



# 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-2017-19

**Effective Date:**

20 June 2017

**ATA:**

27

**Type Certificate:**

A-131

**Subject:**

Flight Control – Rudder Travel Limiter – Return Springs Failure and Limiter Arm Lug Deformation

**Replacement:**

Supersedes and cancels AD CF-2010-18R1, issued on 19 March 2012.

**Applicability:**

Bombardier Inc. aeroplanes:

Model CL-600-2C10, serial numbers 10002 through 10344;

Models CL-600-2D15 and CL-600-2D24, serial numbers 15001 through 15397.

**Compliance:**

As indicated below, unless already accomplished.

**Background:**

Transport Canada AD CF-2010-18R1 mandated a repetitive inspection and introduced a new rudder travel limiter (RTL) return spring, part number (P/N) BA670-93468-1, to correct the potential dormant RTL spring failure. This AD is issued to supersede the repetitive inspection and the replacement of the RTL spring due to discoveries made after the issuance of AD CF-2010-18R1.

When installing the RTL return spring P/N BA670-93468-1 as mandated by AD CF-2010-18R1, it was found that it is possible for the RTL limiter arm assembly lug to be deformed. The lugs become bent when the RTL return spring attachment bolt is torqued. This condition, if not corrected, can lead to failure of the limiter arm assembly lug. In combination with failure of the RTL, failure of the limiter arm assembly lug could affect the controllability of the aeroplane.

This AD mandates the inspection for cracked RTL limiter arm lugs and modification of the RTL limiter arm to prevent the RTL limiter arm lugs from bending during RTL assembly.

**Corrective Actions:**

**Part I - Rudder Travel Limiter Return Spring Replacement and Limiter Arm Modification:**

**Applicable to aeroplanes equipped with RTL Return Spring BA670-93465-1 or E0650-069-02750S**

Within 800 hours air time or 4 months, whichever occurs first, from the effective date of this AD, replace the RTL return springs, perform an eddy current inspection of the RTL limiter arm lug, replace as required, and modify the RTL limiter arm assembly in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin (SB) 670BA-27-070, Revision B, dated 31 March 2017, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Accomplishment in accordance with previous revisions of Bombardier SB 670BA-27-070 also meets the requirements of Part I of this AD.

Accomplishment in accordance with Bombardier SB 670BA-27-059, **does not** meet the requirements of Part I of this AD.

**Part II – Modification of the Limiter Arm Assembly of the Rudder Travel Limiter: Applicable to aeroplanes equipped with RTL Return Spring BA670-93468-1**

Within 8000 hours air time from the effective date of this AD, perform an eddy current inspection of the RTL limiter arm lug, replace as required, and modify the RTL limiter arm assembly in accordance with Part B of the Accomplishment Instructions of Bombardier SB 670BA-27-070, Revision B, dated 31 March 2017, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Accomplishment in accordance with previous revisions of Bombardier SB 670BA-27-070 also meets the requirements of Part II of this AD.

Accomplishment in accordance with Bombardier SB 670BA-27-059, **does not** 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 6 June 2017

**Contact:**

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