Transport Canada Transports Canada

TP 7245E

No. CF-2006-17R1 1/2

Issue Date 30 May 2007

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-2006-17R1**

Subject: **AC Contactor Failure**

Effective: 20 June 2007

Revision: Supersede Airworthiness Directive CF-2006-17 issued on 11 July 2006

Applicability: Bombardier Inc. Model CL-600-2B19, serial number 7003 thru 7990 and 8000 thru 8070.

Compliance: Within twelve (12) months from the effective date of this directive, unless already accomplished.

Background: There have been eight incidents of short-circuit failures of Tyco Hartman AC contactors – 1K4XD and K4XA - located in the avionics bay. All of the failed AC contactors had a terminal base plate made from non-G9 melamine material (Ultem 2200 material or black in color).

In several cases, the arcing, which was initiated due to the presence of contaminants between the power studs, resulted in a fire that continued until power to the contactor was interrupted, either by burned-through wire or through the generator falling offline. Sealing non-G9 terminal base plate will significantly reduce the risk of arcing and fire.

Applying RTV sealant on the non-G9 terminal base plates is considered interim action. This directive has been revised to mandate the installation of the contactors that have a terminal base plate made from G9 melamine material as the terminating action. This revision also amends the applicability for CL-600-2B19 aircraft.

Corrective Action:

1. In accordance with Bombardier service bulletin (SB) 601R-24-123, Revision B, dated 16 February 2007, or later revisions approved by Chief, Continuing Airworthiness, Aircraft Certification, carry out the following:

   a) Visually inspect the AC service bus contactors 1K4XD and 2K4XD, part number (P/N) D-18ZZA, and the utility bus contactor K4XA, P/N D-7GRZ, and determine which AC contactors have a non-G9 terminal base plate; and

   b) If the contactors 1K4XD, 2K4XD or K4XA are determined to have a non-G9 terminal base plate, replace the AC service bus contactors 1K4XD and 2K4XD with new part number (P/N) D-18ZZC and the utility bus contactor K4XA with new part number (P/N) D-7GSZ.

2. As of the effective date of this directive, no person shall install a replacement AC contactor 1K4XD, 2K4XD or K4XA, that has a non-G9 terminal base plate.

Authorization: For Minister of Transport, Infrastructure and Communities

B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Anthony Wan, Continuing Airworthiness, Ottawa, telephone 613-952-4410, facsimile 613-996-9178 or e-mail wana@tc.gc.ca or any Transport Canada Centre.