

[Federal Register: January 27, 2006 (Volume 71, Number 18)]
[Rules and Regulations]
[Page 4484-4486]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr27ja06-4]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-23703; Directorate Identifier 2005-NM-052-AD; Amendment 39-14465; AD 2006-03-01]

RIN 2120-AA64

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

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

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model ERJ 170 airplanes. This AD requires, when certain SmartProbes are installed, revising the Limitations section of the airplane flight manual to limit the maximum take-off weight of the airplane and increase the reference speed during certain landing conditions. This AD results from reports of variable calibration values of certain sensors of the SmartProbes, which could result in the transmission of erroneous information to the air data system. We are issuing this AD to prevent reduced controllability of the airplane.

DATES: This AD becomes effective February 13, 2006.

We must receive comments on this AD by March 28, 2006.

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

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

The Departamento de Aviação Civil (DAC), which is the airworthiness authority for Brazil, notified us that an unsafe condition may exist on all EMBRAER Model ERJ 170 airplanes. Certain Air Data SmartProbes that may be installed on these airplanes have been reported to be contaminated. A SmartProbe contains four absolute pressure sensors and one differential pressure (dP) sensor. These five sensors provide the basic input used by the SmartProbe to calculate certain pressure-based data used by the airplane. Operators have reported shifts in the calibrated values of these dP sensors. These shifts have been attributed to contamination during the manufacturing process. Contaminated SmartProbes, if not detected and removed, could affect the correct operation of several airplane systems including the flight control system, and result in reduced controllability of the airplane.

The DAC issued corresponding Brazilian airworthiness directive 2005-02-01, dated March 3, 2005, to ensure the continued airworthiness of these airplanes in Brazil.

FAA's Determination and Requirements of This AD

This airplane model is manufactured in Brazil and is 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 products of this type design that are certificated for operation in the United States.

Therefore, we are issuing this AD to prevent reduced controllability of the airplane. This AD requires, if an affected SmartProbe is installed, revising the Limitations section of the airplane flight manual to limit the maximum take-off weight of the airplane and increase the reference speed during certain landing conditions.

Difference Between AD and Brazilian Airworthiness Directive

In addition to the AFM revision, the Brazilian airworthiness directive requires repetitive tests of certain affected SmartProbes. We have decided, however, to immediately adopt this AD to require only the AFM revision. We may later consider further rulemaking to supersede this AD to add a requirement to repetitively test the SmartProbes. We considered the urgency associated with the subject unsafe condition, the relatively low number of affected SmartProbes that currently exist, and logistical concerns associated with performing the tests within a period of time that corresponds to the normal scheduled maintenance for most affected operators. The planned compliance time to initiate the repetitive tests would allow enough time to provide notice and opportunity for prior public comment on the merits of the tests. We therefore consider this AD interim action.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD; therefore, providing notice and opportunity for public comment before the AD is issued is impracticable, and good cause exists to make this AD effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed in the ADDRESSES section. Include "Docket No. FAA-2006-23703; Directorate Identifier 2005-NM-052-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

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 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.

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 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 that the 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 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.

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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

www.faa.gov/aircraft/safety/alerts/

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2006-03-01 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-14465.
Docket No. FAA-2006-23703; Directorate Identifier 2005-NM-052-AD.

Effective Date

- (a) This AD becomes effective February 13, 2006.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to all EMBRAER Model ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes, certificated in any category.

Unsafe Condition

(d) This AD results from reports of variable calibration values of certain sensors of the Air Data SmartProbes, which could result in the transmission of erroneous information to the air data system. This was caused by contamination during the manufacturing process. We are issuing this AD to prevent reduced controllability of the airplane.

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.

Revision of Airplane Flight Manual (AFM)

(f) As of 30 days after the effective date of this AD: During any time period when any SmartProbe part number 2015G2H2H-4, 2015G2H2H-4A, 2015G2H2H-5, or 2015G2H2H-5A is installed, before further flight, revise the Limitations section of the AFM to include the following operational limitations (this may be done by inserting a copy of this AD into the AFM):

- Reduce the calculated MTOW by 110 kgf whenever it is defined by obstacle clearance on the final segment.
- Increase the reference speed (VREF) by 1 kt when landing with Flap 5."

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 2005-02-01, dated March 3, 2005, also addresses the subject of this AD.

Issued in Renton, Washington, on January 19, 2006.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 06-782 Filed 1-26-06; 8:45 am]

BILLING CODE 4910-13-P