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-2026-10

Effective Date:

13 March 2026

ATA:

21

Type Certificate:

A-236

Subject:

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

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 of the effective date of this AD, 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 rotary selector in the cockpit. It is used when required by Airplane Flight Manual (AFM) non-normal procedures, 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 Operation Transmission (FOT), A220-FOT-21-30-002 to prohibit the dispatch in manual pressurization mode.

To mitigate this unsafe condition, this AD prohibits dispatching an aeroplane under the applicable Minimum Equipment List (MEL) items.

This AD is an interim action, and further AD action may follow.

SUPERSEDED

Corrective Actions:

It is prohibited to dispatch an aeroplane under 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)

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 27 February 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.

SUPERSEDED