DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0202; Product Identifier 2020-NM-025-AD]

RIN 2120-AA64

Airworthiness Directives; Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.) Model ERJ 170 airplanes and Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. This proposed AD was prompted by reports of cracks discovered on the engine pylon inboard lower link lugs. This proposed AD would require repetitive detailed inspections of the engine inboard and outboard engine pylon lower link lugs for cracking, and repair if necessary, as specified in an Agência Nacional de Aviação Civil (ANAC) Brazilian AD, which will be incorporated by reference. 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.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For the material identified in this proposed AD that will be incorporated by reference (IBR), contact National Civil Aviation Agency, Aeronautical Products Certification Branch (GGCP), Rua Laurent Martins, nº 209, Jardim Esplanada, CEP 12242-431 – São José dos Campos - SP, Brazil; telephone 55 (12) 3203-6600; email pac@anac.gov.br; Internet www.anac.gov.br/en/. You may find this IBR material on the ANAC website at https://sistemas.anac.gov.br/certificacao/DA/DAE.asp. You may view this IBR material 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 in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0202.
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-2020-0202; 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, the regulatory evaluation, 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: Krista Greer, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221; email krista.greer@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-2020-0202; Product Identifier 2020-NM-025-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM based on those comments.

The FAA will post all comments, without change, to https://www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this NPRM.
Discussion

The ANAC, which is the aviation authority for Brazil, has issued Brazilian AD 2020-01-02, effective January 28, 2020 (“Brazilian AD 2020-01-02”) (also referred to as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.) Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 SU, -200 STD, and -200 LL airplanes; and Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -100 SR, -200 STD, -200 LR, and -200 IGW airplanes. Model ERJ 190-100 SR airplanes are not certified by the FAA and are not included on the U.S. type certificate data sheet; therefore, this AD does not include those airplanes in the applicability.

This proposed AD was prompted by reports of cracking on the left hand (LH) and right hand (RH) sides of engine pylon inboard lower link lugs. The FAA is proposing this AD to address cracking of the engine pylon lower link lugs, which could cause the loss of engine pylon integrity, and could result in engine separation from the wing, loss of airplane controllability, and possible injury to persons on the ground. See the MCAI for additional background information.

Related IBR Material under 1 CFR Part 51

ANAC Brazilian AD 2020-01-02 describes procedures for repetitive detailed inspections of LH and RH inboard and outboard engine pylon lower link lugs for cracking, and repair if necessary. This material 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 the FAA’s bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI 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 in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in Brazilian AD 2020-01-02 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD.

**Explanation of Required Compliance Information**

In the FAA’s ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and the European Union Aviation Safety Agency (EASA) to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities (CAAs) to use this process. As a result, Brazilian AD 2020-01-02 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with
Brazilian AD 2020-01-02 in its entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Service information specified in Brazilian AD 2020-01-02 that is required for compliance with Brazilian AD 2020-01-02 will be available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0202 after the FAA final rule is published.

**Costs of Compliance**

The FAA estimates that this proposed AD affects 659 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

<table>
<thead>
<tr>
<th>Estimated costs for required actions</th>
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<tbody>
<tr>
<td>Labor cost</td>
</tr>
<tr>
<td>Parts cost</td>
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<tr>
<td>Cost per product</td>
</tr>
<tr>
<td>Cost on U.S. operators</td>
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<td>3 work-hours X $85 per hour = $255</td>
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The FAA estimates that it would take about 1 work-hour per product to comply with the reporting requirement in this proposed AD. The average labor rate is $85 per hour. Based on these figures, the FAA estimates the cost on U.S. operators of reporting the inspection results to be $56,015, or $85 per product.

The FAA has received no definitive data that would enable the FAA to provide cost estimates for the on-condition actions specified in this proposed AD.

**Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that
The collection of information displays a current valid OMB control number. The control number for the collection of information required by this proposed AD is 2120-0056. The paperwork cost associated with this proposed AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this proposed AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

**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 adding the following new airworthiness directive (AD):

(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

None.

(c) Applicability

This AD applies to all Yaborã Indústria Aeronáutica S.A. (Type certificate previously held by Embraer S.A.) airplanes specified in paragraphs (c)(1) and (2) of this AD, certificated in any category, as identified in Brazilian AD 2020-01-02, effective January 28, 2020 (“Brazilian AD 2020-01-02”).

(1) Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 SU, -200 STD, and -200 LL airplanes.

(2) Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Reason

This AD was prompted by reports of cracking on the left hand (LH) and right hand (RH) sides of engine pylon inboard lower link lugs. The FAA is issuing this AD to address cracking of the engine pylon lower link lugs, which could cause the loss of
engine pylon integrity, and could result in engine separation from the wing, loss of airplane controllability, and possible injury to persons on the ground.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, Brazilian AD 2020-01-02.

(h) Exceptions to Brazilian AD 2020-01-02

(1) Where Brazilian AD 2020-01-02 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where Brazilian AD 2020-01-02 requires contacting “the ANAC [Agência Nacional de Aviação Civil] and Embraer … to approve an adequate repair,” for this AD, obtain repair instructions using the procedures specified in paragraph (i)(2) of this AD and do the repair.

(3) The “Alternative methods of compliance (AMOCs)” section of Brazilian AD 2020-01-02 does not apply to this AD.

(4) Paragraph (e) of Brazilian AD 2020-01-02 specifies to report inspection results to ANAC and Yaborã Indústria Aeronáutica within a certain compliance time. For this AD, report inspection results at the applicable time specified in paragraph (h)(4)(i) or (ii) of this AD.

(i) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.
(ii) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(i) **Other FAA AD Provisions**

The following provisions also apply to this AD:

(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 (j)(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:* For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or ANAC; or ANAC’s authorized Designee. If approved by the ANAC Designee, the approval must include the Designee’s authorized signature.

(3) *Reporting Requirements:* A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork
Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory as required by this AD; the nature and extent of confidentiality to be provided, if any. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

(j) Related Information

(1) For information about Brazilian AD 2020-01-02, contact National Civil Aviation Agency, Aeronautical Products Certification Branch (GGCP), Rua Laurent Martins, nº 209, Jardim Esplanada, CEP 12242-431 – São José dos Campos - SP, Brazil; telephone 55 (12) 3203-6600; email pac@anac.gov.br; Internet www.anac.gov.br/en/. You may find this material on the ANAC website at https://sistemas.anac.gov.br/certificacao/DA/DAE.asp. You may view this material 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. This material may also be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0202.
(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; email krista.greer@faa.gov.

Issued on March 10, 2020.

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