



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-2018-32R1

Effective Date:

21 August 2020

ATA:

22

Type Certificate:

A-276

Subject:

Auto Flight System – Airplane Flight Manual (AFM) Limitations and Abnormal Procedures – Velocity Decay during Low Level ALT CAP in One Engine Inoperative Conditions

Revision:

Supersedes AD CF-2018-32, issued 10 December 2018.

Applicability:

MHI RJ Aviation ULC. (formerly Bombardier Inc.) model CL-600-2B19, CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes.

Compliance:

As indicated below, unless already accomplished

Background:

It was determined that during ALTS CAP or (V) ALTS CAP mode, the flight guidance/autopilot does not account for engine failure while capturing an altitude. If an engine failure occurs during or before a climb while in ALTS CAP or (V) ALTS CAP mode, the airspeed may drop significantly below the safe operating speed. Prompt crew intervention may be required to maintain a safe operating speed.

CF-2018-32 mandated the introduction of a Limitation and Abnormal Procedure to the AFM to address the above-mentioned unsafe condition.

Since AD CF-2018-32 was issued, it was discovered that the mandated AFM changes introduced to Chapter 02 Limitations Section and Chapter 05 Abnormal Procedures did not include reference to (V) ALTV CAP.

The risk of airspeed dropping below the safe operating speed during or before a climb with an engine failure while in altitude capture mode (V) ALTV CAP also exists in this mode.

This AD revision, CF-2018-32R1, mandates changes to the AFM Limitation and Abnormal Procedure to correct the warning(s) added with AD CF-2018-32. The Limitation and Abnormal Procedure now refer to ALTS CAP, (V) ALTS CAP or (V) ALTV CAP. The CL-600-2B19 does not have altitude capture mode (V) ALTV CAP.

Corrective Actions:

A. Within 60 days from the effective date of this AD, accomplish the following:

Amend the applicable Transport Canada approved AFM by incorporating both the warning(s) added to Chapter 02 LIMITATIONS – System Limitations (2) Automatic Flight Control System (AFCS) and the new Chapter 05 ABNORMAL PROCEDURES (C) Engine Failure In Climb During ALTS CAP or (D) Engine Failure in Climb During (V) ALTS CAP or (V) ALTV CAP as applicable, in accordance with the Table 1 below.

Table 1

Aeroplane Model	AFM No	AFM Revision
CL-600-2B19	CSP-A-012	AFM Revision 73, dated January 3, 2020, or later revisions of this procedure approved by Transport Canada.
CL-600-2C10, CL-600-2C11	CSP-B-012	AFM Revision 31, dated May 8, 2020, or later revisions of this procedure approved by Transport Canada.
CL-600-2D15, CL-600-2D24	CSP-C-012	AFM Revision 24, dated March 27, 2020, or later revisions of this procedure approved by Transport Canada.
CL-600-2E25	CSP-D-012	AFM Revision 23, dated February 14, 2020, or later revisions of this procedure approved by Transport Canada.

- B. Aeroplanes that have had their AFM previously amended with earlier approved revisions as applicable, in accordance with Table 2 below, meet the intent of paragraph A.

Table 2

Aeroplane Model	AFM No	AFM Revision
CL-600-2B19	CSP-A-012	AFM Revision 68, dated August 4, 2017 or later revisions of this procedure approved by Transport Canada.
CL-600-2C10, CL-600-2C11	CSP-B-012	AFM Revision 29, dated September 20, 2019 or later revisions of this procedure approved by Transport Canada.
CL-600-2D15, CL-600-2D24	CSP-C-012	AFM Revision 22, dated June 7, 2019 or later revisions of this procedure approved by Transport Canada.
CL-600-2E25	CSP-D-012	AFM Revision 22, dated September 6, 2019 or later revisions of this procedure approved by Transport Canada.

- C. Advise all flight crews of the changes introduced by Transport Canada AFM Revisions listed above.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Robert Farinas
Acting Chief, Continuing Airworthiness
Issued on 7 August 2020

Contact:

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