DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-1137; Project Identifier MCAI-2020-00816-T; Amendment 39-21487; AD 2021-07-10]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by 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 MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), and CL-600-2D24 (Regional Jet Series 900) airplanes. This AD was prompted by a report that some piccolo ducts for the wing anti-ice system have bleed holes that do not conform to requirements. This AD requires, depending on airplane configuration, inspection for the presence of affected wing anti-ice system piccolo ducts and corrective actions, or replacement of affected piccolo ducts with new piccolo ducts. 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 MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd., Mirabel, Québec J7N 1E1 Canada; Widebody Customer Response Center North America toll-free telephone +1-844-272-2720 or direct-dial telephone +1-514-855-8500; fax +1-514-855-8501; email thd.crj@mhirj.com; Internet https://mhirj.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-2020-1137.

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-2020-1137; 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: Siddeeq Bacchus, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7362; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2020-23, dated June 24, 2020 (TCCA AD CF-2020-23) (also referred to as the Mandatory Continuing Airworthiness Information,
or the MCAI), to correct an unsafe condition for certain MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), and CL-600-2D24 (Regional Jet Series 900) 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-2020-1137.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), and CL-600-2D24 (Regional Jet Series 900) airplanes. The NPRM published in the Federal Register on December 21, 2020 (85 FR 82975). The NPRM was prompted by a report that some piccolo ducts for the wing anti-ice system have bleed holes that do not conform to requirements (such as being undersized, un-burred, or in the wrong location). The NPRM proposed to require, depending on airplane configuration, inspection for the presence of affected wing anti-ice system piccolo ducts and corrective actions, or replacement of affected piccolo ducts with new piccolo ducts. The FAA is issuing this AD to address non-conforming piccolo duct bleed holes, which could lead to degradation of the wing anti-ice protection of the leading edge of certain slats, and possibly result in airplane handling issues during critical phases of flight. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Clarification of Reporting Requirement

Bombardier Service Bulletin 670BA-30-025, dated December 17, 2019, includes a requirement to report the pre- and post-modification part and serial number of each
replaced piccolo duct to Bombardier. The FAA has added paragraph (h) of this AD to clarify the appropriate compliance time for this reporting and redesignated subsequent paragraphs accordingly. The FAA has also revised the Cost of Compliance portion of this AD to include the estimated costs for this reporting requirement.

**Conclusion**

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule with the changes described previously and 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.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

**Related Service Information under 1 CFR Part 51**

Bombardier has issued Service Bulletin 670BA-30-025, dated December 17, 2019. This service information describes, for certain airplanes, procedures for replacement of affected piccolo ducts with new piccolo ducts. This service information also describes, for certain other airplanes, procedures for inspection for the presence of affected wing anti-icing system piccolo ducts, and depending on inspection results, replacement of affected piccolo ducts with new piccolo ducts or contacting the manufacturer for further instruction. 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 21 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**Estimated costs for required actions**

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 16 work-hours</td>
<td>Up to $7,534</td>
<td>Up to $8,894</td>
<td>Up to $186,774</td>
</tr>
<tr>
<td>X $85 per hour = Up to $1,360</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table does not include estimated costs for reporting.

The FAA estimates that it would take about 1 work-hour per product to comply with the reporting requirement in this AD. The average labor rate is $85 per hour. Based on these figures, the FAA estimates the cost of reporting on U.S. operators to be $1,785, or $85 per product.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to take approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.
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:

2021-07-10 MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.): Amendment 39-21487; Docket No. FAA-2020-1137; Project Identifier MCAI-2020-00816-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 MHI RJ Aviation ULC airplanes identified in paragraphs (c)(1) and (2) of this AD, certificated in any category.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes and Model CL-600-2C11 (Regional Jet Series 550) airplanes having serial numbers (S/Ns) 10082, 10135, 10141, 10155, 10166, 10173, 10178, 10186, 10249, 10296, and 10327.

(2) Model CL-600-2D24 (Regional Jet Series 900) airplanes having S/Ns 15099, 15102, 15144, 15159, 15201, 15212, 15279, 15396, 15409 through 15413 inclusive, 15415, 15419 through 15427 inclusive, 15430, 15449, and 15453.

(d) Subject

Air Transport Association (ATA) of America Code 30, Ice and Rain Protection.

(e) Reason
This AD was prompted by a report that some piccolo ducts for the wing anti-ice system have bleed holes that do not conform to requirements (such as being undersized, un-burred, or in the wrong location). The FAA is issuing this AD to address non-conforming piccolo duct bleed holes, which could lead to degradation of the wing anti-ice protection of the leading edge of certain slats, and possibly result in airplane handling issues during critical phases of flight.

(f) Compliance

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

(g) Inspection and Corrective Action

Within 8,800 flight hours after the effective date of this AD, inspect for the presence of affected piccolo duct assemblies, as applicable, and replace each affected piccolo duct with a new piccolo duct, as applicable, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-30-025, dated December 17, 2019.

(h) Reporting

At the applicable time specified in paragraph (h)(1) or (2) of this AD: Report the piccolo duct part and serial numbers before and after the modification required by paragraph (g) of this AD to Bombardier in accordance with the instructions of Bombardier Service Bulletin 670BA-30-025, dated December 17, 2019.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.
(i) 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 responsible Flight Standards 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 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, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or MHI RJ Aviation ULC’s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2020-23, dated June 24, 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-2020-1137.

(2) For more information about this AD, contact Siddeeq Bacchus, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone
(k) **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 MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd., Mirabel, Québec J7N 1E1 Canada; Widebody Customer Response Center North America toll-free telephone +1-844-272-2720 or direct-dial telephone +1-514-855-8500; fax +1-514-855-8501; email thd.crj@mhirj.com; Internet https://mhirj.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.


Lance T. Gant, Director, Compliance & Airworthiness Division, Aircraft Certification Service.