



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0008; Directorate Identifier 2013-NM-076-AD]

RIN 2120-AA64

Airworthiness Directives; Embraer S.A. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (SNPRM); reopening of comment period.

SUMMARY: We are revising an earlier notice of proposed rulemaking (NPRM) to supersede an Airworthiness Directive (AD) for all Embraer S.A. Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes. This action revises the NPRM by adding a requirement to revise the maintenance or inspection program, as applicable, to incorporate new airworthiness limitations and adding certain airplanes to the applicability. We are proposing this airworthiness directive (AD) to address the unsafe condition on these products. Since these actions impose an additional burden over those proposed in the NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: The comment period for the NPRM published in the Federal Register on February 3, 2014 (79 FR 6106), is reopened.

We must receive comments on this SNPRM 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 <http://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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this SNPRM, 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; Internet <http://www.flyembraer.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0008; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this SNPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Ana Martinez Hueto, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1622; fax 425-227-1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0008; Directorate Identifier 2013-NM-076-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this SNPRM. We will consider all comments received by the closing date and may amend this SNPRM based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this SNPRM.

Discussion

On November 13, 2012, we issued AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012) (“AD 2012-23-09”). AD 2012-23-09 requires actions intended to address an unsafe condition on all Embraer S.A. Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes.

We issued an NPRM to amend 14 CFR part 39 by adding an AD to supersede AD 2012-23-09 that would apply to all Embraer S.A. Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes. The NPRM published in the Federal Register on February 3, 2014 (79 FR 6106). The NPRM was prompted by a determination that more restrictive maintenance requirements and airworthiness limitations were necessary. The NPRM proposed to require a revision to the maintenance or inspection program to incorporate new inspection tasks and their respective thresholds and intervals.

Actions Since the NPRM was Issued

Since we issued the NPRM, a new revision of the airworthiness limitations section (ALS) of the EMBRAER ERJ 190/195 Maintenance Review Board Report (MRBR) was issued, which contains more restrictive airworthiness limitations. The

Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil, has issued Brazilian Airworthiness Directive 2016-04-01, effective April 4, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition on 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. The MCAI states:

This [Brazilian] AD was prompted by a determination that existing maintenance requirements and airworthiness limitations are inadequate to ensure the structural integrity of the airplane. We are issuing this [Brazilian] AD to prevent failure of certain system components, which could result in reduced structural integrity [and system reliability] of the airplane.

The required action is revising the maintenance or inspection program, as applicable, to incorporate the airworthiness limitations.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0008.

Related Service Information under 1 CFR part 51

Embraer S.A. has issued Appendix A - Airworthiness Limitations, Part 1 - Certification Maintenance Requirements, Part 2 - Airworthiness Limitation Inspections – Structures, Part 3 – Fuel System Limitation Items, and Part 4 – Life-Limited Items, of the EMBRAER ERJ 190/195 Maintenance Review Board Report (MRBR), MRB-1928, Revision 9, dated August 14, 2015 (“MRB-1928, Revision 9”). This service information describes airworthiness limitations (Part 1, Part 2, Part 3, and Part 4 in Appendix A –

Airworthiness Limitations of MRB-1928, Revision 9, make up the airworthiness limitations).

Embraer S.A. has also issued Temporary Revision 9-1, dated October 27, 2015, to Appendix A - Airworthiness Limitations, of MRB-1928, Revision 9, which provides revised airworthiness limitation inspections and life limited items due to new structural provisions for Live TV and Connectivity System.

In addition, Embraer S.A. has issued Temporary Revision 9-3, dated October 27, 2015, to Appendix A - Airworthiness Limitations, of MRB-1928, Revision 9, which updates the life limitations of certain main landing gear and nose landing gear components.

Embraer S.A. has also issued Appendix A, Airworthiness Limitation, of the EMBRAER ERJ 190-100 ECJ Maintenance Planning Guide (MPG), MPG-2928, Revision 4, dated July 14, 2014 (“MPG-2928, Revision 4”). This service information describes airworthiness limitations (Part 1, Certification Maintenance Requirements, Part 2, Airworthiness Limitation Inspections - Structures, Part 3, Fuel System Limitation Items, and Part 4, Life Limited Items, of the MPG make up the airworthiness limitations).

Embraer S.A. has also issued Temporary Revision 4-2, dated February 13, 2015, to Appendix A, Part 2, of MPG-2928, Revision 4, which describes detailed inspections for the upper doubler at the forward passenger door cutout.

Furthermore, Embraer S.A. has issued Temporary Revision 4-3, dated October 30, 2015, to Appendix A, Part 4, of MPG-2928, Revision 4, which updates the life limitations of certain main landing gear and nose landing components.

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.

Comments

We gave the public the opportunity to participate in developing this proposed AD. We received no comments on the NPRM or on the determination of the cost to the public.

FAA's Determination and Requirements of this SNPRM

This proposed AD would require revisions to certain operator maintenance documents to include new actions (e.g., inspections) and Critical Design Configuration Control Limitations (CDCCLs). Compliance with these actions and CDCCLs 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 (k)(1) of this proposed AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure.

Notwithstanding any other maintenance or operational requirements, components that have been identified as airworthy or installed on the affected airplanes before accomplishing the revision of the airplane maintenance or inspection program specified in this proposed AD, do not need to be reworked in accordance with the CDCCLs. However, once the airplane maintenance or inspection program has been revised as

required by this proposed AD, future maintenance actions on these components must be done in accordance with the CDCCLs.

Certain changes described above expand the scope of the NPRM. As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this SNPRM.

Costs of Compliance

We estimate that this SNPRM affects 83 airplanes of U.S. registry.

The actions that are required by AD 2012-23-09 and retained in this SNPRM 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 2012-23-09 is \$85 per product.

We also estimate that it would take about 1 work-hour per product to comply with the new basic requirements of this SNPRM. The average labor rate is \$85 per work-hour. Required parts would cost about \$0 per product. Based on these figures, we estimate the cost of this SNPRM on U.S. operators to be \$7,055, or \$85 per product.

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.

We are 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

We 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. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. 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 removing Airworthiness Directive (AD) 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012), and adding the following new airworthiness directive (AD):

Embraer S.A.: Docket No. FAA-2014-0008; Directorate Identifier 2013-NM-076-AD.

(a) Comments Due Date

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

(b) Affected ADs

This AD replaces AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012) (“AD 2012-23-09”).

(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 19000696 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 more restrictive airworthiness limitations are necessary. We are issuing this AD to detect and correct fatigue cracking of structural components and to prevent failure of certain system components; these conditions 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 the Maintenance Program, with no Changes

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: This paragraph restates the actions required by paragraph (h) of AD 2012-23-09, with no changes. Within 90 days after January 14, 2013 (the effective date of AD 2012-23-09), revise the maintenance program to incorporate the tasks specified in Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations (AL), of the EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated

November 11, 2010; and EMBRAER Temporary Revision (TR) 5-1, dated February 11, 2011, to Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations (AL), of the EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010; with the thresholds and intervals stated in these documents. The initial compliance times for the tasks are stated in the “Implementation Plan” section of Appendix A, Airworthiness Limitations (AL), of the EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010.

(h) Retained No Alternative Actions or Intervals, with New Exception

This paragraph restates the actions required by paragraph (i) of AD 2012-23-09, with a new exception. After accomplishing the revision 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 (k)(1) of this AD, and except as required by paragraph (i) of this AD.

(i) New Requirements of this AD: Revision of the Maintenance or Inspection Program

(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 maintenance or inspection program, as applicable, to incorporate the tasks specified in Part 2 - Airworthiness Limitation Inspections - Structures, of Appendix A - Airworthiness Limitations, of the EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 9, dated August 14,

2015 (“MRB-1928, Revision 9”); EMBRAER 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, of MRB-1928, Revision 9; and EMBRAER Temporary Revision 9-3, dated October 27, 2015, to Part 2 - Airworthiness Limitation Inspections - Structures, of Appendix A, Airworthiness Limitations, 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 (i)(1)(i) and (i)(1)(ii) of this AD. Doing the revision required by this paragraph terminates the revision required by paragraph (g) of this AD.

(i) Within the applicable times specified in MRB-1928, Revision 9; EMBRAER 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, of MRB-1928, Revision 9; and EMBRAER Temporary Revision 9-3, dated October 27, 2015, to Part 2 - Airworthiness Limitation Inspections - Structures, of Appendix A, Airworthiness Limitations, 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 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 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 Limitation, of the EMBRAER ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 4, dated July 14, 2014; EMBRAER Temporary Revision (TR) 4-2, dated February 13, 2015, and EMBRAER TR 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 (i)(2)(i) and (i)(2)(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 Limitation, of the EMBRAER ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 4, dated July 14, 2014; EMBRAER TR 4-2, dated February 13, 2015; and EMBRAER TR 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 the effective date of this AD, whichever occurs later.

(j) No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs)

After accomplishment of the revision required by paragraph (i) of this AD, no alternative actions (e.g., inspections), intervals, and/or CDCCLs may be used unless the actions, intervals, and/or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (k)(1) of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 Branch, 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. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: 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 Branch, ANM-116, Transport Airplane Directorate, FAA; or the Agência Nacional de Aviação Civil (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 Airworthiness Directive 2016-04-01, effective April 4, 2016, for related information.

This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0008.

(2) For more information about this AD, contact Ana Martinez Hueto, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1622; fax 425-227-1320.

(3) 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; Internet <http://www.flyembraer.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on May 8, 2017.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2017-10136 Filed: 5/19/2017 8:45 am; Publication Date: 5/22/2017]