(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,* or email *fr.inspection@nara.gov*.

Issued on September 4, 2025.

Peter A. White,

Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2025–18086 Filed 9–17–25; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2025–0344; Project Identifier MCAI–2024–00638–T; Amendment 39–23141; AD 2025–19–01]

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 superseding Airworthiness Directive (AD) 2022–25–51, which applied to all Airbus Canada Limited Partnership Model BD–500–1A10 and Model BD–500–1A11 airplanes. AD 2022–25–51 required revising the Limitations section of the existing airplane flight manual (AFM) to include a new warning and a new limitation. Since the FAA issued AD 2022–25–51, updated primary flight control computer (PFCC) software has been developed to address the unsafe condition. This AD continues to require the actions in AD 2022–25–51, requires installing the updated PFCC software, which terminates the AFM revision, and removes airplanes from the applicability. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective October 23, 2025.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of October 23, 2025.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2025–0344; 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*. You may find this material on the Transport Canada website at *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* under Docket No. FAA–2025–0344.

FOR FURTHER INFORMATION CONTACT: Rochelle Montgomery, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 405–798–2043; email *rochelle.montgomery@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2022–25–51, Amendment 39–22282 (87 FR 75911, December 12, 2022) (AD 2022–25–51). AD 2022–25–51 applied to all Airbus Canada Limited Partnership Model BD–500–1A10 and Model BD–500–1A11 airplanes. AD 2022–25–51 required revising the Limitations section of the existing AFM by revising the title of the existing autopilot AFM limitation, including a new warning prior to the existing autopilot engagement limitations, and a new limitation prohibiting selecting or reselecting autothrottle during takeoff after thrust levers are advanced to the takeoff setting after the existing autopilot engagement limitations. The FAA issued AD 2022–25–51 to address inadvertent engagement of the autopilot below 400 feet above ground level (AGL) when the flightcrew attempts to engage autothrottle. The unsafe condition, if not addressed, could result in premature rotation due to inadvertent autopilot engagement, possibly leading to tail-strike, inability to climb, and loss of control of the airplane.

The NPRM was published in the **Federal Register** on March 18, 2025 (90 FR 12498). The NPRM was prompted by AD CF–2024–36, dated October 22, 2024, issued by Transport Canada, which is the aviation authority for Canada (Transport Canada AD CF–2024–36) (also referred to as the MCAI). The MCAI states that there have been multiple in-service reports associated with PFCC software deficiencies leading to nuisance messages on the engine-indicating and crew-alerting system (EICAS) such as rudder fail, aileron fail, and spoiler fail, and flight control fault due to erroneous transmissions from the remote electronic unit (REU). Investigations also indicated design deficiencies in the PFCC software such as an incorrectly implemented built-in test, which is unable to detect a failed REU internal hold-up capacitor, or non-implemented self-tests and monitoring mechanisms to prevent erroneous computations to be transmitted to consumers. Other in-service events indicated a lack of software robustness, which may not prevent an un-annunciated deployment of ground spoilers or an inadvertent autopilot engagement during the take-off roll. These deficiencies and lack of PFCC software robustness, if not corrected, could lead to increased flightcrew workload as well as a large reduction of safety margins. Additionally, during specific flight phases or in combination with other failures, these conditions could lead to loss of control of the airplane. The updated software installation required by this AD addresses the unsafe condition identified in AD 2022–25–51 and terminates the AFM revision required by AD 2022–25–51.

In the NPRM, the FAA proposed to continue to require the actions in AD 2022–25–51, require installing the updated PFCC software, which terminates the AFM revision, and remove airplanes from the applicability, as specified in Transport Canada AD CF–2024–36. 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* under Docket No. FAA–2025–0344.

Discussion of Final Airworthiness Directive

Comments

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

The FAA received an additional comment from an individual commenter that did not make a request related to the NPRM.

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 these products. Except for minor editorial changes, 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–2024–36 specifies procedures for revising the Limitations section of the existing AFM to include a new warning, installation of updated PFCC software part number 810–0337–009 on the three PFCCs, which terminates the AFM revision, and applicable concurrent software updates. 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 133 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS FOR REQUIRED ACTIONS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2022–25–51	1 work-hour × $85 per hour = $85	$0	$85	$11,305.
New actions	Up to 5 work-hours × $85 per hour = $425.	Up to $10,000	Up to $10,425	Up to $1,386,525.

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:

■ a. Removing Airworthiness Directive (AD) 2022–25–51, Amendment 39–22282 (87 FR 75911, December 12, 2022); and

■ b. Adding the following new AD:

2025–19–01 Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.): Amendment 39–23141; Docket No. FAA–2025–0344; Project Identifier MCAI–2024–00638–T.

(a) Effective Date

This airworthiness directive (AD) is effective October 23, 2025.

(b) Affected ADs

This AD replaces AD 2022–25–51, Amendment 39–22282 (87 FR 75911, December 12, 2022) (AD 2022–25–51).

(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 Model BD–500–1A11 airplanes, certificated in any category, as identified in Transport Canada AD CF–2024–36, dated October 22, 2024 (Transport Canada AD CF–2024–36).

(d) Subject

Air Transport Association (ATA) of America Code 22, Autoflight.

(e) Unsafe Condition

This AD was prompted by multiple in-service reports associated with primary flight control computer (PFCC) software deficiencies leading to nuisance messages on the engine-indicating and crew-alerting system (EICAS) due to erroneous transmissions from the remote electronic unit (REU). Investigations also indicated design deficiencies in the PFCC software and a lack of software robustness, which may not prevent an un-annunciated deployment of ground spoilers or an inadvertent autopilot engagement during the take-off roll. The FAA is issuing this AD to address the PFCC software deficiencies leading to nuisance messages and the lack of PFCC software robustness. The unsafe condition, if not addressed, could lead to increased flightcrew workload as well as a large reduction of

safety margins. Additionally, during specific flight phases or in combination with other failures, these conditions could lead to loss of control of the airplane.

(f) Compliance

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

(g) Retained Revision of Existing AFM, With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2022–25–51, with no changes. Within 7 days after December 27, 2022 (the effective date of AD 2022–25–51), revise the Limitations section of the existing airplane flight manual (AFM) to include the information specified in figure 1 to paragraph (g) of this AD. This may be accomplished by inserting a copy of figure 1 to paragraph (g) of this AD into the existing AFM. Using an AFM revision that includes information identical to that in figure 1 to paragraph (g) of this AD is acceptable for compliance with the requirement of this paragraph.

Figure 1 to Paragraph (g)—Autopilot and Autothrottle Engagement Limitation

AUTOPILOT and AUTOTHROTTLE ENGAGEMENT

WARNING

Autopilot engagement during takeoff roll can result in premature rotation, possibly leading to tail-strike, inability to climb or loss of control. Immediate crew intervention is required.

The minimum height for engagement of autopilot is 400 feet AGL.

The minimum height for use of autopilot is 80 feet AGL.

To avoid inadvertent engagement of autopilot, during takeoff, the autothrottle must not be selected or re-selected after the thrust levers are advanced to the takeoff setting until the aircraft is at or above 400 feet AGL.

(h) New Requirements of This AD

Except as specified in paragraph (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, Transport Canada AD CF–2024–36. Accomplishing the software installation required by paragraph A. of Part II of Transport Canada AD CF–2024–36 terminates the AFM revision required by paragraph (g) of this AD.

(i) Exceptions to Transport Canada AD CF–2024–36

(1) This AD does not adopt the requirements of Part I of Transport Canada AD CF–2024–36.

(2) Where Transport Canada AD CF–2024–36 refers to its effective date, this AD requires using the effective date of this AD.

(3) For the airplanes identified in the ''Concurrent requirements'' paragraph of the material referenced in Transport Canada AD CF–2024–36: At the applicable time specified in paragraph (i)(3)(i) or (ii) of this AD, accomplish the concurrent PFCC software update specified in the material referenced in Transport Canada AD CF–2024–36.

(i) For airplanes identified in AD 2023–12–09, Amendment 39–22467 (88 FR 42606, July 3, 2023) (AD 2023–12–09): Prior to or concurrently with the installation specified in paragraph A. of Part II of Transport Canada AD CF–2024–36 but no later than the compliance time specified in AD 2023–12–09.

(ii) For airplanes not identified in AD 2023–12–09: Prior to or concurrently with the installation specified in paragraph A. of Part II of Transport Canada AD CF–2024–36.

(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 of the Continued Operational Safety Branch, 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.

(k) Additional Information

For more information about this AD, contact Rochelle Montgomery, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 405–798–2043; email *rochelle.montgomery@faa.gov*.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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–2024–36, dated October 22, 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*. You may find this material on the Transport Canada website at *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,* or email *fr.inspection@nara.gov*.

Issued on September 15, 2025.

Peter A. White,

Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2025–18088 Filed 9–17–25; 8:45 am]

BILLING CODE 4910–13–P