph 3, of this directive.

Part C – Duct Replacement

3. Within 1500 hours air time of the effective date of this directive, replace the suspect wing anti-ice ducts with new wing anti-ice ducts (P/Ns GG670-80504-5 & -6 and GG670-80312-3 and -4) in accordance with the above-mentioned ASB or later approved revisions.
4. Following installation of new wing anti-icing ducts in accordance with paragraph 3 of this directive, restore the MMEL/MEL (as appropriate) relief under Items # 30-12-06 and # 36-21-07 to the version in place prior to the amendments introduced under paragraph 1 of this directive.

Authorization: For Minister of Transport



R.A. Raoux
Acting Chief, Continuing Airworthiness

Contact: Mr. Ian McLellan, Continuing Airworthiness, Ottawa, telephone (613) 952-4362, facsimile (613) 996-9178 or e-mail mclelli@tc.gc.ca or any Transport Canada Centre.