



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-2024-30

Effective Date:

10 September 2024

ATA:

72

Type Certificate:

A-236

Subject:

Engine – Airplane Flight Manual (AFM) Non-Normal Procedure – Engine Bleed Duct Large Leak

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:

Within 90 days from the effective date of this AD, unless already accomplished.

Background:

During a design review, it was discovered that the software protection logic for potential large leaks from the engine bleed duct inside the engine core compartments was partially impaired. Under certain large leak conditions such as duct burst at a specific portion of the engines bleed ducting, Pratt & Whitney's PW1500G engine's electronic engine control (EEC) would not transmit the necessary information to the aircraft controller to automatically isolate the opposite engine from the leak path in the bleed system. This failure condition could lead to a dual engine failure.

To mitigate this unsafe condition, this AD mandates the revised Non-Normal Procedure in the Master AFM, which incorporates the procedures for the flight crew to manually isolate the opposite functional engine in the event of an engine bleed duct large leak condition.

Corrective Actions:

For the purpose of this AD, the Master AFM Issue 023 refers to:

- ACLP's BD-500-1A10 Master AFM (publication BD500-3AB48-22200-00), Issue 023, dated 01 June 2024 and published on 09 July 2024, or
 - ACLP's BD-500-1A11 Master AFM (publication BD500-3AB48-32200-00), Issue 023, dated 01 June 2024 and published on 09 July 2024.
- A. Amend the applicable AFM by incorporating the procedures "L ENG EXCEEDANCE (Caution)" and "R ENG EXCEEDANCE (Caution)" introduced by the Master AFM Issue 023 or included in later Master AFM revision approved by Transport Canada.
- B. Inform all flight crews of these changes in the AFM procedures and thereafter operate the aeroplane accordingly.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 27 August 2024

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