



No.	CF-2008-18	1/3
Issue Date 9 May 2008		

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-2008-18

Subject: Wing Anti-Ice Piccolo Ducts

Effective: 28 May 2008

Applicability: Bombardier Inc. Models:

CL-600-1A11 – Serial Numbers 1004 through 1085
CL-600-2A12 – Serial Numbers 3001 through 3066
CL-600-2B16 – Serial Numbers 5001 through 5194
CL-600-2B16 – Serial Numbers 5301 through 5635

Compliance: As indicated below, unless already accomplished.

Background: There have been several cases of wing anti-ice piccolo duct failure reported on CL-600-2B19 (CRJ) aircraft. Although there have been no failures reported on Challenger aircraft, similar ducts are installed on the above Challenger models.

Upon investigation, it has been determined that ducts manufactured since June 2000, and installed since 1 August 2000, are susceptible to cracking due to the process used to drill the holes in the ducts. These ducts were installed on CL-600-2B16 aircraft, serial numbers 5469 through 5635 in production, but may also have been installed as replacements on CL-600-1A11, CL-600-2A12 and other CL-600-2B16 aircraft.

Cracking of the wing anti-ice piccolo ducts could result in air leakage, with an adverse effect on the anti-ice air distribution pattern and a possible unannounced insufficient heat condition. As a result, the airplane flight manual (AFM) instructions have been revised to provide proper annunciation of an insufficient heat condition, utilizing existing messages and indications, with instructions, to the pilot, to leave icing conditions if sufficient heat cannot be achieved or maintained.

This directive mandates the amendment of the AFM procedures, in addition to checking the part numbers and serial numbers of the installed wing anti-ice piccolo ducts and replacing them as necessary.

Corrective Action:

A. Applicable to:

CL-600-1A11	Serial Numbers 1004 through 1085
CL-600-2A12	Serial Numbers 3001 through 3066
CL-600-2B16	Serial Numbers 5001 through 5194 and 5301 through 5635

Within 30 days of the effective date of this directive:

1. Amend the AFM Normal and Abnormal Procedures by inserting the applicable Temporary Revision (TR) or Revision listed below, or later approved changes to the applicable TR or Revision:

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

Canada

PSP 600 (DOT), TR 600/23	dated 16 August 2006
PSP 600-1 (DOT), TR 600-1/19	dated 16 August 2006
PSP 601-1A, TR 601/27	dated 16 August 2006
PSP 601-1A-1, TR 601/15	dated 16 August 2006
PSP 601-1B, TR 601/19	dated 16 August 2006
PSP 601-1B-1, TR 601/14	dated 16 August 2006
PSP 601A-1, TR 601/26	dated 16 August 2006
PSP 601A-1-1, TR 601/27	dated 16 August 2006
PSP 604-1, TR 604/20	dated 17 April 2006
PSP 604-1, Revision 66	dated 1 February 2007

2. Advise all flight crew of the changes introduced in the applicable AFM TR or Revision.

B. Applicable to:

CL-600-1A11	Serial Numbers 1004 through 1085
CL-600-2A12	Serial Numbers 3001 through 3066
CL-600-2B16	Serial Numbers 5001 through 5194 and 5301 through 5468

1. Within 2000 hours air time or 60 months after the effective date of this directive, whichever comes first, check the aircraft maintenance records (see Notes) to determine if any anti-ice piccolo ducts or complete leading edge sections have been replaced since 1 August 2000.

Notes:

- a) The aircraft maintenance records up to the accomplishment date of this directive are to be checked, not just to the original release date of the applicable Service Bulletin (SB) (i.e. 30 November 2006) as stated in the Service Bulletins listed in paragraph B.2 below.
 - b) The compliance time mandated above differs from the compliance time(s) specified in the applicable Service Bulletins listed in paragraph B.2 below.
2. If any anti-ice piccolo ducts or complete leading edge sections have been replaced since 1 August 2000, check the serial numbers of the replaced ducts and replace them, as determined necessary, in accordance with the Accomplishment Instructions in the applicable Bombardier Service Bulletin listed below, or later revision approved by the Chief, Continuing Airworthiness, Transport Canada.

Model	Service Bulletin	Date
CL-600-1A11 (CL-600)	SB 600-0734	30 November 2006
CL-600-2A12 (CL-601)	SB 601-0585	30 November 2006
CL-600-2B16 (CL-601-3A/3R)	SB 601-0585	30 November 2006
CL-600-2B16 (CL-604)	SB 604-30-003 or SB 604-30-003, Revision 1	30 November 2006 21 January 2008

C. Applicable to CL-600-2B16, Serial Numbers 5469 through 5635

Within 2000 hours air time or 60 months after the effective date of this directive, whichever comes first (see Note), visually check the anti-ice piccolo ducts and replace them, as determined necessary, in accordance with the Accomplishment Instructions in Bombardier Service Bulletin 604-30-003, basic issue dated 30 November 2006, Revision 1, dated 21 January 2008, or later revision approved by the Chief, Continuing Airworthiness, Transport Canada.

Note: The compliance time mandated above differs from the compliance time(s) specified in the Service Bulletin.

D. Applicable to:

CL-600-1A11	Serial Numbers 1004 through 1085
CL-600-2A12	Serial Numbers 3001 through 3066
CL-600-2B16	Serial Numbers 5001 through 5194
CL-600-2B16	Serial Numbers 5301 through 5635

As of the effective date of this directive, no replacement/spare anti-ice piccolo duct with a part number/serial number listed in paragraph 2.C of any of the following Bombardier Service Bulletins, or later revision approved by the Chief, Continuing Airworthiness, Transport Canada, is permitted to be installed on any aircraft.

Model	Service Bulletin	Date
CL-600-1A11 (CL-600)	SB 600-0734	30 November 2006
CL-600-2A12 (CL-601)	SB 601-0585	30 November 2006
CL-600-2B16 (CL-601-3A/3R)	SB 601-0585	30 November 2006
CL-600-2B16 (CL-604)	SB 604-30-003 Revision 1	21 January 2008

Authorization: For Minister of Transport, Infrastructure and Communities

Derek Ferguson
Acting Chief, Continuing Airworthiness

Contact: Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613-952-4428, facsimile 613-996-9178 or e-mail tophamr@tc.gc.ca or any Transport Canada Centre.