

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-1310; Directorate Identifier 2010-NM-067-AD; Amendment 39-16786; AD 2011-18-04]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model ERJ 170 and ERJ 190 Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

It has been reported during operational checks that some failures of the Escape Slide *
* * installed on the forward passenger and service door have occurred which
prevented the door from opening.
* * * [T]his condition * * * could delay an emergency evacuation and increase the
chance of injury to passengers and flight crew * * *.

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective October 14, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of October 14, 2011.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Kenny Kaulia, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2848; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on January 13, 2011 (76 FR 2279). That NPRM proposed to correct an unsafe condition for the specified products. MCAI Brazilian Airworthiness Directive 2009-11-01 states:

It has been reported during operational checks that some failures of the Escape Slide P/N [part number] 4A4030-2 and P/N 4A4030-4 installed on the forward passenger and service door have occurred which prevented the door from opening. Since this condition * * * could delay an emergency evacuation and increase the chance of injury to passengers and flight crew, a corrective action is required.

MCAI Brazilian Airworthiness Directive 2009-08-02 states:

It has been reported during operational checks some failures in the deployment of the Escape Slide P/N 104003-1 installed in the forward passenger and service door, preventing the door opening. Since this condition * * * could impede an emergency evacuation and increase the chance of injury to passengers and flight crew, a corrective action is required.

The required actions include modifying the escape slides of the forward passenger and service doors, and doing borescope inspections for damage of the aspirator body and inlet cross valve. Corrective actions include replacing the aspirator body. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Request To Delay the AD

Goodrich requested that issuance of this AD be delayed until further notice pending completion of their ongoing investigations into the root cause of additional door stall events. The commenter anticipates that a reduced overhaul cycle might be required to mitigate future occurrences until a complete and final action is developed.

We disagree with the request to delay the AD. To delay this action would be inappropriate, in light of the identified unsafe condition. We might consider additional rulemaking action, however, if we receive new information indicating the need to change the AD. We have not changed the AD in this regard.

Request To Expand the Applicability of the AD

EMBRAER requested that post-modification part number (P/N) 4A4030-5 for the ERJ 170, and P/N 104003-2 for the ERJ 190, be included in the Applicability, Actions, and Parts Installation paragraphs of the NPRM (paragraphs (c), (g), and (i) respectively). The commenter made this request in response to reports of door stall caused by the forward escape slide of those part numbers post-modification using the version of the Goodrich service information cited in the NPRM.

We disagree with the request to add the part numbers. While we are aware of the reports of door stall caused by the forward escape slides with those other parts that had been modified per the Goodrich service information cited in the NPRM, we understand that the root cause of the door stall is still under investigation, as mentioned by the previous commenter. Further, we choose to not delay issuance of the AD as mentioned previously, because the known unsafe condition exists on the part numbers specified in the NPRM. When that investigation is complete we might take further rulemaking action. We have not changed the AD in this regard.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD as proposed.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD will affect about 236 products of U.S. registry. We also estimate that it will take about 12 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$240,720, or \$1,020 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 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 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); 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, 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.

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 AD:



2011-18-04 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-16786.
Docket No. FAA-2010-1310; Directorate Identifier 2010-NM-067-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective October 14, 2011.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Empresa Brasileira de Aeronautica S.A. (EMBRAER) airplanes as identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Model ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, and -200 STD airplanes; equipped with Goodrich escape slides having part number (P/N) 4A4030-2 or P/N 4A4030-4.

(2) 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; equipped with Goodrich escape slides having P/N 104003-1.

Subject

- (d) Air Transport Association (ATA) of America Code 25: Equipment/furnishings.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:
It has been reported during operational checks that some failures of the Escape Slide *
* * installed on the forward passenger and service door have occurred which
prevented the door from opening.
* * * [T]his condition * * * could delay an emergency evacuation and increase the
chance of injury to passengers and flight crew * * *.

Compliance

- (f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Actions

- (g) Within 18 months after the effective date of this AD, modify the forward escape slide and do a borescope inspection of the aspirator body and inlet cross valve, in accordance with the

Accomplishment Instructions of the Goodrich alert service bulletin identified in paragraph (g)(1) or (g)(2) of this AD, as applicable. Do all applicable corrective actions before further flight.

(1) For any forward door escape slide having P/N 4A4030-2 or P/N 4A4030-4: Goodrich Alert Service Bulletin 4A4030-25A379, original, dated August 10, 2009.

(2) For any forward door escape slide having P/N 104003-1: Goodrich Alert Service Bulletin 104003-25A380, Revision 2, dated July 7, 2009.

Credit for Actions Accomplished in Accordance With Previous Service Information

(h) Actions accomplished before the effective date of this AD in accordance with Goodrich Alert Service Bulletin 104003-25A380, Revision 1, dated April 15, 2009, are considered acceptable for compliance with the corresponding action specified in this AD.

Parts Installation

(i) After 6 months from the effective date of this AD, no airplane may operate with the forward door escape slide having P/N 4A4030-2 or P/N 4A4030-4 (for Model ERJ 170 airplanes), or P/N 104003-1 (for Model ERJ 190 airplanes), on which 18 months or more has elapsed from the slide date of manufacture (for slides that have not been repacked) or the date of last slide repack (for slides that have been repacked).

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(j) 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: Kenny Kaulia, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2848; fax (425) 227-1149. Information may be e-mailed 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

Related Information

(k) Refer to MCAI Brazilian Airworthiness Directive 2009-11-01, dated November 30, 2009; MCAI Brazilian Airworthiness Directive 2009-08-02, dated August 18, 2009; Goodrich Alert Service Bulletin 4A4030-25A379, original, dated August 10, 2009; and Goodrich Alert Service Bulletin 104003-25A380, Revision 2, dated July 7, 2009; for related information.

Material Incorporated by Reference

(l) You must use Goodrich Alert Service Bulletin 4A4030-25A379, original, dated August 10, 2009; or Goodrich Alert Service Bulletin 104003-25A380, Revision 2, dated July 7, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) 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; e-mail distrib@embraer.com.br; Internet: <http://www.flyembraer.com>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on August 12, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.