



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-2023-37R1

Effective Date:

5 June 2024

ATA:

51

Type Certificate:

A-236

Subject:

Standard Practices/Structures – Verification of Aircraft Repairs and Damage Assessments

Revision:

Supersedes AD CF-2023-37, issued 30 May 2023.

Applicability:

Airbus Canada Limited Partnership (ACLP) (formerly C Series Aircraft Limited Partnership (CSALP), Bombardier Inc.) model BD-500-1A10 and BD-500-1A11 aeroplanes, all serial numbers.

Compliance:

As indicated below, unless already accomplished.

Background:

A design review of A220 aircraft structural and stress reports has resulted in a revision of operational loads for some aircraft flight phases, affecting certain aircraft sections. These changes affect the source data reports for the A220 Aircraft Structural Repair Manual (ASRP). As a result, repairs and damage assessments accomplished on aircraft to date may have exceeded the available structural margins and require review to ensure they comply with the revised stress data for the affected sections.

As of ASRP 136.01, dated 26 August 2022, ACLP has deactivated all permitted damage limits (PDLs) and generic repair engineering orders (GREOs) for affected aeroplane structure. Additionally, ACLP has issued Operators Information Transmission (OIT) A220-OIT-00-00-007 Revision B, dated 22 September 2022, which communicates these deactivation activities, as well as the plan to progressively re-activate affected PDLs and GREOs based on the updated operational loads.

AD CF-2023-37 mandated that ASRP 136.01 or later approved versions, or ACLP source data approved at the time of the disposition, was to be used for any new structural assessments, repairs and dispositions for all model BD-500-1A10 and model BD-500-1A11 aeroplanes.

AD CF-2023-37 also mandated the review and disposition of all repairs and damage assessments for affected structure and prohibited use of previously authorized repairs as source data to generate new repairs for affected structure for model BD-500-1A10 aeroplanes.

This AD revision, CF-2023-37R1, maintains the restriction of Part I of CF-2023-37 on which source data must not be used to assess new damage and repairs on all model BD-500-1A10 and BD-500-1A11 aeroplanes, but removes the restriction on which source data must be used.

In addition, ACLP Service Bulletin (SB) BD500-530011 has been revised to clarify that repairs accomplished using repair engineering orders (REOs) issued later than a specific date have already been validated by ACLP and therefore do not require an additional approved disposition. This AD revision, CF-2023-37R1, references the updated SB in Part II and incorporates the acceptable REO issue date in Part III.

AD CF-2023-37 stated that there was an ongoing review of affected areas for model BD-500-1A11 aeroplanes which may have resulted in additional corrective action for assessment and disposition of existing and new structural repairs and damage assessments.

This review is complete and corrective actions for model BD-500-1A11 aeroplanes are mandated in AD CF-2023-70.

Corrective Actions:

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

Group A aeroplanes are model BD-500-1A10 aeroplanes, having serial numbers 50010 through 50018, 50020 through 50065, and 50067.

Affected Structure is aircraft structure requiring review and disposition of repairs and damage assessments as identified in Service Bulletin (SB) BD500-530011, Issue 003, dated 03 May 2024 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part I – Applicable to all Model BD-500-1A10 and Model BD-500-1A11 Aeroplanes – Prohibition for New Structural Repairs and Damage Assessments

As of the effective date of AD CF-2023-37, 13 June 2023, ASRP versions prior to 136.01 are no longer authorized for use in the accomplishment of new structural repairs or damage assessments.

Part II – Applicable to Group A Aeroplanes – Assessment and Disposition of Existing Structural Repairs and Damage Assessments

- A. Within 24 months from the effective date of AD CF-2023-37, 13 June 2023, identify all existing repairs and damage assessments for affected structure and request disposition from ACLP, in accordance with the Accomplishment Instructions of ACLP SB BD500-530011, Issue 003, dated 03 May 2024, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- B. If the ACLP disposition has determined that an existing repair was carried out that is no longer within permitted repair limits or that a previous damage assessment was approved that is no longer within PDLs, carry out the ACLP disposition instructions within the compliance time specified by those instructions, or other method approved by the Chief, Continuing Airworthiness, Transport Canada.
- C. Incorporation of Issue 002 of SB BD500-530011, dated 06 December 2022, prior to the effective date of this AD, also meets the requirements of Part II, paragraphs A and B, of this AD.

Part III – Applicable to all Model BD-500-1A10 Aeroplanes – Prohibition for Use of Certain Source Data for New Structural Repairs

As of the effective date of AD CF-2023-37, 13 June 2023, all ACLP REOs for affected structure, issued prior to 01 January 2023, are no longer authorized for use as source data to create a new repair disposition.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 22 May 2024

Contact:

William Humphries, 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.