

the first flight after maintenance actions where the spoiler hydraulic lines were improperly connected (reversed) to the ground spoiler actuator. The ground spoiler actuator configuration does not preclude improper hydraulic line connections that could result in unintended asymmetrical spoiler deployment. The FAA is issuing this AD to prevent incorrect connection of the hydraulic lines to the ground spoiler actuator. The unsafe condition, if not addressed, could result in unintended asymmetrical spoiler deployment leading to loss of control of the airplane.

#### (f) Compliance

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

#### (g) Required Actions: Model G-1159A, G-1159B, G-IV

For Model G-1159A, G-1159B, and G-IV airplanes: Within 18 months after the effective date of this AD, incorporate corrective actions (includes replacing a ground spoiler actuator hydraulic hose and associated fittings) that physically prevent improper connection of the hydraulic lines to the ground spoiler actuator, in accordance with a method approved by the Manager, Atlanta ACO Branch, FAA. Accomplishment of the actions specified in the applicable service information in paragraphs (g)(1) through (5) of this AD is acceptable for compliance with the requirements of this paragraph.

- (1) Gulfstream G300 Customer Bulletin No. 250, dated November 9, 2022.
- (2) Gulfstream G400 Customer Bulletin No. 250, dated November 9, 2022.
- (3) Gulfstream GII-GIIB Customer Bulletin No. 471, dated November 9, 2022.
- (4) Gulfstream GIII Customer Bulletin No. 189, dated November 9, 2022.
- (5) Gulfstream GIV Customer Bulletin No. 250, dated November 9, 2022.

#### (h) Required Actions: Model GIV-X

For Model GIV-X airplanes: Within 60 months after the effective date of this AD, incorporate corrective actions (includes replacing a ground spoiler actuator hydraulic hose and associated fittings) that physically prevent improper connection of the hydraulic lines to the ground spoiler actuator, in accordance with a method approved by the Manager, Atlanta ACO Branch, FAA.

#### (i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta 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 the attention of the person identified in paragraph (j) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(3)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled 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 RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

#### (j) Related Information

For more information about this AD, contact Samuel Belete, Aerospace Engineer, Systems and Equipment Section, FAA, Atlanta ACO Branch, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5580; email: [9-ASO-ATLACO-ADs@faa.gov](mailto:9-ASO-ATLACO-ADs@faa.gov).

#### (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 the AD specifies otherwise.

- (i) Gulfstream G300 Customer Bulletin No. 250, dated November 9, 2022.
- (ii) Gulfstream G400 Customer Bulletin No. 250, dated November 9, 2022.
- (iii) Gulfstream GII-GIIB Customer Bulletin No. 471, dated November 9, 2022.
- (iv) Gulfstream GIII Customer Bulletin No. 189, dated November 9, 2022.
- (v) Gulfstream GIV Customer Bulletin No. 250, dated November 9, 2022.

(3) For service information identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; email [pubs@gulfstream.com](mailto:pubs@gulfstream.com); website [gulfstream.com/en/customer-support/](http://gulfstream.com/en/customer-support/).

(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, [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

Issued on April 14, 2023.

#### Christina Underwood,

Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2023-10328 Filed 5-15-23; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2022-1474; Project Identifier MCAI-2022-00888-T; Amendment 39-22409; AD 2023-07-07]

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-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. This AD was prompted by reports from the supplier that sensing elements of the bleed air leak detection system were manufactured with insufficient salt fill, which can result in an inability to detect hot bleed air leaks. This AD requires testing of all affected overheat detection sensing elements of the bleed air leak detection system, and replacement if necessary. This AD also prohibits the installation of affected parts. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective June 20, 2023.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of June 20, 2023.

#### ADDRESSES:

**AD Docket:** You may examine the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1474; 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 service information identified in this final rule, contact MHI RJ

Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email [thd.crj@mhirj.com](mailto:thd.crj@mhirj.com); website [mhirj.com](http://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 at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1474.

#### FOR FURTHER INFORMATION CONTACT:

Thomas Niczky, Aerospace Engineer, Avionics & Electrical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7347; 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 MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. The NPRM published in the **Federal Register** on November 18, 2022 (87 FR 69210). The NPRM was prompted by AD CF-2022-16R1, dated July 5, 2022, issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that MHI RJ Aviation ULC received reports from the supplier of the overheat detection sensing elements of a manufacturing quality escape. Some of the sensing elements of the bleed air leak detection system were manufactured with insufficient salt fill, which can result in an inability to detect hot bleed air leaks and cause damage to surrounding structures and systems that can prevent continued safe flight and landing.

In the NPRM, the FAA proposed to require testing of all affected overheat detection sensing elements of the bleed air leak detection system, and replacement if necessary. The NPRM also proposed to prohibit the installation of affected parts. 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](http://regulations.gov) under Docket No. FAA-2022-1474.

#### Discussion of Final Airworthiness Directive

#### Comments

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

The FAA received additional comments from two commenters, including Endeavor Air and MHI RJ Aviation ULC. The following presents the comments received on the NPRM and the FAA's response to each comment.

#### Request To Not Require Recording of Serial Number and Date Code

Endeavor Air requested that paragraph (h) of the proposed AD be revised to not require recording of the sensing element serial number and date code if not visible, unless the sensing element has failed. Endeavor Air noted that the service information specifies to fill out a data sheet for each sensing element and include it with each failed sensing element, and the data sheet specifies to include the serial number and date code of the sensing element. Endeavor Air noted that obtaining the serial number and date code sometimes requires disassembly of adjacent structure or components, which takes up to two labor hours per sensing element. The commenter asserted that the cost of two additional labor hours for the sole purpose of recording information on a serviceable sensing element constitutes an undue burden on the operator.

The FAA agrees to remove the requirement to record the sensing element serial number and date code if they are not visible without additional disassembly, provided that the part has not failed. However, the Sensing Element Name must be recorded on the Test Data Sheet, so it is clear exactly the sensing element that was tested. Paragraph (h) of this AD has been revised to provide an exception to this requirement.

#### Request To Allow Alternative Installation of Placard

Endeavor Air requested that paragraphs (j)(1)(iii) and (j)(2)(iii) of the proposed AD be revised to allow the placard on the BLEED AIR control panel to be installed as specified in the FAA-approved operator Minimum Equipment List (MEL) procedure, rather than just in accordance with MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022. Endeavor Air stated that its current MEL procedure for an inoperative LOOP already requires installation of a placard on the BLEED

Air control panel, though the wording is not identical to that in MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022. Endeavor Air stated that this change would help prevent worker confusion and possible unnecessary work.

The FAA has reviewed Endeavor Air's MEL procedure and agrees that it provides the same level of safety as that specified in MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022. The FAA has revised paragraphs (j)(1)(iii) and (j)(2)(iii) of this AD to allow installing the placard in accordance with the referenced service information or the operator's FAA-approved MEL procedure.

#### Request To Revise Labor Costs

MHI RJ requested to revise the labor costs in the cost of compliance section from \$85 to \$79 per hour. MHI RJ stated that settlement agreements signed with Liebherr and Kidde are for no more than \$79 per hour, and that operators will be reimbursed for parts and labor costs by Kidde. Therefore, MHI RJ requested the labor cost be based on \$79 per hour.

The FAA acknowledges that labor costs may be higher or lower than the standard rate of \$85 per hour used when estimating the labor costs for complying with AD requirements. However, as stated in this AD, these costs are merely FAA estimates. Further, the FAA does not control any settlement agreement or warranty coverage and cannot guarantee that any given labor rate will be available to operators. This AD has not been changed with respect to this request.

#### Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the 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.

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

The FAA reviewed MHI RJ Service Bulletin 601R-36-021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022; and MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022. This service information specifies

procedures for testing affected bleed air leak detection system sensing elements (*i.e.*, those marked with a date code before “A2105” (which corresponds to January 31, 2021), with a part number defined in this service information) to determine if they are serviceable, and replacing failed sensing elements with serviceable ones. This service information also allows deferring the replacement of an affected part under certain conditions and allows operating the airplane with certain deactivated defective sensing elements. These

documents are distinct since they apply to different airplane models. 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 1,126 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**ESTIMATED COSTS FOR REQUIRED ACTIONS**

Model	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Model CL-600-2B19 (526 airplanes) .....	29 work hours × \$85 per hour = \$2,465 .....	\$0	\$2,465	\$1,296,590
Model CL-600-2C10 and CL-600-2C11, CL-600-2D15 and CL-600-2D24, and CL-600-2E25 (600 airplanes).	82 work hours × \$85 per hour = \$6,970 .....	0	6,970	4,182,000

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:

**ESTIMATED COSTS OF ON-CONDITION ACTIONS**

Model/serial No.s (S/Ns)	Labor cost	Parts cost	Cost per product
CL-600-2B19, S/Ns 7002-7323 .....	Up to 26 work-hours × \$85 per hour = \$2,210	Up to \$113,200 .....	Up to \$115,410.
CL-600-2B19, S/Ns 7324-8113 .....	Up to 24 work-hours × \$85 per hour = \$2,040	Up to \$100,598 .....	Up to \$102,638.
CL-600-2C10 and CL-600-2C11, S/Ns 10002-10347.	Up to 54 work-hours × \$85 per hour = \$4,590	Up to \$70,758 .....	Up to \$75,348.
CL-600-2D15 and CL-600-2D24, S/Ns 15001-15494.	Up to 58 work-hours × \$85 per hour = \$4,930	Up to \$74,598 .....	Up to \$79,528.
CL-600-2E25, S/Ns 19001-19064 .....	Up to 62 work-hours times; \$85 per hour = \$5,270.	Up to \$81,478 .....	Up to \$86,748.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

**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:

**2023–07–07 MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.):** Amendment 39–22409; Docket No. FAA–2022–1474; Project Identifier MCAI–2022–00888–T.

**(a) Effective Date**

This airworthiness directive (AD) is effective June 20, 2023.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to MHI RJ Aviation ULC airplanes, certificated in any category, and identified in paragraphs (c)(1) through (4) of this AD.

(1) Model CL–600–2B19 (Regional Jet Series 100 & 440) airplanes, serial numbers 7002 through 7990 inclusive, and 8000 through 8113 inclusive.

(2) Model CL–600–2C10 (Regional Jet Series 700, 701 & 702) and CL–600–2C11 (Regional Jet Series 550) airplanes, serial numbers 10002 through 10347 inclusive.

(3) Model CL–600–2D15 (Regional Jet Series 705) and Model CL–600–2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15494 inclusive.

(4) Model CL–600–2E25 (Regional Jet Series 1000), serial numbers 19001 through 19064 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 36, Pneumatic.

**(e) Unsafe Condition**

This AD was prompted by reports that sensing elements of the bleed air leak detection system were manufactured with insufficient salt fill. The FAA is issuing this AD to address insufficient salt fill, which can

result in an inability to detect hot bleed air leaks, which can cause damage to surrounding structures and systems that can prevent continued safe flight and landing.

**(f) Compliance**

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

**(g) Definitions**

For the purposes of this AD, the definitions specified in paragraphs (g)(1) through (4) of this AD apply.

(1) *Group 1 airplanes:* The airplanes identified in paragraph (c)(1) of this AD.

(2) *Group 2 airplanes:* The airplanes identified in paragraphs (c)(2) through (4) of this AD.

(3) *Affected part:* A sensing element marked with a date code before A2105 and having a part number as defined in Section 1, Paragraph G(1), of MHI RJ Service Bulletin 601R–36–021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, for Group 1 airplanes; and in Appendix B, dated October 21, 2021, of MHI RJ Service Bulletin 670BA–36–025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, and Appendix C, dated March 14, 2022, for Group 2 airplanes; unless the sensing element has been tested and found to be serviceable in accordance with paragraphs (g)(3)(i) and (ii) or paragraph (h) of this AD.

(i) Has been tested as specified in Section 3 of the Accomplishment Instructions of Kidde Aerospace and Defense Service Bulletin CFD–26–5 and found to be serviceable; and

(ii) Has been marked on one face of its connector hex nut and is packaged as specified in Section 3.C. of the

Accomplishment Instructions—Identification Procedure of the Kidde Aerospace and Defense Service Bulletin CFD–26–5.

(4) *Serviceable part:* A sensing element that is not an affected part.

**(h) Testing**

Perform a test of the bleed air leak detection system sensing elements to determine if they are serviceable, in accordance with Section 2, Part A through Part F, of the Accomplishment Instructions of MHI RJ Service Bulletin 601R–36–021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, for Group 1 airplanes; and Section 2, Part A through Part M, of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA–36–025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022, for Group 2 airplanes; within the applicable compliance time indicated in figure 1 to paragraph (h) of this AD. This AD does not require filling out the serial number or date code of the sensing element in Appendix A, Revision B, dated March 14, 2022; of MHI RJ Service Bulletin 601R–36–021, Revision D, dated May 25, 2022; or MHI RJ Service Bulletin 670BA–36–025, Revision C, dated May 25, 2022, including Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022; as applicable, if the serial number or date code is not visible without additional disassembly and the part has not failed. However, the Sensing Element Name must be recorded on the Test Data Sheet, so it is clear exactly the sensing element that was tested.

**Figure 1 to Paragraph (h)—Compliance Time**

Airplanes	Applicable Service Bulletin Accomplishment Instructions	Compliance Time
Group 1	Part D of the Accomplishment Instructions of MHI RJ Service Bulletin 601R-36-021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022	Within 4,400 flight hours or 24 months, whichever occurs first, after the effective date of this AD
	Part A, Part B, Part C, Part E, and Part F of the Accomplishment Instructions of MHI RJ Service Bulletin 601R-36-021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022	Within 6,600 flight hours or 36 months, whichever occurs first, after the effective date of this AD
Group 2	Part K of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022	Within 8,400 flight hours or 48 months, whichever occurs first, after the effective date of this AD
	Part A, Part B, Part C, Part D, Part E, Part F, Part G, Part H, Part I, Part J, Part L, and Part M of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022	Within 2,200 flight hours or 18 months, whichever occurs first, after the effective date of this AD

**(i) Replacement**

(1) *For Group 1 airplanes:* If any sensing element is found not serviceable during the tests required by paragraph (h) of this AD, before further flight, replace the sensing element with a serviceable part in accordance with Section 2, Part A through Part F, as applicable, of the Accomplishment Instructions of MHI RJ Service Bulletin 601R-36-021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022.

(2) *For Group 2 airplanes:* If any sensing element is found not serviceable during the tests required by paragraph (h) of this AD, before further flight, unless deferred in accordance with paragraph (j) of this AD, replace the sensing element with a serviceable part in accordance with Section 2, Part A through Part M, as applicable, of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022.

**(j) Deferred Replacement for Group 2 Airplanes**

The replacement of an affected part with a serviceable part for Group 2 airplanes, as required by paragraph (i)(2) of this AD, may be deferred up to a maximum of 10 days under the conditions specified in paragraphs (j)(1) or (2) of this AD.

(1) A single bleed air leak detection loop (loop A or loop B) sensing element for a given Part (Part A through Part M of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022) is found not serviceable, provided that the conditions specified in paragraphs (j)(1)(i) through (iv) of this AD have been satisfied.

(i) The remaining operative bleed air leak detection loop (loop A or loop B) sensing elements have been tested and found to be serviceable in accordance with paragraph (h) of this AD.

(ii) The applicable maintenance procedures of Appendix C, dated March 14, 2022, of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, and

Appendix B, dated October 21, 2021, to deactivate the defective sensing element are accomplished prior to operation of the airplane with the defective sensing element inoperative.

(iii) A placard has been installed on the BLEED AIR control panel in accordance with Section 2, Part A through Part M, as applicable, of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022; or in accordance with the operator's FAA-approved Minimum Equipment List (MEL) procedure.

(iv) All flightcrew have been advised that the airplane is dispatched with one out of two bleed air leak detection loops inoperative.

(2) Both bleed air leak detection loop A and loop B sensing elements for a given part (Part A through Part M of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022) are found not

serviceable, provided that the conditions specified in paragraphs (j)(2)(i) through (iv) of this AD have been satisfied.

(i) The applicable maintenance procedures of Appendix C, dated March 14, 2022, of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, and Appendix B, dated October 21, 2021, to deactivate the defective sensing elements are accomplished prior to operation of the airplane with the defective sensing elements inoperative.

(ii) The applicable instructions and limitations of the operator's existing FAA-approved Minimum Equipment List (MEL) item 36-21-06, sub-item 1, 2, or 3, as applicable, in accordance with Section 2, Part A through Part M, of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022, are accomplished prior to operation of the airplane with the defective sensing elements inoperative.

(iii) A placard has been installed on the BLEED AIR control panel in accordance with Section 2, Part A through Part M, as applicable, of the Accomplishment Instructions of MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022; or in accordance with the operator's FAA-approved MEL procedure.

(iv) All flightcrew have been advised that the airplane is dispatched with both bleed air leak detection loops inoperative.

#### (k) Parts Installation Prohibition

As of the effective date of this AD, no person may install an affected part on any airplane.

#### (l) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (h), (i), and (j) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraphs (l)(1) and (2) of this AD. For performing the actions specified in the service information for the Group 1 airplanes: If the sensing element was found not serviceable, replacement is required before further flight; deferred replacement of an affected part is prohibited. For performing the actions specified in the service information for the Group 2 airplanes: If the sensing element was found not serviceable, deferred replacement of the affected part is acceptable, as specified in paragraph (j) of this AD.

(1) For Group 1 airplanes the applicable service information specified in paragraphs (l)(1)(i) through (iv) of this AD:

(i) MHI RJ Service Bulletin 601R-36-021, including Appendix A, dated July 5, 2021.

(ii) MHI RJ Service Bulletin 601R-36-021, including Appendix A, Revision A, dated October 21, 2021.

(iii) MHI RJ Service Bulletin 601R-36-021, Revision B, dated December 2, 2021, including Appendix A, Revision A, dated October 21, 2021.

(iv) MHI RJ Service Bulletin 601R-36-021, Revision C, dated March 14, 2022, including Appendix A, Revision B, dated March 14, 2022.

(2) For Group 2 airplanes the applicable service information specified in paragraphs (l)(2)(i) through (iii) of this AD:

(i) MHI RJ Service Bulletin 670BA-36-025, including Appendix A, dated July 5, 2021.

(ii) MHI RJ Service Bulletin 670BA-36-025, Revision A, dated October 21, 2021, including Appendix A, Revision A, dated October 21, 2021, and Appendix B, dated October 21, 2021.

(iii) MHI RJ Service Bulletin 670BA-36-025, Revision B, dated March 14, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022.

#### (m) Additional 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 New York ACO Branch, mail it to ATTN: Program Manager, Continuing Operational Safety, at the address identified in paragraph (n)(2) of this AD or email to: [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov). If mailing information, also submit information by email. 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; or MHI RJ Aviation ULC's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

#### (n) Additional Information

(1) Refer to Transport Canada AD CF-2022-16R1, dated July 5, 2022, for related information. This Transport Canada AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1474.

(2) For more information about this AD, contact Thomas Niczky, Aerospace Engineer, Avionics & Electrical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7347; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

#### (o) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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.

(i) MHI RJ Service Bulletin 601R-36-021, Revision D, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022.

(ii) MHI RJ Service Bulletin 670BA-36-025, Revision C, dated May 25, 2022, including Appendix A, Revision B, dated March 14, 2022, Appendix B, dated October 21, 2021, and Appendix C, dated March 14, 2022.

(3) For service information identified in this AD, contact MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tournelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email [thd.crj@mhirj.com](mailto:thd.crj@mhirj.com); website [mhirj.com](http://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 [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

Issued on April 8, 2023.

**Christina Underwood,**

*Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.*

[FR Doc. 2023-10334 Filed 5-15-23; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2023-1044; Project Identifier AD-2023-00593-T; Amendment 39-22436; AD 2023-09-13]

RIN 2120-AA64

#### Airworthiness Directives; Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Airplanes

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2019-18-09, which applied to all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes; and Model C-130A, HP-C-130A, EC-130Q, C-130B, and C-130H airplanes. AD 2019-18-09 required a visual inspection of the center wing upper and lower rainbow fittings for cracks, an eddy current inspection of the center wing