



AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.

Number:

CF-2014-44R2

Effective Date:

5 March, 2018

ATA:

27

Type Certificate:

A-131

Subject:

Flight Controls – Elevator Control System - Disconnect

Revision:

Supersedes AD CF-2014-44R1, issued 6 October 2017

Applicability:

Bombardier Inc.

Model CL-600-2C10 aeroplanes, serial numbers 10002 through 10337,
Models CL-600-2D15 and CL-600-2D24 aeroplanes, serial numbers 15001 through 15298.

Compliance:

As indicated below, unless already accomplished.

Background:

During an engineering review of the Elevator Control system, it was discovered that a disconnect between the elevator lever and control rod could lead to an uncommanded elevator movement of the associated control surface. This uncommanded movement may cause a large difference between the position of the left and the right elevator control surface resulting in reduced controllability of the aeroplane and compromised structural integrity of the horizontal stabilizer.

This AD mandates the replacement of the existing elevator lever assemblies and control rods with newly designed ones, which will prevent a disconnect between the components of the elevator control system should a failure occur.

Revision 1 of this AD was issued to require operators, who have completed the actions required in all versions of Service Bulletin (SB) 670BA-27-062, to perform a detailed visual inspection for the correct installation of the tab key washers and to re-torque the nut(s) if the tab key washer(s) does not have one tab bent on a flat surface of the self-locking nut.

Revision 2 of this AD is issued to correct an editorial error. In Part I of the AD, the revision date of the SB 670BA-27-062, Revision D was corrected to read 1 December 2015.

Corrective Actions:

Part I: Modification of the Elevator Lever Assemblies and the Control Rods

Within 9200 hours air time or 5 years, whichever occurs first, from the effective date of the original issue of this AD (23 December 2014), unless already accomplished, remove and replace the left and the right fixed control rods and lever assemblies of the elevator control system. Bombardier Aerospace (BA) SB 670BA-27-062, Revision E, dated 8 June 2017, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides the approved instructions for replacement of the left and right fixed control rods and lever assemblies.

Bombardier Aerospace SB 670BA-27-062, Initial Issue, dated 12 December 2013, or Revision A, dated 1 April 2014, or Revision B, dated 10 October 2014, or Revision C, dated 13 February 2015, or Revision D, dated 1 December 2015, also meet the requirements of Part I of this AD.

Part II: Detailed Visual Inspection for the Correct Installation of the Key Washers and Re-torque of the Self-Locking Nuts

Within 8800 hours air time from the effective date of Revision 1 of this AD, inspect and, if required, re-torque the self-locking nuts of the elevator control linkages. SB 670BA-27-062 Revision E, dated 8 June 2017, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provide the approved instructions for this inspection.

Aeroplanes that have incorporated SB 670BA-27-062, Revision C, dated 13 February 2015, or earlier revisions of this SB, in conjunction with Service Non-Incorporated Engineering Order (SNIEO) KBA670-93707 S02 also meet the requirements of Part II of this AD.

Aeroplanes that have incorporated SB 670BA-27-062, Revision D, dated 1 December 2015, also meet the requirements of Part II of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 19 February 2018

Contact:

Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 1-888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.