

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-351-AD; Amendment 39-13874; AD 2004-23-19]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 and -145 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain EMBRAER Model EMB-135 and -45 series airplanes. The existing AD currently requires a one-time inspection to detect incorrect wiring of the electrical connectors to the pressure switches and cartridges on the fire extinguisher bottles for the engines and the auxiliary power unit (APU); disconnection and reconnection of the wiring, as necessary; and adjustment of the length of the harnesses on the fire extinguisher bottles to avoid future misconnections. This amendment requires additional adjustment of the length of the harnesses; installation of a color-coded identification system to avoid misconnections during maintenance; and a functional test of the engine fire extinguisher system. This amendment also expands the applicability of the existing AD to include additional airplanes. The actions specified by this AD are intended to prevent the issuance of erroneous commands or the receipt of erroneous information pertaining to the fire extinguisher system for the engines and the APU, which could result in the inability to put out a fire in an engine or in the APU. This action is intended to address the identified unsafe condition.

DATES: Effective January 3, 2005.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 3, 2005.

The incorporation by reference of EMBRAER Service Bulletin 145-26-0009, dated January 26, 2001, as listed in the regulations, was approved previously by the Director of the Federal Register as of June 8, 2001 (66 FR 28646, May 24, 2001).

ADDRESSES: The service information referenced in this AD may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or 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.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 2001-10-15, amendment 39-12241 (66 FR 28646, May 24, 2001), which is applicable to certain EMBRAER Model EMB-135 and -145 series airplanes, was published in the Federal Register on May 12, 2004 (69 FR 26326). The action proposed to continue to require a one-time inspection to detect incorrect wiring of the electrical connectors to the pressure switches and cartridges on the fire extinguisher bottles for the engines and the auxiliary power unit (APU); disconnection and reconnection of the wiring, as necessary; and adjustment of the length of the harnesses on the fire extinguisher bottles to avoid future misconnections. The action also proposed to require additional adjustment of the length of the harnesses; installation of a color-coded identification system to avoid misconnections during maintenance; and a functional test of the engine fire extinguisher system. The action also proposed to expand the applicability of the existing AD to include additional airplanes.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

Request To Extend Compliance Time for Modification

One commenter, the airplane manufacturer, requests that we revise paragraph (c) of the proposed AD to extend the compliance time from 4,000 to 5,000 flight hours for modifying the electrical harnesses and electrical connectors of the engine and APU fire extinguisher system. The commenter states that this would allow operators of affected airplanes to do the modification during a regularly scheduled maintenance visit. The commenter states that this extension would not compromise flight safety because the proposed AD would also require a general visual inspection to detect incorrect wiring of connectors. The compliance time for this general visual inspection is 100 flight hours after June 8, 2001 (the effective date of AD 2001-10-15) for airplanes subject to AD 2001-10-15, and 100 flight hours after the effective date of this AD for airplanes added to the applicability of this AD.

We do not concur. In consultation with the Departamento de Aviacao Civil, which is the airworthiness authority for Brazil, we have determined that extending the compliance time for the modification is not appropriate, and would not adequately ensure continued flight safety. We have not revised this AD.

Explanation of Editorial Change to Final Rule

We have revised paragraph (d) of this AD to correct typographical errors in two serial numbers.

Conclusion

After careful review of the available data, including the comment noted above, we have determined that air safety and the public interest require the adoption of the rule with the change described previously. We have determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 435 airplanes of U.S. registry that will be affected by this AD.

The actions that are currently required by AD 2001-10-15 and continue to be required by this AD take approximately 3 work hours per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$84,825, or \$195 per airplane.

The new actions that are required by this AD will take approximately 7 work hours per airplane, at an average labor rate of \$65 per work hour. Required parts will cost approximately \$93 per airplane. Based on these figures, the cost impact of the new requirements of this AD on U.S. operators is estimated to be \$238,380, or \$548 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing amendment 39-12241 (66 FR 28646, May 24, 2001), and by adding a new airworthiness directive (AD), amendment 39-13874, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-23-19 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-13874.
Docket 2002-NM-351-AD. Supersedes AD 2001-10-15, Amendment 39-12241.

Applicability: Model EMB-135 and -145 series airplanes, as listed in EMBRAER Service Bulletin 145-26-0010, Change 03, dated August 28, 2002; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent the issuance of erroneous commands or the receipt of erroneous information pertaining to the fire extinguisher system for the engines and auxiliary power unit (APU), which could result in the inability to put out a fire in an engine or in the APU, accomplish the following:

Restatement of the Requirements of AD 2001-10-15

Inspection

(a) For airplanes listed in EMBRAER Service Bulletin 145-26-0009, dated January 26, 2001: Within 100 flight hours after June 8, 2001 (the effective date of AD 2001-10-15, amendment 39-12241), perform a one-time general visual inspection to detect incorrect wiring of electrical connectors to the pressure switches and cartridges on the fire extinguisher bottles for the engines and the APU, in accordance with paragraph 3.D. of the Accomplishment Instructions of EMBRAER Service Bulletin 145-26-0009, dated January 26, 2001; or Change 01, dated June 25, 2001.

Note 1: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(1) If the wiring connections are correct: Prior to further flight, adjust the length of the harnesses to the fire extinguisher bottles, in accordance with the service bulletin.

(2) If the wiring connections are incorrect: Prior to further flight, re-connect them and adjust the length of the harnesses to the fire extinguisher bottles, in accordance with the service bulletin.

New Requirements of This AD

Inspection

(b) For airplanes not subject to paragraph (a) of this AD: Within 100 flight hours after the effective date of this AD, perform a one-time general visual inspection to detect incorrect wiring of electrical connectors to the pressure switches and cartridges on the fire extinguisher bottles for the engines and the APU, in accordance with paragraph 3.D. of the Accomplishment Instructions of EMBRAER Service Bulletin 145-26-0009, Change 01, dated June 25, 2001.

(1) If the wiring connections are correct: Prior to further flight, adjust the length of the harnesses to the fire extinguisher bottles, in accordance with the service bulletin.

(2) If the wiring connections are incorrect: Prior to further flight, re-connect them and adjust the length of the harnesses to the fire extinguisher bottles, in accordance with the service bulletin.

Modifications

(c) For all airplanes: Within 4,000 flight hours after the effective date of this AD, modify the electrical harnesses and electrical connectors of the engine and APU fire extinguisher system, including installing identification sleeves and color-coded identification stickers, in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 145-26-0010, Change 03, dated August 28, 2002.

Parts Installation

(d) As of the effective date of this AD, no person may install on any airplane, engine fire extinguisher bottle part number (P/N) 33600057-1 or P/N 33600057-5, serial number (S/N) 26916D1 through 42300D1 inclusive; and APU fire extinguisher bottles P/N 30100050-1 or P/N 30100050-5, S/N 30209A1 through S/N 38950A1, inclusive; unless color-coded stickers are installed in accordance with paragraph (c) of this AD.

Actions Accomplished Per Previous Issues of the Service Bulletin

(e) Actions accomplished prior to the effective date of this AD in accordance with EMBRAER Service Bulletin 145-26-0010, dated June 25, 2001; Change 01, dated January 3, 2002; or Change 02, dated June 5, 2002; are considered acceptable for compliance with the corresponding actions specified in this AD.

Alternative Methods of Compliance

(f) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(g) Unless otherwise specified in this AD, the actions shall be done in accordance with EMBRAER Service Bulletin 145-26-0009, dated January 26, 2001, or EMBRAER Service Bulletin 145-26-0009, Change 01, dated June 25, 2001; and EMBRAER Service Bulletin 145-26-0010, Change 03, dated August 28, 2002; as applicable.

(1) The incorporation by reference of EMBRAER Service Bulletin 145-26-0009, Change 01, dated June 25, 2001; and EMBRAER Service Bulletin 145-26-0010, Change 03, dated August 28, 2002; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. EMBRAER Service Bulletin 145-26-0010, Change 03, dated August 28, 2002, contains the following effective pages:

Page number	Change level shown on page	Date shown on page
1–3, 8	03	August 28, 2002.
4–7, 9–24, 39–41	Original	June 25, 2001.
25–38	01	January 3, 2002.

(2) The incorporation by reference of EMBRAER Service Bulletin 145-26-0009, dated January 26, 2001, was approved previously by the Director of the Federal Register as of June 8, 2001 (66 FR 28646, May 24, 2001).

(3) Copies may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or 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.

Note 2: The subject of this AD is addressed in Brazilian airworthiness directive 2001-09-01R1, dated June 26, 2002.

Effective Date

(h) This amendment becomes effective on January 3, 2005.

Issued in Renton, Washington, on November 10, 2004.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-25788 Filed 11-24-04; 8:45 am]

BILLING CODE 4910-13-P