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AD Number: CF-2024-19

# 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: Effective Date:
CF-2024-19 13 June 2024
ATA: Type Certificate:

27 A-131

#### Subject:

Flight Controls - Pitch-up on Landing When Using Thrust Reversers in Partial Flap Configurations

## Applicability:

Bombardier Inc. aeroplanes:

Model CL-600-1A11, serial numbers 1001 through 1085,

Model CL-600-2A12, serial numbers 3001 through 3066,

Model CL-600-2B16, serial numbers 5001 through 5194, 5301 through 5665, 5701 through 5988 and 6050 through 6190.

#### Compliance:

Within 60 days from the effective date of this AD, unless already accomplished.

## Background:

Two tail strikes occurred in-service while landing with partial flap configurations. Subsequent investigations showed that the amount of nose-down elevator input applied following touchdown in these landing conditions was not sufficient to maintain the nose landing gear on the ground when thrust reversers were deployed. This condition if not corrected, could lead to tail strikes.

Although the Aircraft Flight Manual (AFM) already contains guidance regarding the use of adequate nosedown elevator to prevent the aircraft from pitching up, this guidance has been strengthened to further reduce the risk of a tail strike on landing.

This AD requires revision to the normal, emergency and abnormal procedures in the AFM.

#### **Corrective Actions:**

Amend the applicable Transport Canada approved AFM by incorporating the procedures, as required, in accordance with Table 1 below.

## Table 1 - AFM Revisions

Aeroplane Model (Marketing Designation) Serial Numbers	AFM Procedure	AFM Revision
CL-600-1A11 (Challenger 600 Variant)	Emergency Procedures and Normal Procedures sections	AFM PSP 600, Revision 116, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
Serial numbers 1001 through 1085 for non-winglets		



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CL-600-1A11 (Challenger 600 Variant) Serial numbers 1001 through 1085 for winglets	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 600-1, Revision 107, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2A12 (Challenger 601 Variant) Serial numbers 3001 through 3066 and 43,100 lb. maximum take-off weight (MTOW)	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 601-1A, Revision 131, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2A12 (Challenger 601 Variant) Serial numbers 3001 through 3066 and 44,600/45,100 lb. MTOW	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 601-1A-1, Revision 85, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2A12 (Challenger 601 Variant) Serial numbers 3001 through 3066 with -3A Engine and 43,100 lb. MTOW	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 601-1B, Revision 89, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2A12 (Challenger 601 Variant)  Serial numbers 3001 through 3066 with -3A Engine and 44,600/45,100 lb MTOW	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 601-1B-1, Revision 87, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2B16 (Challenger 601-3A/-3R Variant) Serial numbers 5001 through 5194 and 43,100 lb MTOW	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 601A-1, Revision 109, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2B16 (Challenger 601-3A/-3R Variant) Serial numbers 5001 through 5194 and 44,600/45,100 lb MTOW	Emergency Procedures, Normal Procedures and Abnormal Procedures sections	AFM PSP 601A-1-1, Revision 98, issued 25 January 2024, or later revisions of this procedure approved by Transport Canada
CL-600-2B16 (Challenger 604 Variant) Serial numbers 5301 through 5665	Emergency Procedures in Chapter 3 and Abnormal Procedures in Chapter 5. Abnormal Procedure, Engine Failure During Final Approach procedure in Supplement 4/4A/4B, Category II Operations.	AFM PSP 604-1, Revision 131, issued 05 September 2023, or later revisions of this procedure approved by Transport Canada
CL-600-2B16 (Challenger 605 Variant) Serial numbers 5701 through 5988	Emergency Procedures in Chapter 3 and Abnormal Procedures in Chapter 5. Abnormal Procedure, Engine Failure During Final Approach procedure in Supplement 4/4A, Category II Operations.	AFM PSP 605-1, Revision 69, issued 05 September 2023, or later revisions of this procedure approved by Transport Canada

CL-600-2B16 (Challenger 650 Variant) Serial numbers 6050 through 6190	Emergency Procedures in Chapter 3 and Abnormal Procedures in Chapter 5. Abnormal Procedure, Engine Failure During Final Approach procedure in Supplement 4/4A, Category II Operations.	AFM PSP 650-1, Revision 34, issued 05 September 2023, or later revisions of this procedure approved by Transport Canada
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Advise all flight crews of the changes introduced by the AFM revisions listed above and thereafter operate the aeroplane accordingly.

## **Authorization:**

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young Chief, Continuing Airworthiness Issued on 30 May 2024

#### **Contact:**

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