



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-2022-65

Effective Date:

7 December 2022

ATA:

27

Type Certificate:

A-236

Subject:

Flight Controls – Reversion to Flight Control Direct Mode

Applicability:

Airbus Canada Limited Partnership (formerly C Series Aircraft Limited Partnership, Bombardier Inc.) aeroplanes:

Model BD-500-1A10, serial numbers 50020 through 50067;

Model BD-500-1A11, serial numbers 55018, 55019, 55022, 55024, 55026, 55028, 55031, 55035, 55037, 55049, 55067, 55069, 55070, 55075, 55076, 55078 through 55080, 55082 through 55085, 55088, 55090, 55092, 55093, 55096 through 55098, 55100 through 55103, 55105, 55107, 55109, 55111, 55112, 55117 through 55119, 55122, 55123, 55134, 55138 through 55142, 55146, 55147, 55149, 55152, 55153, 55155, 55157, 55159, 55161, 55166, 55169 through 55171, 55173 through 55175, 55179, 55185, 55187, 55190, 55192, 55193, 55195 through 55198, 55200, 55205 and 55210.

Compliance:

Within 36 months from the effective date of this AD, unless already accomplished.

Background:

On aeroplanes equipped with the CAT IIIB Autoland option, there have been numerous occurrences during instrument landing system (ILS) approaches where the flight control system has reverted from primary flight control computer (PFCC) normal mode operating in autopilot to remote electronic unit (REU) direct mode, and then after a period of time, to PFCC direct mode. During these occurrences, the caution message FLT CTRL DIRECT is posted on the engine indication and crew alerting system (EICAS).

Airbus Canada has issued Flight Operation Note CS-FON-27-04-0003, Revision A, dated 28 October 2021, and Flight Operations Transmission A220-FOT-27-00-001, dated 3 October 2022, to make operators aware of this flight control system behaviour and to remind flight crews of the appropriate procedure in the Airplane Flight Manual and Flight Crew Operating Manual to safely recover and land the aeroplane.

A PFCC software update has been released which resolves the unsafe condition of reversion to direct mode during ILS approaches. This AD mandates the installation of this PFCC software update on aeroplanes equipped with the CAT IIIB Autoland option.

Note: This PFCC software update also includes control laws updates which require review and disposition of previous repairs and damage assessments prior to conducting the software update.

Corrective Actions:

Install PFCC software 810-0337-008 in accordance with the Accomplishment Instructions of Airbus Canada Service Bulletin (SB) BD500-270020, Issue 001, dated 28 September 2022, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Daniel Gosselin
Acting Chief, Continuing Airworthiness
Issued on 23 November 2022

Contact:

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