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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2019-0519; Product Identifier 2019-NM-089-AD; Amendment 39-21005; AD 2019-24-16]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Embraer S.A. Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2017-16-08, which applied to certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 IGW, and -100 ECJ airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes. AD 2017-16-08 required revising the existing maintenance or inspection program, as applicable, to incorporate more restrictive airworthiness limitations. This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. This AD also adds airplanes to the applicability. This AD was prompted by the FAA's determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective February 3, 2020.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 3, 2020.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of October 11, 2017 (82 FR 42021, September 6, 2017).

**ADDRESSES:** For service information identified in this final rule, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170–Putim–12227-901 São Jose dos Campos–SP–Brazil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); internet <https://www.flyembraer.com>. You may view this referenced service information at the FAA, Transport Standards 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-2019-0519.

## **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-2019-0519; 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 regulatory evaluation, 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:** Krista Greer, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil, has issued Brazilian AD 2019-05-02, effective May 2, 2019; corrected July 1, 2019 (“Brazilian AD 2019-05-02”) (also referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 SR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes. Model ERJ 190-100SR airplanes are not on the U.S. Register; this AD therefore does not include those airplanes in the applicability. 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-2019-0519.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2017-16-08, Amendment 39-18985 (82 FR 42021, September 6, 2017) (“AD 2017-16-08”). AD 2017-16-08 applied to certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ and -100 IGW airplanes and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes. The NPRM published in the Federal Register on July 5, 2019 (84 FR 32101). The NPRM was prompted by the FAA's determination that new or more restrictive airworthiness limitations are necessary. The NPRM proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The NPRM also proposed to add airplanes to the applicability. The FAA is issuing this AD to address fatigue cracking of structural components and to address failure of certain system components, which could result in reduced structural integrity and system reliability of the airplane. See the MCAI for additional background information.

### **Action Since the NPRM Was Issued**

Since the NPRM was issued ANAC published a correction to Brazilian AD 2019-05-02 to clarify that the initial compliance times identified as “Threshold” or “T” in EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 12, dated September 27, 2018 (“EMBRAER 190/195 MRB-1928, Revision 12”), are expressed in total flight cycles and total flight hours. The FAA has revised paragraph (i)(1)(i) of this AD to state “For the purposes of this AD, the initial compliance times (identified as ‘Threshold’ or ‘T’ in EMBRAER 190/195 MRB-1928, Revision 12) are expressed in ‘total flight cycles’ or ‘total flight hours,’ as applicable.”

### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response to that comment.

## **Request for Credit for Previously Accomplished Actions**

Embraer requested that operators be allowed to substitute the last accomplishment of task 53-23-001-0001, which was included in Revision 11 and earlier of EMBRAER 190/195 MRB-1928, for the initial accomplishment of task 53-23-001-0004, which is included in EMBRAER 190/195 MRB-1928, Revision 12. Embraer justified its request by providing a copy of Brazilian AMOC No. 632/2019/GCPR/GGCP/SAR-ANAC, dated June 13, 2019. The commenter explained that task 53-23-001-0004 was created for EMBRAER 190/195 MRB-1928, Revision 12, by splitting an existing task from previous revisions of EMBRAER 190/195 MRB-1928 in order to increase the interval for certain parts of the task, reducing the frequency of access in areas that are difficult to access. In EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 11, and earlier, task 53-23-001-0001 included the same inspection as task 53-23-001-0004. ANAC granted Brazilian AMOC No. 632/2019/GCPR/GGCP/SAR-ANAC, dated June 13, 2019, to provide credit for a one time accomplishment of task 53-23-001-0001 as a substitution for the initial accomplishment of task 53-23-001-0004, provided the task was accomplished within 5,000 flight cycles since the last accomplishment.

The FAA agrees with the commenter's request for the reason provided and has included Brazilian AMOC No. 632/2019/GCPR/GGCP/SAR-ANAC, dated June 13, 2019, in paragraph (k)(1)(iii) of this AD to allow accomplishment of task 53-23-001-0001 after the effective date of this AD as a substitution for the initial accomplishment of task 53-23-001-0004, provided this task was accomplished within 5,000 flight cycles since it was last accomplished.

## **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 with the change described previously and minor editorial changes. The FAA 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**

Embraer has issued Appendix A–Airworthiness Limitations (AL), to the EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 12, dated September 27, 2018.

Embraer has also issued Appendix A–Airworthiness Limitations (AL), to the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 8, dated October 10, 2018.

This AD also requires the following documents, which the Director of the Federal Register approved for incorporation by reference as of October 11, 2017 (82 FR 42021, September 6, 2017).

- Appendix A–Airworthiness Limitations (AL), of the EMBRAER ERJ 190/195 Maintenance Review Board Report, MRB-1928, Revision 9, dated August 14, 2015.

- Appendix A–Airworthiness Limitations (AL), of the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 4, dated July 14, 2014.

- EMBRAER MPG–Temporary Revision 4-2, dated February 13, 2015.

- EMBRAER MPG–Temporary Revision 4-3, dated October 30, 2015.

- EMBRAER MRB–Temporary Revision 9-1, dated October 27, 2015.

- EMBRAER MRB–Temporary Revision 9-3, dated October 27, 2015

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 107 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD.

The actions that are required by AD 2017-16-08 and retained in this final rule take about 1 work-hour per product, at an average labor rate of \$85 per work hour. Required parts cost about \$0 per product. Based on these figures, the estimated cost of the actions that were required by AD 2017-16-08 is \$85 per product.

The FAA has determined that revising the existing 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 FAA 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 FAA estimates the total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

## **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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

## **Regulatory Findings**

The FAA determined that 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 removing Airworthiness Directive (AD) 2017-16-08, Amendment 39-18985 (82 FR 42021, September 6, 2017), and adding the following new AD:



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

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**2019-24-16 Embraer S.A.:** Amendment 39-21005; Docket No. FAA-2019-0519; Product Identifier 2019-NM-089-AD.

### **(a) Effective Date**

This AD is effective February 3, 2020.

### **(b) Affected ADs**

This AD replaces AD 2017-16-08, Amendment 39-18985 (82 FR 42021, September 6, 2017) ("AD 2017-16-08").

### **(c) Applicability**

This AD applies to Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes; certificated in any category; serial numbers 19000002, 19000004, 19000006 through 19000213 inclusive, 19000215 through 19000276 inclusive, 19000278 through 19000466 inclusive, 19000468 through 19000525 inclusive, and 19000527 through 19000758 inclusive.

### **(d) Subject**

Air Transport Association (ATA) of America Codes 27, Flight controls; 28, Fuel; 52, Doors; 53, Fuselage; 54, Nacelles/pylons; 55, Stabilizers; 57, Wings; 71, Powerplant; and 78, Exhaust.

### **(e) Reason**

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address fatigue cracking of structural components and to address failure of certain system components, which could result in reduced structural integrity and system reliability 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 No Changes**

This paragraph restates the requirements of paragraph (i) of AD 2017-16-08, with no changes. For airplanes having serial numbers 19000002, 19000004, 19000006 through 19000213 inclusive, 19000215 through 19000276 inclusive, 19000278 through 19000466 inclusive, 19000468 through 19000525 inclusive, and 19000527 through 19000696 inclusive, do the revision required by paragraph (g)(1) or (2) of this AD, as applicable.

(1) For Model ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-200 STD, ERJ 190-200 LR, and ERJ 190-200 IGW airplanes: Within 90 days after October 11, 2017 (the effective date of AD 2017-16-08), revise the existing maintenance or inspection program, as applicable, to incorporate the tasks specified in Part 2–

Airworthiness Limitation Inspections–Structures, of Appendix A–

Airworthiness Limitations (AL), of the EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 9, dated August 14, 2015 (“MRB-1928, Revision 9”); EMBRAER MRB–

Temporary Revision 9-1, dated October 27, 2015, to Part 2–Airworthiness Limitation Inspections–Structures, and Part 4–Life Limited Items, of Appendix A–Airworthiness Limitations (AL), of MRB-1928, Revision 9; and EMBRAER MRB–Temporary Revision 9-3, dated October 27, 2015, to Part 2–Airworthiness Limitation Inspections–Structures, of Appendix A–

Airworthiness Limitations (AL), of MRB-1928, Revision 9; with the thresholds and intervals stated in these documents. The initial compliance times for the tasks are at the later of the times specified in paragraphs (g)(1)(i) and (ii) of this AD.

(i) Within the applicable times specified in MRB-1928, Revision 9; EMBRAER MRB–Temporary Revision 9-1, dated October 27, 2015, to Part 2–Airworthiness Limitation Inspections–Structures, and Part 4–Life Limited Items, of Appendix A–Airworthiness Limitations (AL), of MRB-1928, Revision 9; and EMBRAER MRB–Temporary Revision 9-3, dated October 27, 2015, to Part 2–Airworthiness Limitation Inspections–Structures, of Appendix A–Airworthiness Limitations (AL), of MRB-1928, Revision 9. Where tasks are listed in both MRB-1928, Revision 9, and a temporary revision, the compliance times in the temporary revision take precedence.

(ii) Within 90 days or 600 flight cycles after October 11, 2017 (the effective date of AD 2017-16-08), whichever occurs later.

(2) For Model ERJ 190-100 ECJ airplanes: Within 90 days after October 11, 2017 (the effective date of AD 2017-16-08), revise the maintenance or inspection program, as applicable, to incorporate the tasks specified in Part 1–Certification Maintenance Requirements, Part 2–Airworthiness Limitation Inspections–Structures, Part 3–

Fuel System Limitation Items, and Part 4–Life Limited Items, of Appendix A–Airworthiness Limitations (AL), of the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 4, dated July 14, 2014; EMBRAER MPG–Temporary Revision 4-2, dated February 13, 2015; and EMBRAER MPG–Temporary Revision 4-3, dated October 30, 2015; with the thresholds and intervals stated in these documents. The initial compliance times for the tasks are at the later of the times specified in paragraphs (g)(2)(i) and (ii) of this AD.

(i) Within the applicable times specified in Part 1, Certification Maintenance Requirements, Part 2, Airworthiness Limitation Inspections–Structures, Part 3, Fuel System Limitation Items, and Part 4, Life Limited Items, of Appendix A–Airworthiness Limitations (AL), of the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 4, dated July 14, 2014; EMBRAER MPG–Temporary Revision 4-2, dated February 13, 2015; and EMBRAER MPG–Temporary Revision 4-3, dated October 30, 2015. Where tasks are listed in both MPG-2928, Revision 4, and a temporary revision, the compliance times in the temporary revision take precedence.

(ii) Within 90 days or 600 flight cycles after October 11, 2017 (the effective date AD 2017-16-08), whichever occurs later.

#### **(h) Retained No Alternative Actions Intervals, or Critical Design Configuration Control Limitations (CDCCLs), With New Exception**

This paragraph restates the action required by paragraph (j) of AD 2017-16-08, with a new exception. Except as required by paragraph (i) of this AD, after accomplishment of the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (k)(1) of this AD.

### **(i) New Requirement of This AD: Maintenance or Inspection Program Revision**

(1) For Model ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-200 STD, ERJ 190-200 LR, and ERJ 190-200 IGW airplanes: Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in Appendix A–Airworthiness Limitations (AL), to the EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 12, dated September 27, 2018 (“EMBRAER 190/195 MRB-1928, Revision 12”). The initial compliance time for doing the tasks are at the later of the times specified in paragraphs (i)(1)(i) and (ii) of this AD. Accomplishing the revision required by this paragraph terminates the requirements of paragraph (g)(1) of this AD.

(i) Within the applicable times specified in EMBRAER 190/195 MRB-1928, Revision 12. For the purposes of this AD, the initial compliance times (identified as “Threshold” or “T” in EMBRAER 190/195 MRB-1928, Revision 12) are expressed in “total flight cycles or “total flight hours” as applicable.

(ii) Within 90 days or 600 flight cycles after the effective date of this AD, whichever occurs later.

(2) For Model ERJ 190-100 ECJ airplanes: Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the tasks specified in Appendix A–Airworthiness Limitations (AL), of the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 8, dated October 10, 2018 (“EMBRAER Lineage 1000/1000E MPG-2928, Revision 8”). The initial compliance times for the tasks are at the later of the times specified in paragraphs (i)(2)(i) and (ii) of this AD. Accomplishing the revision required by this paragraph terminates the requirements of paragraph (g)(2) of this AD.

(i) Within the applicable times specified in EMBRAER Lineage 1000/1000E MPG-2928, Revision 8. For the purposes of this AD, the initial compliance times (identified as “Threshold” or “T” in EMBRAER Lineage 1000/1000E MPG-2928, Revision 8) are expressed in “total flight cycles” or “total flight hours” as applicable.

(ii) Within 90 days or 600 flight cycles after the effective date of this AD, whichever occurs later.

### **(j) No Alternative Actions, Intervals, or CDCCLs**

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

### **(k) Other FAA AD Provisions**

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards 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 International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to 9-ANM-116-AMOC-REQUESTS@faa.gov.

(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) FAA AMOC letter AIR-676-18-241, dated May 14, 2018, approved previously for AD 2017-16-08, is approved as an AMOC for the corresponding provisions of this AD.



(iii) Brazilian AMOC No. 632/2019/GCPR/GGCP/SAR-ANAC, dated June 13, 2019, is approved as an AMOC for the corresponding provisions of this AD, provided the task was performed within 5,000 flight cycles since its last accomplishment.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

#### **(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian AD 2019-05-02, effective May 2, 2019; corrected July 1, 2019; 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-2019-0519.

(2) For more information about this AD, contact Krista Greer, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221.

#### **(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.

(3) The following service information was approved for IBR on February 3, 2020.

(i) Appendix A—Airworthiness Limitations (AL); to the EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 12, dated September 27, 2018.

(ii) Appendix A—Airworthiness Limitations (AL), to the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 8, dated October 10, 2018.

(4) The following service information was approved for IBR on October 11, 2017 (82 FR 42021, September 6, 2017).

(i) Appendix A—Airworthiness Limitations (AL), of the EMBRAER ERJ 190/195 Maintenance Review Board Report, MRB-1928, Revision 9, dated August 14, 2015.

(ii) Appendix A—Airworthiness Limitations (AL), of the EMBRAER Lineage 1000/1000E Maintenance Planning Guide, MPG-2928, Revision 4, dated July 14, 2014.

(iii) EMBRAER MPG—Temporary Revision 4-2, dated February 13, 2015.

(iv) EMBRAER MPG—Temporary Revision 4-3, dated October 30, 2015.

(v) EMBRAER MRB—Temporary Revision 9-1, dated October 27, 2015.

(vi) EMBRAER MRB—Temporary Revision 9-3, dated October 27, 2015.

(5) For service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170—Putim—12227-901 São Jose dos Campos—SP—Brasil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); internet <https://www.flyembraer.com>.

(6) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) 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](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on December 9, 2019.  
Michael Kaszycki,  
Acting Director, System Oversight Division, Aircraft Certification Service.  
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