



[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-0913; Project Identifier MCAI-2020-00971-T]

RIN 2120-AA64

**Airworthiness Directives;** MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 2015-05-03, which applies to certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. AD 2015-05-03 requires revising the maintenance or inspection program, as applicable, to incorporate new or revised maintenance requirements and airworthiness limitations, and incorporating structural repairs and modifications to preclude widespread fatigue damage (WFD). Since the FAA issued AD 2015-05-03, the FAA has determined that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude WFD. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations and would require incorporating structural repairs and modifications to preclude WFD. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd., Mirabel, Québec J7N 1E1 Canada; Widebody Customer Response Center North America toll-free phone: +1-844-272-2720 or direct-dial phone: +1-514-855-8500; fax: +1-514-855-8501; email: [thd.crj@mhij.com](mailto:thd.crj@mhij.com); Internet: <https://mhij.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.

### **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-2020-0913; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; email: 9-avs-nyaco-cos@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0913; Project Identifier MCAI-2020-00971-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; email: 9-avs-nyaco-cos@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Discussion**

The FAA issued AD 2015-05-03, Amendment 39-18113 (80 FR 13758, March 17, 2015) (“AD 2015-05-03”), for certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. AD 2015-05-03 requires revising the maintenance or inspection program, as applicable, to incorporate new or revised maintenance requirements and airworthiness limitations, and incorporating structural repairs and modifications to preclude WFD. AD 2015-05-03 resulted from reports of cracking on the skin panels and skin splice joints and angles at certain stringers

at various locations between certain fuselage stations. The FAA issued AD 2015-05-03 to address WFD, which could adversely affect the structural integrity of the airplane.

### **Actions Since AD 2015-05-03 was Issued**

Since the FAA issued AD 2015-05-03, the FAA has determined that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude WFD.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2014-07R1, dated July 13, 2020 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) 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-2020-0913.

This proposed AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude WFD. The manufacturer discovered inconsistencies between the Engineering Structure Reports and Maintenance Tasks for the inspection of fuselage skin longitudinal splices along a certain stringer. The FAA is proposing this AD to address WFD, which could adversely affect the structural integrity of the airplane. See the MCAI for additional background information.

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

MHI RJ Aviation has issued Bombardier Temporary Revision 2B-2280, dated June 12, 2020. This service information, among other actions, describes airworthiness

limitation (AWL) task 53-41-207, which specifies airworthiness limitations and inspections for fuselage and longitudinal skin splices at stringer (STR) 6 and 20.

This proposed AD would also require the following service information, which the Director of the Federal Register approved for incorporation by reference as of April 21, 2015 (80 FR 13758, March 17, 2015).

- AWL Task 53-41-110, Longitudinal Str. 6 splice butt strap at Str. 6, FS409.0 to FS617.0, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053.

- AWL Task 53-41-204, Frame splice angles at STR 6 and 20, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053.

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.

#### **FAA's Determination**

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 the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the

unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Proposed Requirements of this NPRM**

This proposed AD would retain certain requirements of AD 2015-05-03. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations and would require incorporating structural repairs and modifications to preclude WFD.

This proposed AD would require revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (n)(1) of this proposed AD.

### **Costs of Compliance**

The FAA estimates that this proposed AD affects 431 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

The FAA estimates the total cost per operator for the retained actions from AD 2015-05-03 to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. In the past, the agency has estimated that this action takes 1 work-hour per airplane. Since operators incorporate maintenance or

inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the agency estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has received no definitive data that would enable us to provide cost estimates for the repairs and modifications specified in this proposed AD.

### **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**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

(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 Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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) 2015-05-03, Amendment 39-18113

(80 FR 13758, March 17, 2015); and

b. Adding the following new AD:

**MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.):**

Docket No. FAA-2020-0913; Project Identifier MCAI-2020-00971-T.

**(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 2015-05-03, Amendment 39-18113 (80 FR 13758, March 17, 2015) (“AD 2015-05-03”).

**(c) Applicability**

This AD applies to MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 7990 inclusive, and 8000 and subsequent.

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Reason**

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude widespread fatigue damage (WFD). The FAA is issuing this AD to address WFD, which could adversely affect the structural integrity of the airplane.

**(f) Compliance**

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

**(g) Retained Revision of Maintenance or Inspection Program, with Certain Requirements Removed**

This paragraph restates the requirements of paragraph (g) of AD 2015-05-03, with certain requirements removed. Within 60 days after April 21, 2015 (the effective date of

AD 2015-05-03): Revise the maintenance or inspection program, as applicable, by incorporating the airworthiness limitations (AWL) tasks specified in paragraphs (g)(1) and (2) of this AD. The initial compliance times for the tasks start from the applicable threshold times specified in Part 2 Airworthiness Requirements, Revision 9, dated June 10, 2013, of Appendix B, Airworthiness Limitations, of Bombardier CL-600-2B19, Maintenance Requirements Manual, CSP A-053; except that, for airplanes that have accumulated more than 38,000 total flight cycles as of April 21, 2015, the initial compliance time for the AWL tasks is before the accumulation of 2,000 flight cycles after April 21, 2015.

(1) AWL Task 53-41-110, Longitudinal Str. 6 splice butt strap at Str. 6, FS409.0 to FS617.0, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19, Maintenance Requirements Manual, CSP A-053.

(2) AWL Task 53-41-204, Frame splice angles at STR 6 and 20, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19, Maintenance Requirements Manual, CSP A-053.

**(h) Retained No Alternative Actions or Intervals, with No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2015-05-03, with no changes. After the maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (n)(1) of this AD.

**(i) Retained Repairs and Modifications, with Changed Paragraph References**

This paragraph restates the requirements of paragraph (i) of AD 2015-05-03, with changed paragraph references. Before the accumulation of 60,000 total flight cycles: Install repairs and modifications to preclude widespread fatigue damage (WFD) at locations specified in the tasks identified in paragraphs (g)(1) and (2) of this AD, using a method approved by the Manager, New York ACO, ANE-170, 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) New Maintenance or Inspection Program Revision**

Within 60 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in AWL task 53-41-207, as specified in Bombardier Temporary Revision 2B-2280, dated June 12, 2020. The initial compliance time for doing the tasks is at the time specified in AWL task 53-41-207, as specified in Bombardier Temporary Revision 2B-2280, dated June 12, 2020, or within 60 days after the effective date of this AD, whichever occurs later.

**(k) New No Alternative Actions or Intervals**

After the existing maintenance or inspection program has been revised as required by paragraph (j) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an AMOC in accordance with the procedures specified in paragraph (n)(1) of this AD.

**(l) Credit for Previous Actions**

This paragraph provides credit for the initial inspections required by the service information specified in paragraph (j) of this AD, if those actions were performed before

the effective date of this AD using the Bombardier Repair Engineering Orders (REOs) specified in Figure 1 to paragraph (1) of this AD.

**Figure 1 to paragraph (I) – REOs Equivalent to Initial Inspection**

<b>Airplane Serial Number -</b>	<b>Bombardier REO -</b>
7168	601R-53-00-714, Revision --, dated January 30, 2019
7437	601R-53-00-722, Revision --, dated March 28, 2019
7574	601R-53-00-725, Revision --, dated June 4, 2019
7667	601R-53-00-726, Revision --, dated June 4, 2019
7640	601R-53-00-727, Revision --, dated June 25, 2019
7636	601R-53-00-728, Revision --, dated June 15, 2019
7400	601R-53-00-730, Revision --, dated June 20, 2019
7660	601R-53-00-731, Revision --, dated June 20, 2019
7638	601R-53-00-732, Revision --, dated June 24, 2019
7523	601R-53-00-734, Revision --, dated June 25, 2019
7425	601R-53-00-735, Revision --, dated June 25, 2019
7568	601R-53-00-737, Revision --, dated July 15, 2019
7873	601R-53-00-739, Revision --, dated July 15, 2019
7536	601R-53-00-741, Revision – A, dated July 23, 2019
7657	601R-53-00-742, Revision --, dated July 23, 2019
7682	601R-53-00-752, Revision --, dated August 22, 2019
7656	601R-53-00-753, Revision --, dated August 22, 2019
7904	601R-53-00-754, Revision --, dated August 26, 2019
7687	601R-53-00-758, Revision --, dated September 9, 2019
7879	601R-53-00-762, Revision --, dated November 4, 2019

Airplane Serial Number -	Bombardier REO -
7447	601R-53-00-763, Revision --, dated October 30, 2019
7256	601R-53-00-765, Revision --, dated October 21, 2019
7663	601R-53-00-767, Revision --, dated November 1, 2019
7457	601R-53-00-769, Revision --, dated October 29, 2019
7257	601R-53-00-772, Revision --, dated November 20, 2019
7569	601R-53-00-777, Revision --, dated December 11, 2019
7695	601R-53-00-780, Revision --, dated January 6, 2020
7880	601R-53-00-785, Revision --, dated February 1, 2020
7490	601R-53-00-787, Revision --, dated February 27, 2020
7366	601R-53-00-790, Revision --, dated February 26, 2020
7306	601R-53-00-795, Revision --, dated April 16, 2020
7479	601R-53-00-797, Revision --, dated June 17, 2020
7487	601R-53-00-798, Revision --, dated June 17, 2020

**(m) New Repairs and Modifications**

Before the accumulation of 60,000 total flight cycles: Install repairs and modifications to preclude WFD at locations specified in the tasks identified in paragraph (j) of this AD, using a method approved by the Manager, New York ACO, ANE-170, FAA; or TCCA; or MHI RJ Aviation ULC 's TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

**(n) 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; phone: 516-228-7300; fax: 516-794-5531.

(i) 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.

(ii) AMOCs approved previously for AD 2015-05-03, are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(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 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.

**(o) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2014-07R1, dated July 13, 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-2020-0913.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; email: 9-avs-nyaco-cos@faa.gov.

(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 phone: +1-844-272-2720 or direct-dial phone: +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.

Issued on October 7, 2020.

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

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