

[Federal Register: February 20, 2009 (Volume 74, Number 33)]
[Rules and Regulations]
[Page 7801-7804]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr20fe09-12]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0271; Directorate Identifier 2007-NM-267-AD; Amendment 39-15784; AD 2009-01-05]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP 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:

Embraer has issued the Service Bulletin (SB) No. 145-00-0032 to provide instructions to modify the EMB-145 () aircraft and allow operation with an increased Maximum Takeoff Weight (MTOW). Reassessment of the Damage Tolerance Analysis during development of the SB resulted in changes to the Airworthiness Limitation Items (ALI) for those modified aircraft to include new tasks and to revise some existing ones and its respective intervals.

Failure to inspect some structural components, according to the new tasks and intervals for those modified aircraft, could prevent a timely detection of fatigue cracking. Undetected fatigue cracking in these components could adversely affect the structural integrity of these airplanes.

* * * * *

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

DATES: This AD becomes effective March 27, 2009.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of March 27, 2009.

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: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1405; 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 March 13, 2008 (73 FR 13501). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Embraer has issued the Service Bulletin (SB) No. 145-00-0032 to provide instructions to modify the EMB-145 () aircraft and allow operation with an increased Maximum Takeoff Weight (MTOW). Reassessment of the Damage Tolerance Analysis during development of the SB resulted in changes to the Airworthiness Limitation Items (ALI) for those modified aircraft to include new tasks and to revise some existing ones and its respective intervals.

Failure to inspect some structural components, according to the new tasks and intervals for those modified aircraft, could prevent a timely detection of fatigue cracking. Undetected fatigue cracking in these components could adversely affect the structural integrity of these airplanes.

* * * * *

The corrective action is revising the Airworthiness Limitations Section, Structural Inspection Requirements Section, and Corrosion Prevention and Control Program Section of the Instructions for Continued Airworthiness to incorporate new structural inspection requirements. 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 for Changes to Airworthiness Limitation Items

ExpressJet Airlines identifies the following three issues regarding the Airworthiness Limitation Items (ALIs) specified in the NPRM:

(1) The tasks for the eddy current inspection of the aft upper landing gear trunnions show effectivity by trunnion part number, which leaves much to interpretation, especially since the illustrated parts catalog (IPC) gives the part numbers for the un-drilled trunnions. Embraer should supply the aircraft serial number for the effectivity since they should have this information available.

We acknowledge and agree with this request. Embraer is in the process of providing information on airplane effectivity for the specific trunnion part numbers. Embraer's goal is to ensure that this information is available to operators in Revision 12 of the Scheduled Maintenance Requirements

Document (SMRD). If Revision 12 is not issued as of the effective date of this AD, operators may request an alternative method of compliance (AMOC) with the AD under the provisions of paragraph (g)(1) of this AD. We have made no change to the AD in this regard.

(2) There is too much left to interpretation for the ALIs. Several tasks have been renumbered in order to accommodate new intervals and effectivity with regard to the modification status or model type (e.g., 135ER, 145LR, 145XR). These new task numbers should have a note stating that they are equivalent to the original task number and that performing the inspection under the original task number meets the requirement. If this is not written into the NPRM then a task with a new number will have to be performed as if it were a new task, with no credit given for previous accomplishment.

We disagree with this request. Embraer states that the task equivalence between the former task and the new task can be verified in the Highlight section of the applicable Maintenance Review Board (MRB) Report revision (in this case Embraer temporary revision (TR) 10-5 dated May 23, 2007). We have made no change to the AD in this regard.

(3) Paragraph (f)(1) of the NPRM specifies revising the Instructions for Continued Airworthiness (ICAs) to include Section 4—Structural Inspection Requirements and Section 5—Corrosion Prevention and Control Program. This is in addition to including the ALI Section. The commenter believes that the intent is to ensure that operators include the ALIs in their maintenance program. The MRB report tasks from Sections 4 and 5 should not be mandated by this AD.

We disagree with this request. The AD does not mandate all of the tasks in Sections 4 and 5 of the complete MRB document. Operators are required to include only tasks specified in Sections 4 and 5 of Embraer EMB145 MRB Report MRB-145/1150, as identified in Embraer TR 10-5 in order to address the identified unsafe condition. We have made no change to the AD in this regard.

Request To Change the Applicability

Embraer recommends changing the applicability in the NPRM to specify airplanes on which Embraer Service Bulletin 145-00-0032, dated September 29, 2006; Revision 01, dated October 23, 2006; Revision 02, dated November 24, 2006; or Revision 03, dated March 5, 2007; has been incorporated. Operators that have incorporated Revision 04, dated December 10, 2007, or subsequent revisions of Embraer Service Bulletin 145-00-0032 should not be affected by this AD since information regarding updated Airworthiness Limitations Requirements is included in Revision 04 of the Service Bulletin.

We disagree with this recommendation. The applicability specified in paragraph (c) of this AD does not specify a date or revision level for the referenced service bulletin; therefore, the original issue and Revisions 01, 02, 03, and 04 are already included in the applicability. All applicable airplanes are required to revise the ALS. We have made no change to the AD in this regard.

Request To Change Note 2

Embraer recommends changing the language specified in Note 2 of the NPRM to exclude the phrase "identical to that in TR 10-5," as this would mandate Embraer TR 10-5 for airplanes that have applied Embraer Service Bulletin 145-00-0032, even after the MRB report has been revised. Embraer adds that operators would be required to request AMOCs for every new revision, or even worse, would be prevented from implementing more restrictive time intervals that might be updated in future revisions. Embraer recommends accepting Revision 11 of the MRB report, which is already published, or subsequent MRB report revisions, as an alternative method of compliance. Revision 11 of the MRB report already includes information from Embraer TR 10-5. Embraer also recommends including information regarding maintenance plan intervals bridging, available in paragraph A2.3.2.1 of Appendix 2 of the MRB report, as an acceptable method to bridge these new intervals into operators' maintenance plans.

We agree that Note 2 of this AD should be changed for clarity; therefore, we have changed the language in Note 2 to exclude the phrase "identical to that in TR 10-5."

We do not agree to include information regarding maintenance plan intervals bridging in the AD. That paragraph is already included in Embraer TR 10-5; therefore, it is acceptable to include those provisions in the operators' maintenance plans. We have made no change to the AD in this regard.

Change to Final Rule

The MCAI does not provide an initial compliance time or grace period for doing the tasks. We have determined that the intent of the MCAI is for the initial compliance time to start from the initial delivery date of the airplane at the applicable time specified in the tasks or within 200 flight cycles after revising the ALS, whichever occurs later, in order to address the identified unsafe condition in a timely manner. We have changed paragraph (f)(1) of this AD to include those compliance times.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

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 572 products of U.S. registry. We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$80 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$45,760, or \$80 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:



2009-01-05 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-15784.
Docket No. FAA-2008-0271; Directorate Identifier 2007-NM-267-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective March 27, 2009.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to EMBRAER Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes, certificated in any category, which have incorporated Embraer Service Bulletin 145-00-0032.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (g)(1) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

- (d) Air Transport Association (ATA) of America Code 53: Fuselage.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Embraer has issued the Service Bulletin (SB) No. 145-00-0032 to provide instructions to modify the EMB-145 () aircraft and allow operation with an increased Maximum Takeoff Weight (MTOW). Reassessment of the Damage Tolerance Analysis during development of the SB resulted in changes to the Airworthiness Limitation Items (ALI) for those modified aircraft to include new tasks and to revise some existing ones and its respective intervals.

Failure to inspect some structural components, according to the new tasks and intervals for those modified aircraft, could prevent a timely detection of fatigue cracking.

Undetected fatigue cracking in these components could adversely affect the structural integrity of these airplanes.

* * * * *

The corrective action is revising the Airworthiness Limitations Section, Structural Inspection Requirements Section, and Corrosion Prevention and Control Program Section of the Instructions for Continued Airworthiness to incorporate new structural inspection requirements.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) Within 60 days after the effective date of this AD: Revise the Airworthiness Limitations Section (ALS), Structural Inspection Requirements Section, and Corrosion Prevention and Control Program Section of the Instructions for Continued Airworthiness to incorporate the tasks specified in Appendix 2, "Airworthiness Limitation Requirements," Section 4 "Structural Inspection Requirements," and Section 5 "Corrosion Prevention and Control Program," identified in Embraer Temporary Revision (TR) 10-5, dated May 23, 2007, of the Embraer EMB 145 Maintenance Review Board (MRB) Report MRB-145/1150. The initial compliance times for the tasks start from the initial delivery date of the applicable airplane at the applicable time specified in the tasks or within 200 flight cycles after revising the ALS, whichever occurs later. Repeat the applicable inspection thereafter at the interval specified in Embraer TR 10-5 of the Embraer EMB 145 MRB Report MRB-145/1150; except as provided by paragraphs (f)(2) and (g)(1) of this AD.

Note 2: The actions required by paragraph (f)(1) of this AD may be done by inserting a copy of Embraer TR 10-5, dated May 23, 2007, into the sections. When this TR has been included in general revisions of the Embraer EMB 145 MRB Report MRB-145/1150, the general revisions may be inserted in the MRB report.

(2) After accomplishing the actions specified in paragraph (f)(1) of this AD, no alternative inspections or inspection intervals may be used, except as provided by paragraph (g)(1) of this AD.

FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) 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. Send information to ATTN: Sanjay Ralhan, Aerospace Engineer, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1405; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Brazilian Airworthiness Directive 2007-07-01, effective August 21, 2007; and Embraer TR 10-5, dated May 23, 2007, to the Embraer EMB145 MRB Report MRB-145/1150; for related information.

Material Incorporated by Reference

(i) You must use Embraer Temporary Revision 10-5, dated May 23, 2007, to the Embraer EMB145 Maintenance Review Board Report MRB-145/1150, to do the actions required by this AD, unless the AD specifies otherwise. (Some pages of the document do not have the full document title.)

(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 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.

Issued in Renton, Washington, on November 4, 2008.

Stephen P. Boyd,
Assistant Manager, Transport Airplane Directorate,
Aircraft Certification Service.