



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-2022-30

Effective Date:

17 June 2022

ATA:

27

Type Certificate:

A-177

Subject:

Flight Controls – Flap Fail on Approach

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9001 through 9998 and 60001 through 60097.

Compliance:

Within 30 days from the effective date of the AD, unless already accomplished.

Background:

It was discovered that in the case of a flap, slat or slat-flap failure in flight, resetting the slat flap control unit (SFCU) to clear the error in accordance with the Airplane Flight Manual (AFM) can result in the stall protection computer (SPC) setting the low-speed cue to the most conservative stall advance mode instead of that published in the AFM. This may result in unexpected stall warnings, aural and visual as well as stick shaker activation during approach for a landing, increasing crew workload during a critical phase of flight. The higher landing speed will consequently require a greater landing distance and possible diversion to a longer runway.

This AD mandates the incorporation of a revision to the AFM to revise the affected procedures addressing a flap, slat or slat-flap failure warning. The revision removes the SFCU in-flight reset from each set of affected procedures to avoid the SPC issue described above. The Quick Reference Handbook (QRH) was also modified by Bombardier.

Corrective Actions:

- A. Amend the applicable Transport Canada approved AFM by incorporating all chapters as follows, in accordance with the applicable AFM publication number indicated in Table 1 below or later revisions approved by Transport Canada:

Chapter 5 – Non-Normal Procedures

- Non-Normal Procedures – Flight Controls, 3. Slat and Flap Control Systems, C. Flap Fail (Caution)
- Non-Normal Procedures – Flight Controls, 3. Slat and Flap Control Systems, D. Slat Fail (Caution)
- Non-Normal Procedures – Flight Controls, 3. Slat and Flap Control Systems, E. Slat-Flap Fail (Caution)
- Non-Normal Procedures – Flight Controls, 3. Slat and Flap Control Systems, F. Slat Fault (Caution) or Flap Fault (Caution) or Slat-Flap Fault (Caution)

- B. Following incorporation of the above-mentioned changes, advise all flight crews of these changes and thereafter operate the aeroplane accordingly.

Table 1: AFM References

Aeroplane Model	Marketing Designation	AFM Publication Number and Revision, dated 19 May 2022
BD-700-1A10	Global Express	CSP 700-1 Revision 112
BD-700-1A10	Global Express XRS	CSP 700-1A Revision 112
BD-700-1A10	Global 6000	CSP 700-1V Revision 42
BD-700-1A10	Global 6500	CSP 700-6500-1 Revision 14
BD-700-1A11	Global 5000	CSP 700-5000-1 Revision 73
BD-700-1A11	Global 5000 ft. GVFD	CSP 700-5000-1V Revision 42
BD-700-1A11	Global 5500	CSP 700-5500-1 Revision 14

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Robert Farinas
Acting Chief, Continuing Airworthiness
Issued on 3 June 2022

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