



No.	CF-2009-09	1/2
Issue Date	9 March 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), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

- Number:** CF-2009-09
- Subject:** Fuel System Safety - Hydraulic System Overheat Inside the Fuel Tank
- Effective:** 30 March 2009
- Applicability:** Bombardier Inc. Model CL-600-2C10 aircraft, serial numbers 10003 through 10267 and CL-600-2D15/CL-600-2D24 aircraft, serial numbers 15001 through 15199, 15202 and 15204.
- Compliance:** As indicated, unless already accomplished.
- Background:** Bombardier Aerospace has completed a system safety review of the CL-600-2C10/CL600-2D15/CL-600-2D24 aircraft fuel system against the new fuel tank safety standards, introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002-043. The identified non-compliances were assessed using Transport Canada Policy Letter No. 525-001 to determine if mandatory corrective action was required.

The assessment showed that certain hydraulic system failure scenarios could lead to a rapid overheat in the hydraulic lines without giving flight crew sufficient time to react before the No. 1 and No. 2 hydraulic system tubing inside the fuel tank reaches the fuel auto ignition temperature. This could result in a fuel tank explosion.

To correct the unsafe condition, this directive mandates the installation of thermal fuses in the No. 1 and No. 2 hydraulic systems and the introduction of Fuel System Limitations (FSL) and Critical Design Configuration Control Limitations (CDCCL) associated with this design change.

- Corrective Actions:** **Part I – Installation of Hydraulic System Fuses**
Within 6000 hours air time after the effective date of this directive, modify the aircraft hydraulic system by installing thermal fuses, according to the Accomplishment Instructions of Revision A of Bombardier Service Bulletin (SB) 670BA-29-005, dated 29 January 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Note: Modification of the hydraulic system prior to the effective date of this directive according to the original issue of the above-noted SB satisfies the requirements of Part I.

Part II – Incorporation of FSL

Within 6000 hours air time after the effective date of this directive, revise the Transport Canada approved maintenance schedule by incorporating the following maintenance requirements as introduced through Temporary Revision (TR) 2-269 of Canadair Regional Jet Models CL-600-2C10, CL-600-2D15 and CL-600-2D24 Maintenance Requirements Manual, CSP B-053, Part 2, Section 3, "Fuel System Limitations":

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 (AAC)** at Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or www.tc.gc.ca/civilaviation/communications/centre/address.asp



Task Number	Task Description
29-30-00-603	Hydraulic System No. 1 and No. 2 Thermal Fuse: Discard the system No. 1 and No. 2 thermal fuse (Post Modsum 670T112042 or SB 670BA-29-005)

Part III – Incorporation of CDCCL

To ensure management and control of CDCCL items, each operator must comply with paragraphs A. and B. below prior to the completion of Part I of this directive on any aircraft in the operator's fleet.

- A. Amend their copies of the Bombardier CL-600-2C10, CL-600-2D15, CL-600-2D24 Maintenance Requirements Manual, CSP B-053, Part 2, Section 3, "Fuel System Limitations" to incorporate the CDCCL items introduced through TR 2-268 of this manual.
- B. Amend any of their CL-600-2C10, CL-600-2D15, CL-600-2D24 aircraft related procedures and documentation to highlight the existence of CDCCL items noted in paragraph A. above, and to highlight the necessary requirements to maintain the design features of those CDCCL items.

Authorization: For Minister of Transport, Infrastructure and Communities

Eric Lucas
Acting Chief, Continuing Airworthiness

Contact: Mr. Philip Tang, Continuing Airworthiness, Ottawa, telephone 613-952-4365, facsimile 613-996-9178 or e-mail philip.tang@tc.gc.ca or any Transport Canada Centre.