DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0586; Directorate Identifier 2013-NM-255-AD; Amendment 39-18256; AD 2015-17-23]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (Embraer) Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Empresa Brasileira de Aeronautica S.A. (Embraer) Model EMB-135BJ airplanes. This AD was prompted by a determination that more restrictive fuel limitations are needed. This AD requires revising the maintenance or inspection program to incorporate new compliance times and fuel limitations. We are issuing this AD to detect and correct fatigue cracking of various structural elements and prevent ignition sources in the fuel system.

DATES: This AD becomes effective October 7, 2015.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of October 7, 2015.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0586 or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (Embraer), 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; 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. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0586.
SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Empresa Brasileira de Aeronautica S.A. (Embraer) Model EMB-135BJ airplanes. The NPRM published in the Federal Register on August 26, 2014 (79 FR 50857). The NPRM was prompted by a determination that more restrictive fuel limitations are needed. The NPRM proposed to require revising the maintenance or inspection program to incorporate new compliance times and fuel limitations. We are issuing this AD to detect and correct fatigue cracking of various structural elements and prevent ignition sources in the fuel system.

The Agência Nacional De Aviação Civil (ANAC), which is the aviation authority for Brazil, has issued Brazilian Airworthiness Directive 2013-12-02, effective December 27, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Empresa Brasileira de Aeronautica S.A. (Embraer) Model EMB-135BJ airplanes. The MCAI states:

This [Brazilian] AD was prompted by a new revision to the Airworthiness Limitations Requirements of the Maintenance Planning Guide (MPG-1483). We are issuing this [Brazilian] AD to allow timely detection and correction of fatigue cracking of various structural elements, and to allow the necessary preclusion of ignition sources in the fuel system.

Required actions include revising the maintenance or inspection program, as applicable, to incorporate new compliance times and fuel limitations. You may examine the MCAI in the AD docket on the internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0586.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 50857, August 26, 2014) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 50857, dated August 16, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 50857, dated August 16, 2014).

Related Service Information Under 1 CFR Part 51

Embraer has issued the following service information.
• TR 8-2, dated December 5, 2012, to the Embraer Legacy BJ MPG, MPG-1483.
• TR 8-3, dated April 8, 2013, to the Embraer Legacy BJ MPG, MPG-1483.

The service information describes revisions to the maintenance or inspection program to incorporate new compliance times and fuel limitations. 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 of this AD.

**Costs of Compliance**

We estimate that this AD affects 53 airplanes of U.S. registry.

We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be $4,505, or $85 per product.

**Authority for This Rulemaking**


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 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. 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.

**Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0586; 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 AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.
Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

   Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

(a) Effective Date

This AD becomes effective October 7, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Empresa Brasileira de Aeronautica S.A. (Embraer) Model EMB-135BJ airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel; 53, Fuselage; 54, Nacelles/Pylon.

(e) Reason

This AD was prompted by a determination that more restrictive fuel limitations are needed. We are issuing this AD to detect and correct fatigue cracking of various structural elements and prevent ignition sources in the fuel system.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 60 days after the effective date of this AD, do the actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

1) Revise the maintenance or inspection program, as applicable, by incorporating the Critical Design Configuration Control Limitations (CDCCLs) specified in Embraer Temporary Revision (TR) 8-1, dated October 26, 2012, to the Embraer Legacy BJ Maintenance Planning Document (MPG), MPG-1483, into Appendix 2, "Airworthiness Limitations Requirements," of the Embraer Legacy BJ MPG, MPG-1483.

2) Revise the maintenance or inspection program, as applicable, by incorporating the tasks and compliance times specified in Embraer TR 8-3, dated April 8, 2013, of Embraer Legacy BJ MPG, MPG-1483; and Embraer TR 8-2, dated December 5, 2012, to the Embraer Legacy BJ MPG, MPG-1483; into Appendix 2, "Airworthiness Limitations Requirements," of the Embraer Legacy BJ MPG, MPG-1483. The initial compliance times for the tasks start at the applicable time specified in Embraer TR 8-2, dated December 5, 2012, and TR 8-3, dated April 8, 2013; or within 500 flight
cycles after the effective date of this AD, whichever occurs later. Where Embraer TR 8-2, dated December 5, 2012, specifies a compliance time in "flight cycles" for the pre-mod service bulletin, those compliance times are total flight cycles.

(3) Revise the maintenance or inspection program, as applicable, by incorporating the new fuel system limitations specified in Embraer TR 8-1, dated October 26, 2012, to the Embraer Legacy BJ MPG, MPG-1483, into Appendix 2, "Airworthiness Limitations Requirements," of the Embraer Legacy BJ MPG, MPG-1483. The initial compliance times for the tasks are specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this AD.

   (i) For tasks with reference numbers 28-50-01-220-001-A02, 28-50-08-212-001-A00, 28-50-09-212-001-A00, and 28-50-10-212-001-A00, at the later of the times specified in paragraph (g)(3)(i)(A) or (g)(3)(i)(B) of this AD.

   (A) Before the accumulation of 10,000 total flight hours or within 48 months since the date of issuance of the original Brazilian standard airworthiness certificate or date of issuance of the original Brazilian export certificate of airworthiness, whichever occurs first.

   (B) Within 60 months after the effective date of this AD.

   (ii) For task reference number 28-50-01-720-001-A00, at the later of the times specified in paragraph (g)(3)(ii)(A) or (g)(3)(ii)(B) of this AD.

   (A) Before the accumulation of 20,000 total flight hours or within 96 months since the date of issuance of the original Brazilian standard airworthiness certificate or date of issuance of the original Brazilian export certificate of airworthiness, whichever occurs first.

   (B) Within 60 months after the effective date of this AD.

(h) Incorporation of TRs Into General Revisions

When the information from Embraer TR 8-1, dated October 26, 2012; TR 8-2, dated December 5, 2012; and TR 8-3, dated April 8, 2013; to the Embraer Legacy BJ MPG, MPG-1483, has been included in the general revisions of Embraer Legacy BJ MPG, MPG-1483, the general revisions may be inserted in the MPG, provided that the relevant information in the general revision is identical to that in Embraer TR 8-1, dated October 26, 2012; TR 8-2, dated December 5, 2012; and TR 8-3, dated April 8, 2013; and the TRs may be removed.

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

After accomplishing the revision required by paragraph (g) 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 alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

(j) 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 ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1175; fax 425-227-1149. 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. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: 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.

(k) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian Airworthiness Directive 2013-12-02, effective December 27, 2013, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0586-0003.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.


(ii) Embraer Temporary Revision 8-2, dated December 5, 2012, to the Embraer Legacy BJ MPG, MPG-1483.

(iii) Embraer Temporary Revision 8-3, dated April 8, 2013, to the Embraer Legacy BJ MPG, MPG-1483.

(3) For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (Embraer), 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.

(4) 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.

(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, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on August 21, 2015.

Kevin Hull,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.