



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-2022-37

Effective Date:

25 July 2022

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

Replacement:

Supersedes AD CF-2018-32R1, issued 7 August 2020.

Applicability:

MHI RJ Aviation ULC. (MHIRJ) (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 altitude capture flight stages, the flight guidance/autopilot does not account for engine failure while capturing an altitude. If an engine failure occurs during a climb while capturing, or just before capturing an altitude, the airspeed may drop significantly below the safe operating speed. Prompt crew intervention may be required to maintain a safe operating speed.

This AD mandates changes to the AFM Limitations and Abnormal Procedures to address this unsafe condition. This AD also provides additional information for aeroplanes equipped with coupled vertical navigation (CVNAV).

For aeroplanes that have the CVNAV option installed originally by Bombardier or MHIRJ or by post-production Service Bulletin 670BA-34-031, the Limitation and Abnormal Procedures will refer to ALTS CAP, (V) ALTS CAP or (V) ALTV CAP. For other non-CVNAV aeroplanes, the Limitation and Abnormal Procedures will refer only to ALTS 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 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 68, dated 4 August 2017, or later revisions of this procedure approved by Transport Canada.
CL-600-2C10, CL-600-2C11	CSP-B-012	AFM Revision 29, dated 20 September 2019, or later revisions of this procedure approved by Transport Canada.
CL-600-2D15, CL-600-2D24	CSP-C-012	AFM Revision 22, dated 7 June 2019, or later revisions of this procedure approved by Transport Canada.
CL-600-2E25	CSP-D-012	AFM Revision 22, dated 6 September 2019, or later revisions of this procedure approved by Transport Canada.

B. Inform all flight crews of these new AFM changes and thereafter operate the aeroplane accordingly.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Robert Ferguson
Acting Director, National Aircraft Certification
Issued on 11 July 2022

Contact:

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