



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9507; Directorate Identifier 2016-NM-127-AD]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Embraer S. A. Model EMB-120, -120ER, -120FC, -120QC, and -120RT airplanes. This proposed AD was prompted by changes to the airworthiness limitations, which add life-limited landing gear parts not previously identified. This proposed AD would require revising the maintenance or inspection program to incorporate new airworthiness limitations that add life limits for previously unidentified landing gear parts. We are proposing this AD to address the unsafe condition on these products.

DATES: We 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 <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: 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 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>. 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-2016-9507; 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 proposed 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. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

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-2016-9507; Directorate Identifier 2016-NM-127-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD 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 proposed AD.

Discussion

The Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil, has issued Brazilian Airworthiness Directive 2016-07-02, dated July 27, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the

MCAI”), to correct an unsafe condition for all Embraer S. A. Model EMB-120, -120ER, -120FC, -120QC, and -120RT airplanes. The MCAI states:

This [Brazilian] AD was prompted by changes to the Airworthiness Limitation Section of the Maintenance Review Board Report MRB 120-HI-200, which add life-limited landing gear parts not previously identified. We are issuing this [Brazilian] AD to prevent life-limited landing gear parts from being used beyond their safe-life limits, which could lead to collapse of the landing gear.

This proposed AD would require revising the maintenance or inspection program to incorporate new airworthiness limitations that add life limits for previously unidentified landing gear parts. 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-2016-9507.

Related Service Information under 1 CFR part 51

We reviewed the following Embraer S.A. service information:

- Temporary Revision (TR) 28-1 to MRB Report 120-HI-200, dated May 17, 2016. This service information adds life-limited landing gear parts not previously identified to the airworthiness limitations section.

- Alert Service Bulletin 120-32-A543, dated July 11, 2016. This service information provides procedures for replacement of affected parts.

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 and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Costs of Compliance

We estimate that this proposed AD affects 70 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|------------------------------|--|-------------------|-------------------------|-------------------------------|
| Maintenance program revision | 1 work-hour X \$85 per hour = \$85 | \$0 | \$85 | \$5,950 |

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 adding the following new airworthiness directive (AD):

Empresa Brasileira de Aeronautica S.A. (Embraer): Docket No. FAA-2016-9507;
Directorate Identifier 2016-NM-127-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

None.

(c) Applicability

This AD applies to Embraer S.A. Model EMB-120, EMB-120RT, EMB-120ER, EMB-120FC, and EMB-120QC airplanes, certificated in any category, all serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by changes to the Airworthiness Limitation Section of the Maintenance Review Board (MRB) Report 120-HI-200, which adds life-limited landing gear parts not previously identified. We are issuing this AD to prevent life-limited

landing gear parts from being used beyond their safe-life limits, which could lead to collapse of the landing gear.

(f) Compliance

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

(g) Revision of Maintenance or Inspection Program

Within 90 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, by incorporating the life-limited landing gear parts and the applicable safe-life limits identified in table 1 to paragraph (g) of this AD, as specified in Embraer S.A. Temporary Revision (TR) 28-1 to MRB Report 120-HI-200, dated May 17, 2016.

Table 1 to Paragraph (g) of this AD - *Life-limited landing gear parts*

| Part number | Description | Safe-life limits (landings) |
|--------------------|---|------------------------------------|
| 19699-001-00 | Pin drag strut, lower | 104,054 |
| 19429-000-00 | Piston tube (pre-modification service bulletin 120-032-0514) | 30,000 |
| 19429-000-00 | Piston tube (post-modification service bulletin 120-032-0514) | 90,000 |
| 19946-001-00 | Pin leg hinge | 90,000 |
| 20030-001-00 | Pin torque link | 90,000 |
| 19437-000-00 | Drag strut, upper half | 104,054 |
| 20031-001-00 | Pin drag strut hinge | 104,054 |
| 19414-000-00 | Piston tube | 90,000 |
| 19919-000-00 | Pin leg hinge | 90,000 |

(h) Replace Affected Parts

The initial compliance for the replacement of affected parts is specified in paragraphs (h)(1) and (h)(2) of this AD. Replace affected parts with serviceable parts, in

accordance with the Accomplishment Instructions of Embraer S.A. Alert Service Bulletin 120-32-A543, dated July 11, 2016.

(1) Before the applicable safe-life limit identified in table 1 to paragraph (g) of this AD, or within 90 days after the effective date of this AD, whichever occurs later.

(2) Within 90 days after the effective date of this AD for parts on which the current status is unknown.

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install on any airplane a main landing gear part or nose landing gear part having a part number identified in table 1 to paragraph (g) of this AD, if it has reached or exceeded its safe-life limit, or if its current status is unknown.

(j) No Alternative Actions and Intervals

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 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 ACO, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 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.

(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.

(1) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) ANAC AD No.: 2016-07-02, dated July 27, 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-2016-9507.

(2) For service information identified in this NPRM, 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; e-mail 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 December 6, 2016.

Dionne Palermo,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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