



No.	<b>CF-2011-27</b>	1/1
Issue Date	<b>25 July 2011</b>	

# 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-2011-27

**Subject:** Air Driven Generator Failure to Power Essential Buses

**Effective:** 13 August 2011

**Applicability:** Bombardier Inc. Aeroplanes:

**Model CL-600-2C10, Serial Number 10003 through 10319**  
**Models CL-600-2D15 and CL-600-2D24, Serial Numbers 15001 through 15260**  
**Model CL-600-2E25, Serial Numbers 19001 through 19012**

**Compliance:** As indicated below, unless already accomplished.

**Background:** There have been several occurrences of the air driven generator (ADG) failure to power essential buses during functional tests of the ADG on aeroplane models CL-600-2B16 and CL-600-2B19. The aeroplane models CL-600-2C10, CL-600-2D15, CL-600-2D24, and CL-600-2E25 use the same ADG generator control unit (GCU) as models CL-600-2B16 and CL-600-2B19. However the aeroplane models CL-600-2C10, CL-600-2D15, CL-600-2D24, and CL-600-2E25 are installed with a different hydraulic pump and do not experience the same failure due to the low threshold setting of the circuit protection. However, it was found that the same ADG GCU transformer primary winding can break due to thermal fatigue. Broken transformer primary winding can prevent the supply of power from the ADG to the essential buses. In the event of an emergency, failure for the essential buses to remain powered can prevent continued safe flight.

This directive mandates the replacement of the ADG GCU.

**Corrective Actions:** Within 10 000 hours air time or 60 months from the effective date of this directive, whichever occurs first, remove and replace the ADG GCU Part Number (P/N) 604-90800-7 with a new ADG GCU P/N 604-90800-27 in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-24-031, dated 30 May 2011, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

As of the effective date of this directive, no ADG GCU P/N 604-90800-7 is permitted to be installed on any aeroplanes.

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

*ORIGINAL SIGNED BY*

Robin Lau  
 Acting Chief, Continuing Airworthiness

**Contact:** Miss Helen Tsai, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail [CAWWEBFeedback@tc.gc.ca](mailto:CAWWEBFeedback@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)

