

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

[Docket No. FAA-2009-0412; Directorate Identifier 2009-NM-022-AD]

RIN 2120-AA64

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

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed 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 found the possibility of some aluminum fasteners having been installed instead of titanium ones at bulkhead 1 of the LH (left-hand) and RH (right-hand) pylons of some [Embraer ERJ 170 and] Embraer ERJ 190 aircraft models.

The unsafe condition is damage to the hydraulic lines and electrical generator power cables in the case of bird impact in the region of bulkhead 1 of the pylons, which may lead to presence of fire without indication to the flight crew. The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** We must receive comments on this proposed AD by June 4, 2009.

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Fax:** (202) 493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- **Hand Delivery:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-40, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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](mailto:distrib@embraer.com.br); Internet: <http://www.flyembraer.com>. You may review copies of the referenced 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 or 425-227-1152.

**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 this proposed AD, 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.

**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:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2009-0412; Directorate Identifier 2009-NM-022-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

The Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil, has issued Brazilian Airworthiness Directive 2008-09-02, effective September 30, 2008; and Brazilian Airworthiness Directive 2008-

10-04, effective November 10, 2008 (referred to after this as “the MCAI”); to correct an unsafe condition for the specified products. MCAI 2008-09-02 states:

It has been found the possibility of some aluminum fasteners having been installed instead of titanium ones at bulkhead 1 of the LH (left-hand) and RH (right-hand) pylons of some Embraer ERJ 190 aircraft models. In the case of a bird strike in the pylon bulkhead 1 equipped with aluminum fasteners there is the possibility where the impact may affect some equipments installed in the region after the bulkhead 1. Damages to the hydraulic lines and electrical generator power cables may lead to presence of fire in the region, without indication to the flight crew.

\* \* \* \* \*  
MCAI 2008-10-04 states:

It has been found the possibility of some aluminum fasteners having been installed instead of titanium ones at bulkhead 1 of the LH and RH pylons of some Embraer ERJ 170 aircraft models. The structural integrity of the region where these fasteners are installed may be affected in case of bird impact.

\* \* \* \* \*  
Corrective actions include inspecting for the presence of aluminum fasteners at pylon bulkhead 1, and replacing all aluminum fasteners with titanium fasteners. You may obtain further information by examining the MCAI in the AD docket.

**Relevant Service Information**

Embraer has issued Service Bulletins 170-54-0007 and 190-54-0008, both dated December 21, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

**FAA's Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

**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 proposed different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a NOTE within the proposed AD.

### Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect 20 products of U.S. registry. We also estimate that it would take 2 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$80 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$3,200, or \$160 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:*

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 proposed AD and placed it in the AD docket.

### List of Subjects in 14 CFR Part 39

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

### The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

**Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Docket No. FAA-2009-0412; Directorate Identifier 2009-NM-022-AD.

#### Comments Due Date

- (a) We must receive comments by June 4, 2009.

#### Affected ADs

- (b) None.

#### Applicability

- (c) This AD applies to EMBRAER Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes, certificated in any category, serial numbers 17000156 through 17000169 inclusive; and Model ERJ 190-100 ECJ, -100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW airplanes, certificated in any category, serial numbers 19000047 through 19000089 inclusive.

#### Subject

- (d) Air Transport Association (ATA) of America Code 54: Nacelles/Pylons.

#### Reason

- (e) Brazilian Airworthiness Directive 2008-09-02, effective September 30, 2008, states:

It has been found the possibility of some aluminum fasteners having been installed instead of titanium ones at bulkhead 1 of the LH (left-hand) and RH (right-hand) pylons of some Embraer ERJ 190 aircraft models. In the case of a bird strike in the pylon bulkhead 1 equipped with aluminum fasteners there is the possibility where the impact may affect some equipments installed in the region after the bulkhead 1. Damages to the hydraulic lines and electrical generator power cables may lead to presence of fire in the region, without indication to the flight crew.

\* \* \* \* \*

Brazilian Airworthiness Directive 2008-10-04, effective November 10, 2008, states:

It has been found the possibility of some aluminum fasteners having been installed instead of titanium ones at bulkhead 1 of the LH and RH pylons of some Embraer ERJ 170 aircraft models. The structural integrity of the region where these fasteners are installed may be affected in case of bird impact.

\* \* \* \* \*

Corrective actions include inspecting for the presence of aluminum fasteners at pylon bulkhead 1, and replacing all aluminum fasteners with titanium fasteners.

### Actions and Compliance

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

(1) Within 5,000 flight cycles after the effective date of this AD: Inspect the fasteners in bulkhead 1 of the left- and right-hand pylons for the presence of aluminum fasteners, in accordance with Part I of the Accomplishment Instructions of Embraer Service Bulletins 170-54-0007 and 190-54-0008, both dated December 21, 2007; as applicable. If no aluminum fastener is found, this AD requires no further action.

(2) If any aluminum fastener is found, before further flight after the inspection required by paragraph (f)(1) of this AD: Replace any aluminum fastener with a titanium fastener in accordance with Part II of the Accomplishment Instructions of Embraer Service Bulletins 170-54-0007 and 190-54-0008, both dated December 21, 2007; as applicable.

### FAA AD Differences

**Note 1:** 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: 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. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(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 2008-09-02, effective September 30, 2008; MCAI Brazilian Airworthiness Directive 2008-10-04, effective November 10, 2008; and Embraer Service Bulletins 170-54-0007 and 190-54-0008, both dated December 21, 2007; for related information.

Issued in Renton, Washington, on April 27, 2009.

Stephen P. Boyd,

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. E9-10302 Filed 5-4-09; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2009-0411; Directorate Identifier 2008-NM-190-AD]

RIN 2120-AA64

#### Airworthiness Directives; Boeing 737-600, -700, -700C, and -800 Series Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain Boeing Model 737-600, -700, -700C, and -800 series airplanes. This proposed AD would require repetitive lubrications of the right and left main landing gear (MLG) forward trunnion pins. This proposed AD also would require an inspection for discrepancies of the transition radius of the MLG forward trunnion pins, and corrective actions if necessary. For certain airplanes, this proposed AD would also require repetitive detailed inspections for discrepancies (including finish damage, corrosion, pitting, and base metal scratches) of the transition radius of the left and right MLG trunnion pins, and corrective action if necessary. Replacing or overhauling the trunnion pins would terminate the actions required by this AD. This proposed AD results from a report that the protective finishes on the forward trunnion pins for the left and right MLG might have been damaged during final assembly. We are proposing this AD to prevent stress corrosion cracking of the forward trunnion pins, which could result in

fracture of the pins and consequent collapse of the MLG.

**DATES:** We must receive comments on this proposed AD by June 19, 2009.

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Fax:** 202-493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- **Hand Delivery:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail [me.boecom@boeing.com](mailto:me.boecom@boeing.com); Internet <https://www.myboeingfleet.com>.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6440; fax (425) 917-6590.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2009-0411; Directorate Identifier 2008-NM-190-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will

consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

We have received a report indicating that the protective finishes on the main landing gear (MLG) forward trunnion pins might have been damaged during final assembly of certain Boeing Model 737-600, -700, -700C, and -800 series airplanes. The protective coating could be damaged at one location because the pins were not handled correctly. The MLG forward trunnion pins may have been delivered to operators with compromised corrosion protection in one critical area: The transition radius between the chrome-plated outer diameter and the spherical ball bearing surface. Damage to the protective finish puts the base metal of the trunnion pins at risk from corrosion pitting. This condition, if not corrected, could lead to stress corrosion cracking of the forward trunnion pins, which could result in fracture of the pins and consequent collapse of the MLG.

#### Relevant Service Information

We have reviewed Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008. The service bulletin describes procedures for repetitive lubrication of the MLG forward trunnion pins. The service bulletin states that accomplishing the inspections and applicable repairs/replacements described below, or overhauling the trunnion pins, eliminates the need for the repetitive lubrication. The service bulletin also describes procedures for a detailed inspection for discrepancies (including finish damage, corrosion, pitting, and base metal scratches) of the transition radius of the left and right MLG trunnion pins, and applicable corrective actions. The corrective actions include repairing the finish if finish damage is found without corrosion, pitting, or base metal scratches, and replacing the trunnion pins. For airplanes on which the finish repair is done, the service bulletin describes procedures for repeating the detailed inspections for discrepancies of the MLG trunnion pins and doing applicable corrective actions. Replacement or overhaul of the trunnion pins eliminates need for the actions specified in the service bulletin.