Transport Canada / Transports Canada

TP 7245E

No. CF-2014-24 | 1/1

Issue Date 5 August 2014

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-2014-24**

ATA: **27** **Type Certificate: A-234**

Subject: **Flight Controls – Spoiler Electronic Control Unit (SECU) Software Fault**

Effective Date: **19 August 2014**

Applicability: **Bombardier Inc. model BD-100-1A10 aeroplanes, equipped with SECU Part Number (P/N) C47330-006, C47330-007 or C47330-008.**

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

Background: During testing of the software for an upgrade of the spoiler electronic control unit (SECU), a timing error between the Command and Monitor channels was found in the SECU software. This timing error, if not corrected, in combination with the failure of the roll disconnect switch, may lead to a complete loss of spoiler functionality and result in a reduction or complete loss of aeroplane roll control.

This AD mandates the SECU software modification to correct the timing error and to change the inspection interval for a maintenance task based on System Functional Hazard Analysis.

Corrective Actions:

Part I - Operational Test of Aileron Disconnect System

A. Within 400 hours air time from the effective date of this AD or 600 hours air time since the last operational test, whichever occurs first, perform an operational test of the aileron disconnect system, Task Number 27-11-00-301 in Part 3 of the BD-100-1A10 Time Limits/Maintenance Checks (TLMC) Manual, and

B. Subsequently, at intervals not to exceed 400 hours air time until Part II of this AD is accomplished.

Part II - Modification of the SECU

A. Within 1600 hours air time from the effective date of this AD but no later than 31 October 2018, remove, modify and re-identify the SECU in accordance with Accomplishment instructions of Bombardier Service Bulletin 100-27-16, Basic Issue, dated 31 October 2013, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

B. As of the effective date of this AD, no person may install a SECU, P/N C47330-006, C47330-007 or C47330-008, on an aeroplane.

Authorization: For the Minister of Transport,

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.