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-2026-54

Effective Date:

4 November 2026

ATA:

21

Type Certificate:

A-236

Subject:

Air Conditioning – Outflow Valve (OFV) Manual Mode Direct Current (DC) Motor Failure

Replacement:

Supersedes AD CF-2026-10, issued 27 February 2026.

Applicability:

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

Model BD-500-1A10, serial numbers 50001 and subsequent,

Model BD-500-1A11, serial numbers 55001 and subsequent.

Compliance:

As indicated below, unless already accomplished.

Background:

During production flight tests, ACLP discovered that the OFV DC motor could potentially be inoperative when used in high differential pressure conditions.

The Cabin Pressure Control System (CPCS) automatically controls the pressure inside the cabin by controlling the flow of pressurized air through the OFV. The OFV normally operates in Automatic (AUTO) mode and uses two separate OFV stepper motors during all phases of flight. The OFV can also operate in manual (MAN) mode and use the OFV DC motor under certain conditions such as:

- altitude or altitude rate limitation is engaged by the CPCS safety functions,
- ram air is opened and emergency depressurization is selected, or
- CPCS MAN mode is activated with the AUTO PRESS push button annunciator and controlled with the MAN RATE rotary selector in the cockpit. It is used when required by Airplane Flight Manual (AFM) Non-Normal Procedures (NNP), Master Minimum Equipment List (MMEL) requirements, maintenance activities, or production checks.

The high differential pressure across the OFV can increase the friction between the OFV butterfly shaft and the OFV body, resulting in excessive torque being required to operate the OFV. This excessive torque may trip the OFV MAN mode torque limiter resulting in loss of OFV control in CPCS MAN mode.

This condition, if not corrected, could potentially lead to total loss of cabin pressure control, excessive differential pressure across the aeroplane structure, inability to rapidly depressurize the aeroplane to ambient, when needed, and inability to evacuate smoke, when needed.

ACLP has published Flight Operations Transmission (FOT), A220-FOT-21-30-002 to prohibit the dispatch in manual pressurization mode.

As an interim action to mitigate this unsafe condition, AD CF-2026-10 prohibited dispatching an aeroplane under the applicable Minimum Equipment List (MEL) items. Since AD CF-2026-10 was issued, ACLP has also revised the AFM to update the affected NNP to mitigate the unsafe condition. This update provides additional instructions to address potential in-flight events that could be affected by loss of OFV control in manual mode, even with the previously mandated MEL prohibitions in place.

This AD, CF-2026-54, retains the requirements of AD CF-2026-10, which is superseded, and mandates the incorporation of an AFM revision to the applicable procedures.

Corrective Actions:

Part I – Definitions

For the purpose of this AD, the following definitions apply:

Applicable MEL Items refer to the MEL items corresponding with the following MMEL items:

- SECTION 1 – ATA 21 - Air Conditioning:
  - 21-33-03- LANDING FIELD ELEVATION (LFE) INDICATION: ITEM 2) PRESSURIZED AIRCRAFT
  - 21-33-04- LFE AUTOMATIC SELECTION: ITEM 2) LFE MANUAL SELECTION INOPERATIVE
- SECTION 2 – Crew Alerting System (CAS) messages:
  - 21-00-025-01- AUTO PRESS FAIL (CAUTION)

Applicable AFM refers to:

- ACLP's BD-500-1A10 AFM issue 024, dated 19 February 2026, or later revisions approved by Transport Canada (TC), and
- ACLP's BD-500-1A11 AFM issue 024, dated 19 February 2026, or later revisions approved by TC.

Affected AFM procedures refer to the following procedures which are introduced in the applicable AFM:

- Chapter 4- Non-Normal Procedures
  - AUTO PRESS FAIL (Caution)
  - CABIN ALT (Caution)
  - Unpressurized flight procedure
  - Arcing, delaminated, shattered, or cracked window or windshield
  - Smoke or fumes removal

Part II – Applicable MEL Items Prohibition

As of the effective date of AD CF-2026-10 (13 March 2026), it is prohibited to dispatch an aeroplane under the applicable MEL items.

Part III – AFM Revision

Within 30 days from the effective date of this AD, amend the existing TC approved AFM by incorporating the affected AFM procedures.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 21 October 2026

Contact:

Alireza Gharagozloo, Continuing Airworthiness, Ottawa, telephone 1-888-663-3639 or e-mail TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.