



No.	CF-2005-26R1	1/3
Issue Date	21 September 2005	

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-2005-26R1

Subject: Wing Anti-Ice Ducts (Piccolo Tubes) Cracked

Effective: 17 October 2005

Revision: Supersedes Airworthiness Directive CF-2005-26 issued 11 July 2005

Applicability: Bombardier CL-600-2B19, 7014, 7017, 7037, 7046, 7059, 7066, 7105, 7127, 7151, 7157, 7163, 7179, 7203, 7228, 7271, 7347, 7359, 7362, 7378, 7381 and 7417 through 7990 and 8000 through 8055.

Compliance: As indicated below, unless already incorporated.

Background: Transport Canada has received reports of several failed wing anti-ice ducts (piccolo tubes) located in the wing leading edge. Upon investigation, it has been determined that piccolo tubes manufactured since June 2000 are susceptible to cracking due to the process used to drill the air distribution holes. Such cracking may cause air leakage, with a possible adverse effect on the anti-ice air distribution pattern and anti-ice capability, without annunciation to the flight crew.

Revision 1 of this directive is intended to revise the aircraft serial number applicability. This revision does not introduce additional mandatory action.

Note: Illustrated Part Manual Temporary Revision (TR) 30-018, dated 29 August 2005, clarifies the interchangeability of the different piccolo tube (wing anti-ice duct assembly) part numbers. It also specifies that installation of piccolo tubes with the part number and serial numbers listed in paragraph 1.A of Service Bulletin 601R-30-029, Revision B, is limited to the aircraft serial numbers included in the Applicability section of this revision.

Corrective Actions: A. Airplane Flight Manual (AFM) Change.

1. Applicable to aircraft serial numbers 7417 through 7990 and 8000 through 8055:

Within 14 days of 18 July 2005 (the effective date of the original issue of this directive):

- (a) Amend the AFM by inserting Temporary Revision (TR) RJ/155 dated 5 July 2005, or later approved changes to this AFM TR.
- (b) Advise all flight crew on the changes introduced through the AFM TR.

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



2. Applicable to aircraft serial numbers 7014, 7017, 7037, 7046, 7059, 7076, 7105, 7127, 7151, 7157, 7163, 7179, 7203, 7228, 7271, 7347, 7359, 7362, 7378 and 7381:

Within 14 days of the effective date of this revision:

- (a) Amend the AFM by inserting Temporary Revision (TR) RJ/155-1, dated 5 August 2005, or later approved changes to this AFM TR.
- (b) Advise all flight crew on the changes introduced through the AFM TR.

Notes:

- 1. The Operating Limitations and Abnormal Procedures in AFM TR RJ/155 and TR RJ/155-1 apply to all applicable aircraft with 3000 hours air time or more, which are not compliant with the inspection requirements of Bombardier Service Bulletin (SB) 601R-30-029, as detailed in Parts B and C of this directive.
- 2. Master Minimum Equipment List (MMEL) entry 30-12-03, which permits the wing anti-ice system to be inoperative with specific provisions, is not affected by this directive.

B. Initial Inspection of the Wing Anti-Ice Piccolo Tubes.

- 1. At the operator's convenience, remove and inspect all of the piccolo tubes installed which have serial numbers listed in Paragraph 1.A of Bombardier Service Bulletin 601R-30-029, Revision B, dated 5 August 2005, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. The inspection procedures are contained in the above-mentioned SB.

Note: Inspections done in accordance with the original issue or Revision A of Bombardier Service Bulletin 601R-30-029 meet the requirements of Part B, paragraph 1 of this directive.

- 2. If one or more of the piccolo tubes is cracked carry out one of the following actions before next flight:
 - (a) Replace the cracked piccolo tube with a tube which has the same part number as listed in paragraph 1.A. of the above-mentioned SB, but which does not have a serial number listed in the same service bulletin paragraph;
 - (b) Replace the cracked piccolo tube with a tube with a different part number (as listed in the illustrated parts catalog) to those listed in paragraph 1.A. of the above-mentioned SB. This includes use of tubes detailed in Part E of this directive;
 - (c) Replace the cracked piccolo tube with a tube which has been inspected in accordance with the above-mentioned SB, is not cracked, and has not accumulated any air time since inspection;
 - (d) Repair the cracked piccolo tube in accordance with an approved repair supplied by Bombardier;
 - (e) Replace the cracked piccolo tube with a tube that has been repaired in accordance with an approved repair supplied by Bombardier and has not accumulated any air time since repair; or
 - (f) Reinstall the cracked piccolo tube and dispatch the aircraft using provision of MMEL entry 30-12-03.

C. Repeat Inspection of the Wing Anti-Ice Piccolo Tubes.

At or before 2000 hours air time since the last inspection, repeat the inspection of the piccolo tubes as detailed in Part B of this directive.

D. Reporting.

Report the results of each inspection to Bombardier within seven (7) days using the Data Sheet provided in Appendix B of the above-mentioned SB.

E. Terminating Action.

1. Installation of a complete set of new inboard, centre and outboard piccolo tubes, as detailed below, constitutes terminating action for the requirements of Parts A, B, C and D of this directive:

Inboard: Part numbers 601-80032-7 (14432-107) and 601-80032-8 (14432-108)

Centre: Part numbers 14464-105 and 14464-106

Outboard: Part numbers 14463-109 and 14463-110

2. Upon completion of the actions specified above in Part E, paragraph 1. of this directive, remove the Operating Limitations and Abnormal Procedures (inserted in accordance with Part A of this directive) from the AFM.

Authorization: For Minister of Transport



B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613 952-4428, facsimile 613 952-5178 or e-mail tophamr@tc.gc.ca or any Transport Canada Centre.

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