

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2006-24696; Directorate Identifier 2006-NM-038-AD]

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:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain EMBRAER Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes. This proposed AD would require replacing the electrical bonding clamps inside the fuel tanks and adjacent areas. This proposed AD results from a report of a failure of fitting clamp of an electrical bonding cable for the fuel tubing. We are proposing this AD to prevent loss of bonding protection in the interior of the fuel tanks or adjacent areas, and a consequent potential source of ignition in a fuel tank and possible fire or explosion.

**DATES:** We must receive comments on this proposed AD by June 8, 2006.

**ADDRESSES:** Use one of the following addresses to submit comments on this proposed AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, room PL-401, Washington, DC 20590.

- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343—CEP 12.225, Sao Jose dos Campos—SP, Brazil, for service information identified in this proposed AD.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2125; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number "FAA-2006-24696; Directorate Identifier 2006-NM-038-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

**Examining the Docket**

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

**Discussion**

The Departamento de Aviacao Civil (DAC), which is the airworthiness authority for Brazil, notified us that an unsafe condition may exist on all EMBRAER Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes. The DAC advises that it received a report of one failure of

fitting clamp of an electrical bonding cable for the fuel tubing. Investigation into the failure identified a batch of electrical bonding cable fitting clamps that was manufactured with incorrect material; the incorrect aluminum alloy Type 1100, which is more ductile than the correct Type 2602 aluminum alloy, deforms during the installation process. The batch of clamps made from incorrect material was installed on numerous airplanes. This condition, if not corrected, could result in loss of bonding protection in the interior of the fuel tanks or adjacent areas, and a consequent potential source of ignition in a fuel tank and possible fire or explosion.

**Relevant Service Information**

EMBRAER has issued Service Bulletin 145-28-0028, dated November 7, 2005. The service bulletin describes procedures for replacing the electrical bonding clamps, having part numbers AN735D6 and AN735D4, inside the ventral, wing stub, and wing fuel tanks, and adjacent areas. The replacement includes measuring the electrical resistance between the tubes joined by the electrical bonding jumper. If the resistance is greater than 200 milliohms, the service bulletin describes repeating the clamp replacement and measuring the resistance until the resistance value is 200 milliohms or less. When the resistance is 200 milliohms or less, the service bulletin describes procedures for making the bonding protection inside the ventral, wing stub, and wing fuel tanks. Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition. The DAC mandated the service information and issued Brazilian airworthiness directive 2006-02-03, effective February 24, 2006, to ensure the continued airworthiness of these airplanes in Brazil.

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

These airplane models are manufactured in Brazil and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DAC has kept the FAA informed of the situation described above. We have examined the DAC's findings, evaluated all pertinent information, and determined that we need to issue an AD for airplanes of this type design that are certificated for operation in the United States.

Therefore, we are proposing this AD, which would require accomplishing the actions specified in the service information described previously, except as discussed under "Difference Between the Proposed AD and Brazilian Airworthiness Directive."

#### **Difference Between the Proposed AD and Brazilian Airworthiness Directive**

Brazilian airworthiness directive 2006-02-03, dated February 24, 2006, is applicable to "all EMB-145( ) aircraft models in operation." However, this does not agree with EMBRAER Service Bulletin 145-28-0028, dated November 7, 2005, which states that only certain EMB-145 airplanes are affected and

identifies them by serial number. This proposed AD would be applicable only to the airplanes listed in the service bulletin. This difference has been coordinated with the DAC.

#### **Costs of Compliance**

The following table provides the estimated costs for U.S. operators to comply with this proposed AD.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Replacement of bonding clamp (all airplane groups).	2	\$80	Between \$57 and \$87 (depending on kit/airplane group).	Between \$217 and \$247 (depending on kit/airplane group).	18	Between \$3,906 and \$4,446 (depending on kit/airplane group).

#### **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 have 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 that the 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. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

**Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Docket No. FAA-2006-24696; Directorate Identifier 2006-NM-038-AD.

##### **Comments Due Date**

- (a) The FAA must receive comments on this AD action by June 8, 2006.

##### **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; as identified in

EMBRAER Service Bulletin 145-28-0028, dated November 7, 2005.

#### **Unsafe Condition**

(d) This AD results from a report of a failure of fitting clamp of an electrical bonding cable for the fuel tubing. We are issuing this AD to prevent loss of bonding protection in the interior of the fuel tanks or adjacent areas, and a consequent potential source of ignition in a fuel tank and possible fire or explosion.

#### **Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

#### **Electrical Bonding Clamp Replacement**

(f) Within 5,000 flight hours after the effective date of this AD: Replace the electrical bonding clamps having part numbers AN735D6 and AN735D4 inside the ventral, wing stub, and wing fuel tanks, and adjacent areas, by accomplishing all actions specified in the Accomplishment Instructions of EMBRAER Service Bulletin 145-28-0028, dated November 7, 2005.

#### **Alternative Methods of Compliance (AMOCs)**

(g)(1) The Manager, International Branch ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

#### **Related Information**

(h) Brazilian airworthiness directive 2006-02-03, effective February 24, 2006, also addresses the subject of this AD.

Issued in Renton, Washington, on April 28, 2006.

Ali Bahrami,

Manager, Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. E6-7013 Filed 5-8-06; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2006-24093; Directorate  
Identifier 2006-CE-19-AD]

RIN 2120-AA64

#### **Airworthiness Directives; Pilatus Aircraft Ltd. Models PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2 Airplanes**

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

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

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2003-13-04, which applies to Pilatus Aircraft Ltd (Pilatus) Model PC-6 airplanes, all manufacturer serial numbers (MSN) up to and including 939. AD 2003-13-04 currently requires you to inspect the integral fuel tank wing ribs for cracks and the top and bottom wing skins for distortion, repair any cracks or distortion before further flight, and do a fuel tank ventilating system installation. Since we issued AD 2003-13-04, the FAA determined the action should also apply to all the models of the PC-6 airplanes listed in the type certification data sheet of Type Certificate (TC) No. 7A15 that are produced in the United States through a licensing agreement between Pilatus and Fairchild Republic Company (also identified as Fairchild Industries, Fairchild Heli Porter, or Fairchild-Hiller Corporation). In addition, the intent of the applicability of AD 2003-13-04 was to apply to all the affected serial numbers of the airplane models listed in TC No. 7A15. Consequently, this proposed AD would retain all the actions of AD 2003-13-04, would add those Fairchild Republic Company airplanes to the applicability of this proposed AD, and would list out the individual specific airplane models. We are proposing this AD to detect and correct cracks in the ribs of the inboard integral fuel tanks in the left and right

wings, which could lead to wing failure during flight.

**DATES:** We must receive comments on this proposed AD by June 9, 2006.

**ADDRESSES:** Use one of the following addresses to comment on this proposed AD:

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
  - Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
  - Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.
  - Fax: (202) 493-2251.
  - Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., 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 Pilatus Aircraft Ltd., Customer Liaison Manager, CH-6371 Stans, Switzerland; telephone: +41 41 619 63 19; facsimile: +41 41 619 6224.

**FOR FURTHER INFORMATION CONTACT:** Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

We invite you to send any written relevant data, views, or arguments regarding this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include the docket number, "Docket No. FAA-2006-24093; Directorate Identifier 2006-CE-19-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

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

##### **Discussion**

Mandatory continuing airworthiness information and the FAA's determination that an unsafe condition

existed on a Pilatus Model PC-6 airplane caused us to issue AD 2003-13-04, Amendment 39-13204 (68 FR 37394, June 24, 2003). AD 2003-13-04 currently requires that you inspect the integral fuel tank wing ribs for cracks and the top and bottom wing skins for distortion, repair any cracks or distortion before further flight, and do a fuel tank ventilating system installation on Pilatus Model PC-6 airplanes, all manufacturer serial numbers (MSN) up to and including 939.

The Federal Office for Civil Aviation (FOCA), which is the airworthiness authority for Switzerland, notified the FAA of the need to supersede AD 2003-13-04 to address an unsafe condition that may exist or could develop on Pilatus Model PC-6 airplanes. The FOCA reports that the AD action should also apply to all the models of the PC-6 airplanes listed in the type certification data sheet of TC No. 7A15 produced in the United States through a licensing agreement between Pilatus and Fairchild Republic Company (also identified as Fairchild Industries, Fairchild Heli Porter, or Fairchild-Hiller Corporation).

This condition, if not corrected, could result in cracks in the ribs of the inboard integral fuel tanks in the left and right wings, which could lead to wing failure during flight.

##### **Foreign Airworthiness Authority Information**

The FOCA recently issued Swiss AD Number HB 2005-289, effective date August 23, 2005, to ensure the continued airworthiness of all models of the PC-6 airplanes listed in TC No. 7A15, including those produced in the United States under a licensing agreement with Pilatus and Fairchild Republic Company (also identified as Fairchild Industries, Fairchild Heli Porter, or Fairchild-Hiller Corporation).

The State of Design for the Pilatus PC-6 airplanes is Switzerland and the airplanes are type-certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement.

Under this bilateral airworthiness agreement, the FOCA has kept us informed of the situation described above.

##### **FAA's Determination and Requirements of the Proposed AD**

We are proposing this AD because we have examined the FOCA's findings, evaluated all information and determined the unsafe condition described previously is likely to exist or