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[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0340; Product Identifier 2019-NM-203-AD;

Amendment 39-19903; AD 2020-08-11]

RIN 2120-AA64

Airworthiness Directives; Yaborã Indústria Aeronáutica S.A. (Type Certificate previously held by Embraer S.A.)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Yaborã Indústria Aeronáutica S.A. Model ERJ 190-300 and ERJ 190-400 airplanes. This AD was prompted by a failure propagation test, which revealed that when complete loss of the electrical digital current (DC) essential bus 2 was induced, the smoke detection system of the forward and aft electrical bays erroneously indicated the presence of smoke via the respective engine indication and crew alerting system (EICAS) messages. This AD requires revising the existing airplane flight manual (AFM) procedures associated with messages of smoke in the electronic bays presented on the EICAS, as specified in an Agência Nacional de Aviação Civil (ANAC) Brazilian AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this 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.
- 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 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For the material incorporated by reference (IBR) in this AD, 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, Airworthiness Products Section, Operational Safety 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-2020-0340.

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-2020-0340; 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 AD, 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, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223; email krista.greer@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The ANAC, which is the aviation authority for Brazil, has issued Brazilian Emergency Airworthiness Directive (EAD) 2019-12-01, effective December 9, 2019 (“Brazilian EAD 2019-12-01”) (also referred to as the Mandatory Continuing

Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Yaborã Indústria Aeronáutica S.A. Model ERJ 190-300 and ERJ 190-400 airplanes.

This AD was prompted by a failure propagation test, which revealed that when complete loss of the electrical DC essential bus 2 was induced, the smoke detection system of the forward and aft electrical bays erroneously indicated the presence of smoke via the respective EICAS messages. When these messages are displayed the existing AFM procedures require the flightcrew to turn off the essential electrical buses DC ESS BUS 1 and DC ESS BUS 3, which would result in a loss of all electrical DC essential buses, causing loss of electrical power for critical systems of the airplane.

The FAA is issuing this AD to provide the flightcrew with revised AFM procedures for responding to erroneous indications of smoke in the electrical bays presented on the EICAS. If the flightcrew followed the existing AFM procedures, it could result in a loss of all electrical DC essential buses, causing loss of electrical power for critical systems of the airplane. See the MCAI for additional background information.

Related IBR Material under 1 CFR Part 51

Brazilian EAD 2019-12-01 describes revisions to the existing AFM procedures associated with messages of smoke in the electronic bays presented on the EICAS.

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

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 issuing this AD after evaluating all pertinent information and determining the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Requirements of this AD

This AD requires accomplishing the actions specified in Brazilian EAD 2019-12-01 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 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, ANAC Brazilian EAD 2019-12-01 is incorporated by reference in this final rule. This AD, therefore, requires compliance with ANAC Brazilian EAD 2019-12-01 in its entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD. Service information specified in ANAC Brazilian EAD 2019-12-01 that is required for compliance with ANAC Brazilian

EAD 2019-12-01 is available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0340.

FAA's Justification and Determination of the Effective Date

Since there are currently no domestic operators of these products, notice and opportunity for public comment before issuing this AD are unnecessary. In addition, for the reasons stated above, the FAA finds that good cause exists for making this amendment effective in less than 30 days.

Regulatory Flexibility Act (RFA)

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and the FAA did not precede it by notice and opportunity for public comment. The FAA invites you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2020-0340; Product Identifier 2019-NM-203-AD" at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this AD. The FAA will consider all comments received by the closing date and may amend this AD based on those comments.

The FAA will post all comments received, 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 AD.

Costs of Compliance

Currently, there are no affected U.S.-registered airplanes. If an affected airplane is imported and placed on the U.S. Register in the future, the FAA provides the following cost estimates to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product
1 work-hour X \$85 per hour = \$85	\$0	\$85

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 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, and
- (2) Will not affect intrastate aviation in Alaska.

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 adding the following new airworthiness directive (AD):

2020-08-11 Yaborã Indústria Aeronáutica S.A. (Type Certificate previously held by Embraer S.A.): Amendment 39-19903; Docket No. FAA-2020-0340; Product Identifier 2019-NM-203-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 15 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.) Model ERJ 190-300 and ERJ 190-400 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical power.

(e) Reason

This AD was prompted by a failure propagation test, which revealed that when complete loss of the electrical digital current (DC) essential bus 2 was induced the smoke detection system of the forward and aft electrical bays erroneously indicated the presence of smoke via the respective engine indication and crew alerting system (EICAS) messages. The FAA is issuing this AD to provide the flightcrew with revised airplane flight manual (AFM) procedures for responding to erroneous indications of smoke in the electrical bays presented on the EICAS. If the flightcrew followed the existing AFM procedures, it could result in a loss of all electrical DC essential buses, causing loss of electrical power for critical systems of the airplane.

(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, Agência Nacional de Aviação Civil (ANAC) Brazilian Emergency Airworthiness Directive (EAD) 2019-12-01, effective December 9, 2019 (“Brazilian EAD 2019-12-01”).

(h) Exceptions to Brazilian EAD 2019-12-01

- (1) Where Brazilian EAD 2019-12-01 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Alternative method of compliance (AMOC)” section of Brazilian EAD 2019-12-01 does not apply to this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation 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 Large Aircraft Section, send it to the attention of the person identified in paragraph (j) 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, Large Aircraft Section, International Validation Branch, FAA; or ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

(j) Related Information

For more information about this AD, contact Krista Greer, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223; email krista.greer@faa.gov.

(k) 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.

(i) Agência Nacional de Aviação Civil National Civil Aviation Agency (ANAC) Brazilian Emergency Airworthiness Directive (EAD) 2019-12-01, effective December 9, 2019.

(ii) [Reserved]

(3) For information about ANAC Brazilian EAD 2019-12-01, 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/.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety 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 be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0340.

(5) You may view this material 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, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on April 23, 2020.

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