

[Federal Register: June 25, 2008 (Volume 73, Number 123)]
[Rules and Regulations]
[Page 35904-35907]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr25jn08-9]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0182; Directorate Identifier 2007-NM-262-AD; Amendment 39-15577; AD 2008-13-14]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135ER, -135KE, -135KL, and -135LR Airplanes, and 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:

Fuel system reassessment, performed according to RBHA-E88/SFAR-88 (Regulamento Brasileiro de Homologacao Aeronautica 88/Special Federal Aviation Regulation No. 88), requires the inclusion of new maintenance tasks in the Critical Design Configuration Control Limitations (CDCCL) and in the Fuel System Limitations (FSL), necessary to preclude ignition sources in the fuel system. * * *

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

DATES: This AD becomes effective July 30, 2008.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 30, 2008.

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 supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That supplemental NPRM was published in the Federal Register on May 7, 2008 (73 FR 25609). That supplemental NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Fuel system reassessment, performed according to RBHA-E88/SFAR-88, requires the inclusion of new maintenance tasks in the Critical Design Configuration Control Limitations (CDCCL) and in the Fuel System Limitations (FSL), necessary to preclude ignition sources in the fuel system. * * *

The corrective action is revising the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness (ICA) to incorporate new limitations for fuel tank systems. 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 Revise Inspections

ExpressJet requests that we revise two tasks, "28-41-01-720-001-A00 and 28-41-01-720-A00," specified in Table 1 of the supplemental NPRM. The commenter states that these tasks are related to a functional check of the component rather than the aircraft system. The commenter suggests that we identify these two components by part number and require the inspections be done before the part accumulates 10,000 flight hours since new or 10,000 flight hours since the last functional check.

We agree with the commenter that tasks 28-41-01-720-001-A00 and 28-41-04-720-001-A00 are related to a functional check of the component rather than the aircraft system (the commenter referred to task 28-41-01-720-A00, which is not listed in Table 1; we infer that the commenter intended to refer to task 28-41-04-720-001-A00). Prior to the commenter submitting its comment, the commenter raised the issue during a visit by the FAA. Since then we have discussed the issue with the manufacturer and with the Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil. ANAC states that it intends to issue an airworthiness directive to address an inspection threshold for these tasks. Therefore, we have removed these tasks from Table 1 of this AD. We might consider further rulemaking once new actions and compliance times for these tasks are identified by ANAC or in absence of any new action from ANAC, we might consider unilateral rulemaking.

Requests To Extend Compliance Times/Include Costs of Unscheduled Inspections

ExpressJet and EMBRAER request that we extend the compliance times specified in Table 1 of the supplemental NPRM. ExpressJet states that the compliance times for the inspections specified in Table 1 of the supplemental NPRM are confusing. ExpressJet notes that the "Grace Period" is "Within 90 days after the effective date of this AD," but the effective date of the AD is not stated and the

compliance time for revising the ALS of the ICA is before December 16, 2008. ExpressJet recommends that we revise the "Grace Period" to within 90 days after December 16, 2008.

EMBRAER states that the compliance time "within 90 days of the effective date of the AD" for airplanes with cycle totals above the thresholds would require airplanes to be removed from service for special inspections and that these inspections would require the fuel tanks to be drained and ventilated prior to inspection. EMBRAER states that requiring unscheduled tank inspections will increase the probability of maintenance error, which will result in an increase in the risk of ignition sources. EMBRAER believes that there is no special risk that justifies the compliance time of within 90 days from the effective date of the AD and suggests that the compliance time be revised to within 5,000 flight hours after the effective date of the AD.

EMBRAER also requests that if the compliance time of within 90 days after the effective date of the AD is retained, we include the costs of unscheduled inspections. EMBRAER notes that the costs of unscheduled inspections would be higher than the estimate given in the promulgation of Special Federal Aviation Regulation No. 88 of between 60 and 330 work-hours for the inspection and between 36 and 96 hours for time out of service.

We agree to extend the "Grace Period" specified in Table 1 of this AD. We agree with ExpressJet that the compliance time of within 90 days after December 16, 2008 is appropriate. We have determined that the new compliance time will ensure an acceptable level of safety. We have revised Table 1 of this AD accordingly.

However, we do not agree with EMBRAER to defer the first mandatory inspections to within 5,000 flight hours after the effective date of the AD. In revising the appropriate compliance time for the inspections (i.e., extending the "Grace Period" to within 90 days after December 16, 2008), we considered the urgency associated with the subject unsafe condition, the availability of required parts, and the practical aspect of accomplishing the required inspections within a period of time that corresponds to the normal scheduled maintenance for most affected operators. If an operator decides that more time is needed to comply with the AD, the operator can request an alternative method of compliance (AMOC) in accordance with the provisions of paragraph (g)(1) of the supplemental NPRM.

As stated earlier, we have extended the compliance time and therefore the number of unscheduled inspections should be reduced. However, because operators' schedules vary substantially, it would be nearly impossible for us to accurately calculate all costs associated with unscheduled inspections. Therefore, we have not revised the Costs of Compliance section of this AD to reflect unscheduled inspections. However, we have revised the Costs of Compliance section of this AD to reflect a change in the number of airplanes affected by this AD from 704 (as specified in the supplemental NPRM) to 668 airplanes.

Request To Clarify Actions

ExpressJet notes that paragraph (f)(2) of the supplemental NPRM states "Before December 16, 2008, revise the ALS of the ICA * * *." ExpressJet states that it assumes that this is referring to the operator's ICA.

We infer that ExpressJet is requesting clarification of the actions in this AD. The wording that was used represents a standard approach and has been used for many years. The intent is to have all airworthiness limitations, regardless of whether imposed by original type certification or by a later AD, located in one immediately recognizable document. In 1980, the FAA identified the Airworthiness Limitations section of the Instructions for Continued Airworthiness as the appropriate document.

We consider that not having all airworthiness limitations in one document could lead to confusion as to what is or what is not a mandatory maintenance action as identified in Federal Aviation Regulation, part 25, Appendix H, section H25.4. This is the basis of our requirement to have each operator maintain a current copy of the Airworthiness Limitations section. Concerning ExpressJet's statement that the AD is referring to the operator's ICA, we infer that the commenter is

wondering if, after revising its copy of the Airworthiness Limitation section, there are other required actions such as ensuring that the operator's maintenance program is updated to incorporate the actions specified in the revised Airworthiness Limitations.

Ensuring that operators' maintenance programs and the actions of its maintenance personnel are in accordance with the Airworthiness Limitations is required, but not by this AD. 14 CFR 91.403(c) specifies that no person may operate an aircraft for which airworthiness limitations have been issued unless those limitations have been complied with. Therefore, there is no need to further expand the requirements of the AD beyond that which was proposed because section 91.403(c) already imposes the appropriate required action after the airworthiness limitations are revised. We have not changed this 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 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 668 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 \$53,440, 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:



2008-13-14 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-15577.
Docket No. FAA-2008-0182; Directorate Identifier 2007-NM-262-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 30, 2008.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to EMBRAER Model EMB-135ER, -135KE, -135KL, and -135LR airplanes, and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; certificated in any category; except for Model EMB-145LR airplanes modified according to Brazilian Supplemental Type Certificate 2002S06-09, 2002S06-10, or 2003S08-01.

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) 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 28: Fuel.

Reason

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

Fuel system reassessment, performed according to RBHA-E88/SFAR-88, requires the inclusion of new maintenance tasks in the Critical Design Configuration Control Limitations (CDCCL) and in the Fuel System Limitations (FSL), necessary to preclude ignition sources in the fuel system. * * *

The corrective action is revising the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness (ICA) to incorporate new limitations for fuel tank systems.

Actions and Compliance

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

(1) The term "MRBR," as used in this AD, means the EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report (MRBR) MRB-145/1150, Revision 11, dated September 19, 2007.

(2) Before December 16, 2008, revise the ALS of the ICA to incorporate Section A2.5.2, Fuel System Limitation Items, of Appendix 2 of the MRBR. For all tasks identified in Section A2.5.2 of Appendix 2 of the MRBR, the initial compliance times start from the applicable times specified in Table 1 of this AD; and the repetitive inspections must be accomplished thereafter at the interval specified in Section A2.5.2 of Appendix 2 of the MRBR, except as provided by paragraphs (f) (4) and (g) of this AD.

Table 1 – Initial Inspections

Reference Number	Description	Compliance Time (whichever occurs later)	
		Threshold	Grace Period
28-11-00-720-001-A00	Functionally Check critical bonding integrity of selected conduits inside the wing tank, Fuel Pump and FQIS connectors at tank wall by conductivity measurements	Before the accumulation of 30,000 total flight hours	Within 90 days after December 16, 2008
28-17-01-720-001-A00	Functionally Check critical bonding integrity of Fuel Pump, VFQIS and Low Level SW connectors at tank wall by conductivity measurements	Before the accumulation of 30,000 total flight hours	Within 90 days after December 16, 2008
28-21-01-220-001-A00	Inspect Electric Fuel Pump Connector	Before the accumulation of 10,000 total flight hours	Within 90 days after December 16, 2008
28-23-03-220-001-A00	Inspect Pilot Valve harness inside the conduit	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008
28-23-04-220-001-A00	Inspect Vent Valve harness inside the conduit	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008
28-27-01-220-001-A00	Inspect Electric Fuel Transfer Pump Connector	Before the accumulation of 10,000 total flight hours	Within 90 days after December 16, 2008
28-41-03-220-001-A00	Inspect FQIS harness for clamp and wire jacket integrity	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008
28-41-07-220-001-A00	Inspect VFQIS and Low Level SW Harness for clamp and wire jacket integrity	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008

(3) Before December 16, 2008, or within 90 days after the effective date of this AD, whichever occurs first, revise the ALS of the ICA to incorporate items 1, 2, and 3 of Section A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of the MRBR.

(4) After accomplishing the actions specified in paragraphs (f)(2) and (f)(3) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used unless the inspections, intervals, or CDCCLs are part of a later revision of Appendix 2 of the MRBR that is approved by the Manager, ANM-116, FAA, or ANAC (or its delegated agent); or unless the inspections, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (g) of this AD.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: The MCAI specifies a compliance date of "Before December 31, 2008" for doing the ALI revisions. We have already issued regulations that require operators to revise their maintenance/inspection programs to address fuel tank safety issues. The compliance date for these regulations is December 16, 2008. To provide for coordinated implementation of these regulations and this AD, we are using this same compliance date in this AD.

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, 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, International Branch, ANM-116, Transport Airplane Directorate, FAA, 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 Brazilian Airworthiness Directive 2007-08-02, effective September 27, 2007; and Sections A2.5.2, Fuel System Limitation Items, and A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of the MRBR; for related information.

Material Incorporated by Reference

(i) You must use Sections A2.5.2, Fuel System Limitation Items, and A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007, to do the actions required by this AD, unless the AD specifies otherwise. This document contains the following effective pages:

Pages	Revision level	Date
List of Effective Pages: Pages A through L	11	September 19, 2007.

(The revision level of this document is identified only on the title page of the document.)

(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), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil.

(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/cfr/ibr-locations.html>.

Issued in Renton, Washington, on June 13, 2008.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-13924 Filed 6-24-08; 8:45 am]