



No.	CF-2010-12	1/2
Issue Date	6 May 2010	

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-2010-12

Subject: Wing Leading Edge Thermal Switches and Wing Anti-Ice Duct Piccolo Tubes – Airworthiness Limitation Tasks

Effective: 26 May 2010

Applicability: Bombardier Inc. Model: CL-600-2B19, Serial Numbers 7003 and subsequent

Compliance: As indicated below, unless already accomplished.

Background: During flight-testing of a wing anti-ice piccolo tube containing a deliberate small breach, it was determined that the wing leading edge thermal switches Part Number (P/N) 601R59320-1 were not detecting the consequent bleed leak at the design threshold. As a result, Airworthiness Limitation (AWL) tasks, consisting of a functional check of the wing leading edge thermal switches (P/N 601R59320-1) and an inspection of the wing anti-ice duct piccolo tubes on aeroplanes with these switches installed, have been introduced. These tasks will limit exposure to dormant failure of the wing leading edge thermal switches in the event of piccolo tube failure, which could potentially compromise the structural integrity of the wing leading edge and the effectiveness of the wing anti-ice system.

This directive mandates revision of the approved maintenance schedule to include the above referenced tasks, including phase-in schedules that supersede the phase-in schedules specified in the AWL tasks.

Note: Thermal switches, P/N 601R59320-1, were installed in production on aircraft Serial Numbers (S/N) 7213 and subsequent. Service Bulletin 601R-30-022 covered in-service installation of these switches on aircraft S/Ns 7003 through 7212.

Corrective Actions: A. Revision of Maintenance Schedule

Within 30 days after the effective date of this directive:

Revise the Transport Canada approved maintenance schedule by incorporating the thermal switch functional check and piccolo tube inspection requirements (task numbers identified below) contained in the applicable Temporary Revision (TR) to the Maintenance Requirements Manual (MRM), CSP A-053, Part 2, Appendix A, Certification Maintenance Requirements, as follows:

- MRM TR 2A-50, dated 17 November 2009: Task Number C36-20-133-03
- MRM TR 2A-49, dated 17 November 2009: Task Number C30-10-133-01

B. Phase-In Schedule

The phase-in schedules for the initial functional check of the thermal switches and the initial inspection of the piccolo tubes, as detailed below, supersede those specified in Paragraphs 1 and 2 of MRM TRs 2A-50 and 2A-49:

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

- 1) Functional Check of the Thermal Switches (Task Number C36-20-133-03)
 - (a) For aeroplanes that have 15 000 Flight Hours (FH) or less at the effective date of this directive, do the initial functional check of the thermal switches by 15 000 FH or by 31 December 2010, whichever occurs last.
 - (b) For aeroplanes that have more than 15 000 FH at the effective date of this directive, do the initial functional check of the thermal switches by 31 December 2010.
- 2) Inspection of the Piccolo Tubes (Task Number C30-10-133-01)
 - (a) For piccolo tubes that have 15 000 FH or less at the effective date of this directive, do the initial inspection by 15 000 FH or by 31 December 2010, whichever occurs last.
 - (b) For piccolo tubes that have more than 15 000 FH at the effective date of this directive, do the initial inspection by 31 December 2010.

- Notes:
1. Notes 1. and 2. in MRM TR 2A-49 remain applicable.
 2. Compliance with superseding TRs or later revisions of the MRM, approved by Transport Canada, also satisfies the requirements of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail CAWWEBFeedback@tc.gc.ca or any Transport Canada Centre.