



This document is scheduled to be published in the Federal Register on 10/02/2025 and available online at

<https://federalregister.gov/d/2025-19388>, and on <https://govinfo.gov> [4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2025-0206; Project Identifier MCAI-2024-00525-T; Amendment 39-23147; AD 2025-19-07]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Airbus Canada Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. This AD was prompted by an investigation that showed a change in the feed-through connector O-ring material at a certain frame increased the electrical bonding resistance due to the current torque specification being inadequate. This AD requires electrical bonding tests between the feed-through connectors and the forward side of the bulkhead at a certain frame, and the installation of two electrical bonding plates, as applicable. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

## **ADDRESSES:**

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0206; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

### *Material Incorporated by Reference:*

- For Transport Canada material identified in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email [TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca](mailto:TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca). You may find this material on the Transport Canada website at [tc.canada.ca/en/aviation](https://tc.canada.ca/en/aviation).

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0206-T.

**FOR FURTHER INFORMATION CONTACT:** Steven Dzierzynski, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 516-228-7300; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Canada Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. The NPRM was published in the

*Federal Register* on February 19, 2025 (90 FR 9876). The NPRM was prompted by AD CF-2024-32, dated September 11, 2024 (Transport Canada AD CF-2024-32) (also referred to as the MCAI), issued by Transport Canada, which is the aviation authority for Canada. The MCAI states an Airbus Canada Limited Partnership investigation revealed a change in the feed-through connector O-ring material at frame (FR) 51 increased the electrical bonding resistance due to the current torque specification being inadequate, which may lead to electrical bonding levels which exceed allowable design limits, leaving the aircraft more susceptible to electromagnetic interference (EMI), high-intensity radiated fields (HIRF) and lightning strikes.

In the NPRM, the FAA proposed to require electrical bonding tests to determine the resistance between the feed-through connectors and the forward side of the bulkhead at FR 51, and the installation of two electrical bonding plates if any connectors have more than the specified resistance, as specified in Transport Canada AD CF-2024-32. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0206.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received a comment from Air Line Pilots Association, International (ALPA) who supported the NPRM without change.

The FAA received additional comments from two commenters, including Delta Air Lines (Delta) and one anonymous commenter. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Request for Adding an Exception**

Delta requested the FAA add an exception to the proposed AD to allow all electrical bonding tests to be completed in accordance with paragraph A. of Transport

Canada AD CF-2024-32, followed, before further flight, by installation of electrical bonding plates in accordance with paragraph B. of Transport Canada AD CF-2024-32. Delta stated that, in the service information referenced in Transport Canada AD CF-2024-32, the electrical bonding test at one feed-through connector, followed immediately by the applicable corrective action, is repeated 21 more times for a total of 22 feed-through connectors. Delta stated the workflow in the proposed AD would be cumbersome, requiring multiple handoffs between skills and that multiple handoffs increase the possibility of turnover error through miscommunication. Delta stated Transport Canada AD CF-2024-32 allows the completion all tests, the identification of all discrepant connectors, and turnover of all required corrective actions to technicians for completion of that corrective action. Delta stated this reduces turnover error by only turning over test results one time and the end result of reviewing all connectors and the correction of any with unsatisfactory bonding resistance, as applicable, before further flight remains the same.

The FAA agrees to clarify. The FAA notes that compliance times in ADs take precedence over any compliance time specified in referenced service information. The FAA notes that the time of “followed immediately by the applicable corrective action” is not specifically stated in the service information referenced in Transport Canada AD CF-2024-32 but is inferred. Regardless of if the service information contains a compliance time or not, operators must accomplish the required actions within the compliance time specified in Transport Canada AD CF-2024-32, except as specified in paragraphs (h)(1) and (2) of this AD.

No exception is needed to this AD because, as noted by Delta, Transport Canada AD CF-2024-32 allows for all connectors to be inspected first and then the replacement of the discrepant connectors must be done before further flight as specified in paragraph B. of Transport Canada AD CF-2024-32. Since this AD mandates the compliance times

in Transport Canada AD CF-2024-32, this AD also allows for all connectors to be inspected first. The FAA has not revised this AD in this regard.

### **Request for Revising Reporting Requirement**

Delta requested that the FAA add an exception to specify that where Airbus Canada Service Bulletin BD500-534011 states to record the electrical bonding test result in Appendix A of the service bulletin, the AD would permit the use of either Appendix A or an equivalent form developed by the operator and recording the same information.

Delta commented that paragraph (i) of the proposed AD removes the reporting requirement, but it does not remove the requirement referenced in the service information referenced in Transport Canada AD CF-2024-32 to record the test results in Appendix A.

Delta stated that they do not object to the requirement to record test results but prefer to use internally developed documentation. Delta stated that operators, as a matter of practice, frequently develop their own documentation to accomplish work instructions in a manner which complies with mandated work instruction documents including the recording of test results. Delta stated the mitigation of the unsafe condition is not affected by the use of alternative forms, provided the required information is reported.

The FAA agrees to clarify. In excluding a reporting requirement, the FAA is also excluding the requirement to record test results and send them to Airbus Canada, as specified in the Airbus Canada Service Bulletin BD500-534011. Therefore, recording the test results is not required by this AD and no change to this AD is necessary.

### **Request for Additional Reporting Requirements**

An anonymous commenter stated the proposed AD should require operators to document and report the results of electrical bonding tests to the FAA. The commenter stated this data can support compliance verification and provide insight into broader trends in bonding degradation. The commenter noted that FAA Advisory Circular 43-

210A, dated May 31, 2018, encourages structured data collection and reporting to support continued airworthiness actions.

The FAA disagrees with this request. In general, the FAA only requires reporting if the results are needed to determine the scope of the identified unsafe condition or to develop corrective actions. For this AD, reporting is not necessary as the installation of the bonding plates addresses the unsafe condition. The FAA also notes that Transport Canada did not include reporting requirements in Transport Canada AD CF-2024-32. The FAA has not revised this AD in this regard.

### **Request for Information About Diagnostic Thresholds or Engineering Criteria for Determining Bonding Plate Installation**

An anonymous commenter stated they had questions about the specific diagnostic thresholds or engineering criteria used to determine the need for bonding plate installation, and how it will be communicated in the instructions for continued airworthiness. The commenter stated that clearly defined technical criteria reduce ambiguity and ensure consistent implementation across operators.

The FAA agrees to clarify. As specified in Transport Canada AD CF-2024-32, the electrical bonding tests are done to determine if the bonding plate installation is necessary and those tests are done as specified in the procedure of the service information identified in Transport Canada AD CF-2024-32. That procedure specifies that if the test results show that the value is more than the specified maximum resistance, then the installation must be done.

### **Request for Evaluation of Proposed Timeframe**

An anonymous commenter stated the proposed timeframe of 12,000 flight hours or 48 months should be evaluated for flexibility based on operator type and fleet utilization, particularly for lower-utilization carriers such as regional airlines. The commenter stated that flexible compliance windows that still prioritize safety can reduce maintenance burdens and support efficient fleet management.

The FAA disagrees with this request. In developing an appropriate compliance time for this action, the FAA considered the compliance times specified in Transport Canada AD CF-2024-32, the urgency associated with the subject unsafe condition, and the availability of required parts. In consideration of these items, the FAA has determined that the actions required by this AD must be done within the compliance time specified in this AD to ensure an acceptable level of safety. However, under the provisions of paragraph (j)(1) of this AD, the FAA will consider requests for approval of an extension of the compliance time if sufficient data are submitted to substantiate that the new compliance time would provide an acceptable level of safety. The FAA has not changed this AD in this regard.

#### **Request for Information About Training**

An anonymous commenter stated they had questions about the FAA providing or endorsing any specific training materials or procedural guidance to ensure maintenance technicians are equipped to perform bonding tests and install bonding plates correctly. The commenter stated the FAA's Aviation Maintenance Technician Handbook outlines the importance of tailored training for novel procedures.

The FAA notes that training requirements are outside the scope of this AD. The FAA has determined that accomplishing the electrical bonding tests and the installation of two electrical bonding plates, as required by this AD, addresses the identified unsafe condition. The service information referenced in Transport Canada AD CF-2024-32 provides appropriate procedures for accomplishing those actions. The FAA has not changed this AD in this regard.

#### **Request for Coordination**

An anonymous commenter stated the FAA should coordinate with the European Union Aviation Safety Agency (EASA) and Transport Canada to harmonize compliance expectations for affected aircraft types to avoid duplicative testing or installations for

multinational operators and to support global safety consistency. The commenter noted that International Civil Aviation Organization (ICAO) Annex 19 supports international alignment of airworthiness directives to improve safety and efficiency.

The FAA acknowledges the request. The FAA has coordinated with Transport Canada. As specified in the NPRM, pursuant to the FAA's bilateral agreement with the State of Design Authority for the affected aircraft, Transport Canada notified the FAA of the unsafe condition described in the Transport Canada AD referenced above. However, the FAA will not communicate directly with EASA regarding this AD, or the Transport Canada AD, because Transport Canada, as the State of Design Authority, has communicated with EASA regarding the Transport Canada AD. The FAA has not changed this AD in this regard.

### **Conclusion**

These products have been approved by the civil aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

### **Material Incorporated by Reference Under 1 CFR Part 51**

Transport Canada AD CF-2024-32 specifies procedures for electrical bonding tests to determine the resistance between the feed-through connectors and the forward side of the bulkhead at FR 51, and the installation of two electrical bonding plates if any connectors have more than the specified resistance. This material is reasonably available

because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

The FAA estimates that this AD affects 36 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

#### **Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
23 work-hours X \$85 per hour = \$1,955	\$0	\$1,955	\$70,380

#### **Estimated costs of on-condition actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Up to 20 work-hours X \$85 per hour = \$1,700 per connector	Up to \$10,936 per connector	Up to \$12,636 per connector

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2025-19-07 Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.):** Amendment 39-23147; Docket No. FAA-2025-0206; Project Identifier MCAI-2024-00525-T.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus Canada Limited Partnership (Type Certificate previously held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Model BD-500-1A10 and BD-500-1A11 airplanes, certificated in any category, as identified in Transport Canada AD CF-2024-32, dated September 11, 2024 (Transport Canada AD CF-2024-32).

**(d) Subject**

Air Transport Association (ATA) of America Code 92, Electrical system installation.

**(e) Unsafe Condition**

This AD was prompted by an investigation that showed a change in the feed-through connector O-ring material at frame (FR) 51 increased the electrical bonding resistance due to the current torque specification being inadequate. The FAA is issuing this AD to address the unsafe condition, which if not addressed, could result in airplane susceptibility to electromagnetic interference (EMI), high-intensity radiated fields (HIRF) and lightning strikes.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Requirements**

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with Transport Canada AD CF-2024-32.

## **(h) Exception to Transport Canada AD CF-2024-32**

(1) Where Transport Canada AD CF-2024-32 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where Transport Canada AD CF-2024-32 refers to hours air time, this AD requires using flight hours.

## **(i) No Reporting Requirement**

Although the material referenced in Transport Canada AD CF-2024-32 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

## **(j) Additional AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, AIR-520, Continued Operational Safety Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Manager, AIR-520, Continued Operational Safety Branch, FAA, send it to the attention of the person identified in paragraph (k) of this AD and email to: AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, AIR-520, Continued Operational Safety Branch, FAA; or Transport Canada; or Airbus Canada Limited Partnership's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (j)(2) of this AD, if any material contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(k) Additional Information**

For more information about this AD, contact Steven Dzierzynski, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Transport Canada AD CF-2024-32, dated September 11, 2024.

(ii) [Reserved]

(3) For Transport Canada material identified in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca; website tc.canada.ca/en/aviation.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit [www.archives.gov/federal-register/cfr/ibr-locations](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on September 16, 2025.

Peter A. White,  
Deputy Director, Integrated Certificate Management Division,  
Aircraft Certification Service.  
[FR Doc. 2025-19388 Filed: 10/1/2025 8:45 am; Publication Date: 10/2/2025]