



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-2024-26

Effective Date:

31 July 2024

ATA:

57

Type Certificate:

A-236

Subject:

Wing – Slat Track Corrosion and Wear

Replacement:

Supersedes AD CF-2021-43, issued 29 November 2021.

Applicability:

Airbus Canada Limited Partnership (formerly C Series Aircraft Limited Partnership, 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:

Corrosion and wear has been reported on the slat tracks on a number of in-service aeroplanes. An investigation determined that the likely cause was insufficient grease being applied to the slat tracks in production. It was also determined that the intervals in the scheduled maintenance program for the repeat greasing of the slat tracks may not be appropriate to prevent slat track corrosion and wear. Uncorrected, this corrosion and wear can lead to the loss of one or more slat panels or the loss of slat track guidance, which can cause catastrophic structural damage to the wings or other parts of the aeroplane due to slat panels departing the aeroplane.

Airbus Canada Limited Partnership (ACLP) has released a service bulletin (SB) to perform repeat inspection and greasing of all slat tracks. To mitigate the risks associated with slat track corrosion and wear, AD CF-2021-43 required the actions specified in the SB to be performed, including the collection of data required to assist the investigation and possibly develop further corrective actions.

Since AD CF-2021-43 was issued, it has been discovered that previous slat track repairs required the use of inappropriate non-destructive test (NDT) methods and, therefore, may have allowed cracks to remain undetected on slat tracks that were previously repaired. Reports have also been received that the SB accomplishment instructions are ambiguous and that access constraints prevent the SB accomplishment instructions from being fully accomplished without the removal of all slat tracks from the aeroplane. Based on these reports, Transport Canada Civil Aviation (TCCA) issued Global alternative means of compliance (AMOC) AARDG-2022/A09 to allow the use of the procedure in its Appendix as an AMOC to the requirements of AD CF-2021-43 Paragraphs A and B. This alternate procedure limits the repeat inspection and greasing of all slat tracks required by AD CF-2021-43 Paragraphs A and B to visible portions of the slat tracks only. Since TCCA issued Global AMOC AARDG-2022/A09, ACLP has revised the SB to require a rework NDT inspection on all slat tracks that were previously repaired using an inappropriate NDT method, to clarify its accomplishment instructions, and to incorporate the intent of Global AMOC AARDG-2022/A09.

This AD, AD CF-2024-26, maintains the requirements of AD CF-2021-43, but requires that the revised SB be used to ensure that the rework NDT inspection is performed on all slat tracks that were previously repaired using an inappropriate NDT method. AD CF-2024-26 also incorporates Global AMOC AARDG-2022/A09, and cancels the mandatory reporting requirement required by AD CF-2021-43 Paragraph C.

ACLP has committed to releasing a sampling SB which will be campaigned over 18 months to collect corrosion data on the inaccessible areas of the slat tracks from a variety of operators, utilizations, and operating environments. This sampling data will be assessed to assist the investigation and possibly develop further corrective actions.

Corrective Actions:

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

The **applicable SB** is defined as ACLP SB BD500-574001 Issue 002, dated 10 July 2024, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada (TC).

The **vendor SB (VSB)** is imbedded within the applicable SB and is defined as Spirit SB 500SHW-57-4201 Issue 002, dated 20 May 2024, or later revisions approved by the Chief, Continuing Airworthiness, TC.

- A. Clean and grease all slat tracks, inspecting as applicable and repairing any corrosion or damage found before further flight, in accordance with the applicable compliance time and scope indicated in Table 1 below.

Table 1: Compliance Time and Scope

Aeroplane Total Hours Air Time Accumulated as of the Effective Date of this AD	Compliance Time	Scope
Less than 2550	Before accumulating 2550 total hours air time, or within 850 hours air time from the effective date of this AD, whichever occurs later	Clean then grease all slat tracks in accordance with the applicable SB and only Part A of the VSB.
2550 or greater	Before accumulating 4000 total hours air time, or within 850 hours air time from the effective date of this AD, whichever occurs later	Clean then inspect and grease all slat tracks, repairing any corrosion or damage found before further flight, in accordance with the applicable SB and only Part B of the VSB.

- B. Thereafter, at intervals not to exceed 2550 hours air time, clean then inspect and grease all slat tracks, repairing any corrosion or damage found before further flight, in accordance with the applicable SB and only Part B of the VSB.
- C. Earlier revisions of the applicable SB and the VSB are not acceptable for compliance with the requirements of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 17 July 2024

Contact:

Hilary Ross, 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.

SUPERSEDED