



No.	CF-2008-20	1/1
Issue Date	12 June 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-2008-20  
**Subject:** Fuel System Safety - Insufficient Electrical Bonding at the Refuel/Defuel Shutoff Valves  
**Effective:** 30 June 2008  
**Applicability:** The following Bombardier Inc. Model CL-600-2B19 aircraft:

- serial numbers 7003 through 7067, 7069 through 7939 that have not incorporated the modification of the refuel/defuel shutoff valves according to the original issue of Bombardier Service Bulletin (SB) 601R-28-053; and
- serial numbers 7989, 7990, and 8000 through 8034.

**Compliance:** Within 5000 hours air time after the effective date of this directive, unless already accomplished.

**Background:** Bombardier Aerospace has completed a system safety review of the CL-600-2B19 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 is required.

The assessment showed that insufficient electrical bonding between the refuel/defuel shutoff valves and the aircraft structure could occur due to the presence of a non-conductive gasket (Gask-O-Seal). In addition, it was also determined that the presence of an anodic coating on the shutoff valve electrical conduit connection fitting could affect electrical bonding. The above conditions, if not corrected, could result in arcing and potential ignition source inside the fuel tank during lightning strikes and consequent fuel tank explosion.

To correct the unsafe condition, this directive mandates the modification of the refuel/defuel system.

**Corrective Actions:** Carry out the modification of refuel/defuel system in the center wing fuel tank according to the Accomplishment Instructions of Bombardier SB 601R-28-053, Revision C, dated 14 March 2006 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Note: Modification of refuel/defuel system prior to the effective date of this directive according to Revision A or Revision B of the above-noted SB satisfies the requirements of this directive.

**Authorization:** For Minister of Transport, Infrastructure and Communities

Philip Tang  
Acting Chief, Continuing Airworthiness

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

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](http://www.tc.gc.ca/civilaviation/communications/centre/address.asp)