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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2008-0194; Directorate Identifier 2007-NM-263-AD; Amendment 39-15578; AD 2008-13-15]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135BJ Airplanes**

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

**ACTION:** Final rule.

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**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 25606). 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 comment received.

### **Request To Extend Compliance Times/Include Costs of Unscheduled Inspections**

EMBRAER request that we extend the compliance times specified in Table 1 of the supplemental NPRM. 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 have determined that a compliance time of within 90 days after December 16, 2008 is appropriate and will ensure an acceptable level of safety. We have revised Table 1 of this AD accordingly. 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 this 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.

### **Explanation of Removal of Certain Tasks**

We have determined that tasks 28-41-01-720-001-A00 and 28-46-05-720-001-A00 in Table 1 of the supplemental NPRM are related to a functional check of the component rather than the aircraft system. 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 the absence of any new action from ANAC, we might consider unilateral rulemaking.

### **Revision to Costs of Compliance**

The number of airplanes on the U.S. Registry has changed since we issued the supplemental NPRM from 49 airplanes to 41 airplanes. We have revised the Costs of Compliance section of this AD accordingly.

### **Conclusion**

We reviewed the available data, including the comment 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 41 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 \$3,280, 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:



**2008-13-15 Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Amendment 39-15578.  
Docket No. FAA-2008-0194; Directorate Identifier 2007-NM-263-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to all EMBRAER Model EMB-135BJ airplanes, certificated in any category.

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 "MPG," as used in this AD, means the EMBRAER Legacy BJ–Maintenance Planning Guide (MPG) MPG-1483, Revision 5, dated March 22, 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 MPG. For all tasks identified in Section A2.5.2 of Appendix 2 of the MPG, 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 MPG, 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
28-13-01-720-002-A00	Functionally Check Aft Fuel tank critical bonding integrity of Fuel Pump, FQGS 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
28-15-04-720-001-A00	Functionally Check Fwd Fuel tank critical bonding integrity of Fuel Pump, FQGS 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 Wing Electric Fuel Pump Connector	Before the accumulation of 10,000 total flight hours	Within 90 days after December 16, 2008D
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
28-41-03-220-001-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
28-46-02-220-001-A00	Aft Fuel Tank Internal Inspection: FQGS harness 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

28-46-04-220-001-A00	Fwd Fuel Tank Internal Inspection: FQGS harness 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
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(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 MPG.

(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 MPG 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:

(1) 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.

(2) The MCAI specifies a compliance time of 180 days to revise the ALS of the ICA to incorporate items 1, 2, and 3 of Section A2.4 of Appendix 2 of the MPG. This AD requires a compliance time of 90 days to do this revision. This difference has been coordinated with ANAC.

### 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 2007-08-01, 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 MPG; 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 Legacy BJ–Maintenance Planning Guide MPG-1483, Revision 5, dated March 22, 2007, to do the actions required by this AD, unless the AD specifies otherwise. This document contains the following effective pages:

<b>Pages</b>	<b>Revision level</b>	<b>Date</b>
List of Effective Pages: Pages A through J	5	March 22, 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. E8-13926 Filed 6-24-08; 8:45 am]