DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0971; Product Identifier 2020-NM-083-AD; Amendment 39-21453; AD 2021-05-10]

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), Department of Transportation (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 a report that threaded fuel couplings were incorrectly installed at final assembly and in service. This AD requires repetitive functional tests of the auxiliary power unit (APU) fuel feed line shroud, a general visual inspection of the APU fuel feed line shroud for any loose couplings; and tightening any loose couplings, which would terminate the repetitive functional tests. 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: For service information identified in this final rule, contact Airbus Canada Limited Partnership, 13100 Henri-Fabre Boulevard, Mirabel, Québec J7N 3C6, Canada; telephone 450-476-7676; email a220_crc@abc.airbus; Internet http://a220world.airbus.com. You may view this service information 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 on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0971.

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0971; 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, 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.

FOR FURTHER INFORMATION CONTACT: Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2020-14, dated April 30, 2020 (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Airbus Canada Limited Partnership Model BD-500-1A10 and
BD-500-1A11 airplanes. You may examine the MCAI in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0971.

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 published in the Federal Register on October 28, 2020 (85 FR 68257). The NPRM was prompted by a report that threaded fuel couplings were incorrectly installed at final assembly and in service. The NPRM proposed to require repetitive functional tests of the APU fuel feed line shroud, a general visual inspection of the APU feed line shroud for any loose couplings; and tightening any loose couplings, which would terminate the repetitive functional tests. The FAA is issuing this AD to address loose fuel couplings, which could eventually disconnect and could lead to fuel starvation of the APU and pose a risk of fire. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA has considered the comment received. The Air Line Pilots Association, International (ALPA) stated that it supports the NPRM.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.
Related Service Information under 1 CFR Part 51

Airbus Canada has issued Service Bulletin BD500-282009, Issue 003, dated August 14, 2020. This service information describes procedures for repetitive functional tests of the APU fuel feed line shroud, a general visual inspection of the APU fuel feed line shroud for any loose couplings, and tightening of any loose couplings if necessary. The inspection and tightening of the APU fuel feed line shroud couplings terminates the repetitive functional tests of the APU fuel feed line shroud.

This service information 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 22 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Estimated costs for required actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labor cost</strong></td>
</tr>
<tr>
<td>Up to 42 work-hours X $85 per hour = Up to $3,570</td>
</tr>
</tbody>
</table>

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

<table>
<thead>
<tr>
<th>Estimated costs of on-condition actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labor cost</strong></td>
</tr>
<tr>
<td>8 work-hours X $85 per hour = $680</td>
</tr>
</tbody>
</table>

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.

**Adoption of 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:

2021-05-10 Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.): Amendment 39-21453; Docket No. FAA-2020-0971; Product Identifier 2020-NM-083-AD.

(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.) airplanes, certificated in any category, as identified in paragraphs (c)(1) and (2) of this AD.

(1) Model BD-500-1A10 airplanes, serial numbers 50010 through 50018 inclusive, and 50020 through 50041 inclusive.

(2) Model BD-500-1A11 airplanes, serial numbers 55003 through 55016 inclusive, 55018 through 55054 inclusive, and 55056.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by a report that threaded fuel couplings were incorrectly installed at final assembly and in service. The FAA is issuing this AD to address loose
fuel couplings, which could eventually disconnect and could lead to fuel starvation of the auxiliary power unit (APU) and pose a risk of fire.

(f) Compliance

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

(g) Functional Test of the APU Fuel Feed Line Shroud

Within 4,000 flight hours after the effective date of this AD, do an initial functional test of the APU fuel feed line shroud, in accordance with Part A of the Accomplishment Instructions of Airbus Canada Service Bulletin BD500-282009, Issue 003, dated August 14, 2020. Thereafter, repeat the functional test at intervals not to exceed 4,000 flight hours. If any functional test reveals a leak, before further flight, do the applicable actions specified in paragraph (h) of this AD.

(h) Inspection and Torque of APU Fuel Feed Line Shroud Couplings

(1) Except as required by paragraph (g) of this AD: Within 9,350 flight hours or 56 months, whichever occurs first after the effective date of this AD: Do a general visual inspection of the APU fuel feed line shroud for any loose couplings, and tighten any loose couplings as applicable, in accordance with Part B of the Accomplishment Instructions of Airbus Canada Service Bulletin BD500-282009, Issue 003, dated August 14, 2020.

(2) For airplanes on which the inspection and tightening of the APU fuel feed line shroud couplings was done before the effective date of this AD, using Part B of the Accomplishment Instructions of Airbus Canada Service Bulletin BD500-282009, Issue 001, dated December 13, 2019: Within 9,350 flight hours or 56 months, whichever occurs first after the effective date of this AD, do a general visual inspection of the APU feed line shroud for any loose couplings between frame (FR) 63 and FR 80, and tighten any loose couplings as applicable, in accordance with Part C of the Accomplishment

(i) Terminating Action for the Functional Tests

The inspection and tightening of the APU fuel feed line shroud couplings as specified in paragraph (h) of this AD terminate the initial and repetitive functional tests of the APU fuel feed line shroud specified in paragraph (g) of this AD.

(j) Credit for Previous Actions

(1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Airbus Canada Service Bulletin BD500-282009, Issue 001, dated December 13, 2019, or Airbus Canada Service Bulletin BD500-282009, Issue 002, dated March 18, 2020, provided the functional test is repeated at intervals not to exceed 4,000 flight hours from the completion of those actions specified in paragraph (g) of this AD.

(2) This paragraph provides credit for actions required by paragraph (h)(1) of this AD, if those actions were performed before the effective date of this AD using Airbus Canada Service Bulletin BD500-282009, Issue 001, dated December 13, 2019.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO 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 local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal
inspector, or lacking a principal inspector, the manager of the local flight standards
district office/certificate holding district 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, New York ACO Branch, FAA; or Transport Canada Civil
Aviation (TCCA); or Airbus Canada Limited Partnership’s TCCA Design Approval
Organization (DAO). If approved by the DAO, the approval must include the
DAO-authorized signature.

**(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA
AD CF-2020-14, dated April 30, 2020, for related information. This MCAI may be found
in the AD docket on the Internet at https://www.regulations.gov by searching for and
locating Docket No. FAA-2020-0971.

(2) For more information about this AD, contact Darren Gassetto, Aerospace
Engineer, Mechanical Systems and Administrative Services Section, FAA, New York
ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone
516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(3) Service information identified in this AD that is not incorporated by reference
is available at the addresses specified in paragraphs (m)(3) and (4) of this AD.

**(m) Material Incorporated by Reference**

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

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

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus Canada Limited Partnership, 13100 Henri-Fabre Boulevard, Mirabel, Québec J7N 3C6, Canada; telephone 450-476-7676; email a220_crc@abc.airbus; Internet http://a220world.airbus.com.

(4) You may view this service information 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 service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on February 21, 2021.

Ross Landes, Deputy Director for Regulatory Operations, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-05583 Filed: 3/19/2021 8:45 am; Publication Date: 3/22/2021]