



No.	CF-2005-12R1	1/1
Issue Date	23 December 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-2005-12R1
Subject: Failure of Proximity-Sensor Electronic Unit
Revision: Supersedes Airworthiness directive (AD) CF-2005-12 issued on 26 April 2005.
Effective: 23 January 2009
Applicability: Bombardier Inc. BD-100-1A10, Serial Numbers 20002 through 20153.
Compliance: As indicated unless already accomplished.
Background: There has been an incident during a production flight test where the proximity-sensor electronic unit (PSEU) failed. This resulted in unannounced loss of:

- Wheel brakes below 10 knots;
- Thrust reverser;
- Nose wheel steering; and
- Auto-deployment of the multi-function spoilers.

A similar condition, if not corrected, may result in reduced controllability of the aircraft upon landing and possible overrun of the runway.

The original issue of this directive mandated the introduction of non-normal procedures to the airplane flight manual (AFM) as an interim corrective action to address PSEU failures.

Revision 1 of this directive amends the aircraft applicability and introduces a note providing terminating action, for use at operator discretion, if the aircraft has incorporated a PSEU with software version 12 in accordance with Bombardier Service Bulletin (SB) 100-32-12.

Corrective Action: **A. AFM Change**

Within 14 days after the effective date of this directive:

1. Amend the Bombardier Challenger 300 AFM, CSP 100-1, by inserting Temporary Revision (TR) number TR-39, dated 2 March 2005, or later approved revisions.
2. Advise all flight crews on the changes introduced through the AFM TR.

Note: If the aircraft has incorporated a PSEU, part number (P/N) 30227-0401, 30227-0402 or 30227-0403, with software version 12 in accordance with Bombardier SB 100-32-12, dated 4 June 2007 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, it is permissible to follow the revised AFM procedures introduced at TR number TR-46, dated 27 March 2008 or later approved revisions in lieu of AFM under paragraph 1 of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities

Robin Lau
Acting 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.

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