



No.	CF-2013-03	1/2
Issue Date	05 February 2013	

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-2013-03

Subject: Elevator Control System – Erratic Pitch Movement and Oscillatory Behavior

Effective: 19 February 2013

Applicability: Bombardier Inc. aeroplanes:

Model CL-600-2C10, serial numbers 10002 through 10999

Models CL-600-2D15 and CL-600-2D24, serial numbers 15001 through 15990

Model CL-600-2E25, serial numbers 19001 through 19990

Compliance: As indicated below, unless already accomplished.

Background: There have been several reported incidents of erratic pitch movements and oscillatory behaviors of the elevator control system. Investigation revealed that the increase in the elevator breakout force induced by the introduction of a new elevator centering mechanism, in combination with the existing bracket assembly backlash and bearing friction of the bellcrank support, could result in erratic pitch movement and oscillatory behavior of the elevator control system. This condition, if not corrected, could result in pitch upset of the aeroplane that generates transient accelerations. These accelerations could be high enough to injure aeroplane occupants that are not restrained in their seats.

This AD mandates the repetitive replacement of the bellcrank supports with a new bearing.

Corrective Actions: A. Replace the bellcrank supports, part number (P/N) AV670-23350-001 (left side) and P/N AV670-23350-002 (right side), on the inner rear spar of the horizontal stabilizer in accordance with the Accomplishment Instructions of Bombardier Aerospace Service Bulletin (SB) 670BA-27-064, dated 11 December 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, in accordance with the following schedule:

Accumulated hours air time at the Effective Date of this AD	Compliance Schedule
Less than or equal to 18 000 hours air time	Before the aeroplane reaches 24 600 hours air time
More than 18 000 but not more than 23 400 hours air time	Within 6600 hours air time from the effective date of this AD
More than 23 400 but not more than 28 500 hours air time	Before the aeroplane reaches 30 000 hours air time
More than 28 500 hours air time	Within 1500 hours air time from the effective date of this AD.

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

Canada

- B. Repeat the replacement of the bellcrank supports, P/N AV670-23350-001 (left side) and P/N AV670-23350-002 (right side) on the inner rear spar of the horizontal stabilizer in accordance with the above-mentioned SB at interval not to exceed 20 000 hours air time.

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

ORIGINAL SIGNED BY

Robin Lau
Acting Chief, Continuing Airworthiness

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