



# 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) with ADs.*

**Number:**

CF-2024-31

**Effective Date:**

23 September 2024

**ATA:**

27

**Type Certificate:**

A-131

**Subject:**

Flight Controls – Flap System On-Board Recorder (FSOBR) effects on Flap Control Unit

**Applicability:**

Bombardier Inc. model CL-600-2B16 aeroplanes, all serial numbers.

**Compliance:**

Within 1000 hours air time or 14 months, whichever occurs first, from the effective date of this AD, unless already accomplished.

**Background:**

The FSOBR was introduced in 2015 as an option for customers to facilitate troubleshooting on flap system failures. The FSOBR interfaces with the Flap Control Unit Input/Output (I/O) signals and may result in the Flap Control Unit monitors tripping, causing Flap Fail messages and possibly an uncommanded flap movement. When this event combines with other flap system failures, it can lead to an uncommanded flap runaway. This condition can lead to loss of control of the aeroplane. Subsequent investigations have shown that disconnecting the FSOBR eliminates this failure mode.

This AD requires the disconnection of the FSOBR and the prohibition of future installation of this system.

**Corrective Actions:**

**Part I – FSOBR Disconnection**

Disconnect the FSOBR in accordance with Section 2.B of the Accomplishment Instructions of the applicable Service Bulletin (SB) listed in Table 1 below.

**Table 1 – SB References**

<b>Aeroplane Model (Marketing Designation)</b>	<b>Aeroplane Serial Number</b>	<b>Applicable SB</b>
CL-600-2B16 (Challenger 604)	5301 through 5665	604-27-041, Basic Issue, dated 20 May 2024, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada
CL-600-2B16 (Challenger 605)	5701 through 5988	605-27-012, Basic Issue, dated 20 May 2024, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada
CL-600-2B16 (Challenger 650)	6050 through 6999	650-27-005, Basic Issue, dated 20 May 2024, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada

**Part II – Part Installation Prohibition**

As of the effective date of this AD, it is prohibited to re-connect or install the FSOBR Unit Part Number (P/N) (604-70201-1) or the FSOBR Harness P/N (604-57140-3) on the Bombardier Inc. model CL-600-2B16 aeroplanes, all serial numbers.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Jenny Young  
Chief, Continuing Airworthiness  
Issued on 9 September 2024

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