

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

[Docket No. FAA-2004-18564; Directorate Identifier 2004-NM-16-AD]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP Airplanes

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

ACTION: Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

SUMMARY: The FAA is revising an earlier NPRM for an airworthiness directive (AD) that applies to certain EMBRAER airplane models as identified above. The original NPRM would have required modifying the total air temperature (TAT) sensor heating system. The original NPRM was prompted by a report indicating that the fully automated digital electronic control (FADEC) unit failed to compensate for ice accretion on the engine fan blades due to a false temperature signal from the TAT sensor to the FADEC. This action revises the original NPRM by requiring modification of additional electrical connections for the TAT sensor heating system. This action also would expand the applicability of the original NPRM because the additional electrical connections must be modified on airplanes that had the TAT sensor heating system modified previously (e.g., in production). This action also adds replacing the FADEC assemblies with new or modified assemblies as an additional means of compliance. We are proposing this supplemental NPRM to prevent failure of the TAT sensor, which could result in insufficient thrust to take off or (if coupled with the loss of an engine during takeoff) to abort the takeoff in a safe manner, and consequent reduced controllability of the airplane.

DATES: We must receive comments on this supplemental NPRM by September 12, 2005.

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

- 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.

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

You can examine the contents of this AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, on the plaza level of the Nassif Building, Washington, DC. This docket number is FAA-2004-18564; the directorate identifier for this docket is 2004-NM-16-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:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this supplemental NPRM. Send your comments to an address listed under **ADDRESSES**. Include “Docket No. 2000-FAA-18564; Directorate Identifier 2004-NM-16-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this supplemental NPRM. We will consider all comments received by the closing date and may amend this supplemental NPRM in light of those comments.

We will post all comments submitted, 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 supplemental NPRM. Using the search function of our docket 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 can review the DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78), or you can visit <http://dms.dot.gov>.

Examining the Docket

You can 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 in the Nassif Building at the DOT street address stated in **ADDRESSES**. Comments will be available in the AD docket shortly after the Docket Management System (DMS) receives them.

Discussion

We proposed to amend 14 CFR part 39 with a notice of proposed rulemaking (NPRM) for an airworthiness directive (AD) (the “original NPRM”). The original NPRM applies to certain EMBRAER Model EMB-135 and -145 series airplanes. The original NPRM was published in the **Federal Register** on July 8, 2004 (69 FR 41209). The original NPRM proposed to require modifying the total air temperature (TAT) sensor heating system.

Relevant Service Information

EMBRAER has issued Service Bulletin 145-30-0028, Revision 09, dated March 1, 2004. The original NPRM refers to EMBRAER Service Bulletin 145-30-0028, Revision 08, dated August 20, 2003, as the appropriate source of service information for modifying the TAT sensor heating system. Part III of the Accomplishment Instructions of Revision 09 of the service bulletin adds new procedures for modifying certain electrical connections. These electrical connections must be modified on airplanes on which any previous revision of EMBRAER Service Bulletin 145-30-0028 was done. Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

The Departamento de Aviacao Civil (DAC) mandated Revision 09 of the service bulletin and issued Brazilian airworthiness directive 2004-01-02R2, dated November 29, 2004, to ensure the continued airworthiness of these airplanes in Brazil. (The original NPRM referred to Brazilian airworthiness directive 2004-01-02, dated January 27, 2004, as the parallel Brazilian airworthiness directive.)

We have revised paragraph (f) of this supplemental NPRM to require modifying the TAT sensor heating system in accordance with Revision 09 of the service bulletin. In addition, we have revised paragraph (g) of this supplemental NPRM to state that actions accomplished in accordance with Revisions 04 through 08 of the service bulletin are acceptable for compliance with paragraph (f), provided that the additional actions specified in Part III of Revision 09 of the service bulletin are accomplished. We have also

revised paragraph (c), Applicability, of this supplemental NPRM to state that this supplemental NPRM applies to airplanes identified in Revision 09 of the service bulletin.

Brazilian airworthiness directive 2004-01-02R2 also includes an additional means of compliance. Brazilian airworthiness directive 2004-01-02R2 states that incorporating full-authority digital engine control (FADEC) software version 7.6 (or subsequent versions) on both engines is an alternative to modifying the TAT sensor heating system. EMBRAER has issued

the service bulletins listed in the table below, which describe procedures for replacing the existing FADEC assemblies with new or modified assemblies that have FADEC software version 7.6, including verifying the part number of the ITT trim plug and replacing it with an ITT trim plug of another part number if necessary. These service bulletins also refer to the Rolls-Royce service bulletins listed in the table below as additional sources of service information for replacing the FADEC assemblies.

SERVICE INFORMATION FOR REPLACING FADEC ASSEMBLIES

EMBRAER service Bulletin	Revision	Date	For EMBRAER model—	Which refers to Rolls-Royce service bulletin—
145-73-0021	Original	July 23, 2004	EMB-135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP.	AE3007A-73-071
145-73-0022	01	July 15, 2004	EMB-135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP.	AE3007A-73-067
145-73-0023	Original	June 28, 2004	EMB-135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP.	AE3007A-73-070
145-73-0024	01	July 15, 2004	EMB-135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP.	AE3007A-73-069
145-73-0025	Original	July 23, 2004	EMB-135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP.	AE3007A-73-068
145-73-0026	Original	June 28, 2004	EMB-145XR	AE3007A-73-072
145LEG-73-0003	01	July 15, 2004	EMB-135BJ	AE3007A-73-070
145LEG-73-0004	02	October 6, 2004	EMB-135BJ	AE3007A-73-072

The EMBRAER service bulletins listed in the table above also specify that installing the new or modified FADEC assemblies that have FADEC software version 7.6 also necessitates installing new engine indication and crew alerting system (EICAS) and central maintenance computer (CMC) versions.

Comments

We have considered the following comments on the original NPRM.

Request for Credit for Actions Accomplished Previously

Two commenters request that we revise the original NPRM to give credit for actions that they have previously accomplished on their airplane fleets. One commenter asks for credit for modifying the TAT sensor heating

system in accordance with EMBRAER Service Bulletin 145-30-0028, dated September 20, 1999; Change 01, dated March 23, 2000; Change 02, dated December 27, 2000; or Change 03, dated February 15, 2001. The commenter states that many of its airplanes have been modified in accordance with the original issue and Change 01 of the service bulletin. Thus, revising the original NPRM would alleviate the burden of the commenter requesting approval of an alternative method of compliance (AMOC) and of the FAA addressing these AMOC requests. The other commenter states that EMBRAER Service Bulletin 145-30-0028, Changes 02 and 03, should be listed as acceptable previous revisions. The

second commenter states no justification for its request.

We do not concur. EMBRAER Service Bulletin 145-30-0028, Revision 04, dated March 13, 2001, states that additional work is necessary on airplanes modified in accordance with the original issue or Changes 01 through 03. Also, Brazilian airworthiness directive 2004-01-02R1 refers to only Revisions 04 and subsequent of the service bulletin for compliance. Similarly, paragraph (g) of this supplemental NPRM (and the original NPRM) gives credit for modifications done before the effective date of this AD in accordance with EMBRAER Service Bulletin 145-30-0028, Revision 04; Revision 05, dated May 24, 2001; Revision 06, dated September 26, 2001;

Revision 07, dated April 10, 2003; or Revision 08. Operators may request approval of an AMOC for actions done in accordance with other revisions of the service bulletin. An operator's request should include copies of the applicable service bulletins, and data substantiating that the actions that have been accomplished provide an acceptable level of safety. We have not changed this supplemental NPRM in this regard.

Request To Extend the Compliance Time

One commenter requests that we extend the compliance time of 90 days that is stated in paragraph (f) of the original NPRM. The commenter states that, due to the large number of airplanes needing to be modified, 90 days is not enough time. The commenter does not specify what it would like the compliance time to be.

We agree that it is appropriate to extend the compliance time. In developing an appropriate compliance time for this supplemental NPRM, we considered the manufacturer's recommendation, the DAC's recommendation, and the number of airplanes that would be subject to the proposed requirements. We balanced these factors against the degree of urgency associated with the subject unsafe condition. In light of all of these factors, we find that a 180-day compliance time represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety. We find that extending the compliance time in this way will ensure that the majority of affected operators are able to comply with the requirements of this AD during regularly scheduled maintenance. We have coordinated with the DAC on this

issue, and they agree with our decision to extend the compliance time.

Explanation of Change to Applicability

We have revised the applicability of the original NPRM to identify model designations as published in the most recent type certificate data sheet for the affected models.

FAA's Determination and Proposed Requirements of the Supplemental NPRM

Certain changes discussed above expand the scope of the original NPRM; therefore, we have determined that it is necessary to reopen the comment period to provide additional opportunity for public comment on this supplemental NPRM.

Costs of Compliance

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

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-cost registered airplanes	Fleet cost
Modify the TAT sensor heating system.	8	\$65	\$443	\$963	Up to 434	Up to \$417,942.

For airplanes modified in accordance with Revisions 04 through 08 of the service bulletin, it would take about 1 work hour per airplane to do the additional modification specified in Part III of the Accomplishment Instructions of the service bulletin, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of doing this proposed action is \$65 per airplane.

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 supplemental NPRM. 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 FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Empresa Brasileira de Aeronautica S.A. (EMBRAER); Docket No. FAA-2004-18564; Directorate Identifier 2004-NM-16-AD.

Comments Due Date

- (a) The Federal Aviation Administration must receive comments on this AD action by September 12, 2005.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to EMBRAER Model EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; as identified in EMBRAER Service Bulletin

145–30–0028, Revision 09, dated March 1, 2004; certificated in any category.

Unsafe Condition

(d) This AD was prompted by a report indicating that the fully automated digital electronic control (FADEC) unit failed to compensate for ice accretion on the engine fan blades, which was caused by a false temperature signal from the total air temperature (TAT) sensor to the FADEC. We are issuing this AD to prevent failure of the TAT sensor, which could result in insufficient thrust either to take off or (if coupled with the loss of an engine during takeoff) the inability to abort the takeoff in a

safe manner, and consequent 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.

Modification

(f) Within 180 days after the effective date of this AD: Modify the TAT sensor heating system in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 145–30–0028, Revision 09, dated March 1, 2004.

Modifications Done According to Previous Revisions of the Service Bulletin

(g) Modifications done before the effective date of this AD in accordance with the revisions of the service bulletin in Table 1 of this AD are acceptable for compliance with the corresponding action in this AD, provided that the additional actions specified in PART III of the Accomplishment Instructions of EMBRAER Service Bulletin 145–30–0028, Revision 09, dated March 1, 2004, are accomplished within the compliance time required by paragraph (f) of this AD.

TABLE 1.—PREVIOUS REVISIONS OF THE SERVICE BULLETIN

EMBRAER service bulletin	Revision	Date
145–30–0028	04	March 13, 2001.
145–30–0028	05	May 24, 2001.
145–30–0028	06	September 26, 2001.
145–30–0028	07	April 10, 2003.
145–30–0028	08	August 20, 2003.

Credit for Replacement of FADEC Assemblies

(h) Replacing the existing FADEC assemblies with new or modified FADEC assemblies that include software version 7.6, in accordance with the Accomplishment

Instructions of the applicable service bulletin listed in Table 2 of this AD, is acceptable for compliance with paragraph (f) of this AD. If the FADEC assemblies are replaced with new or modified assemblies as specified in this paragraph, all applicable engine indication and crew alerting system (EICAS) and central

maintenance computer (CMC) upgrades, as well as any other applicable actions associated with upgrading the EICAS and CMC, must also be done, as specified in paragraph 1.C., “Description—Time for Accomplishment” of the applicable EMBRAER service bulletin.

TABLE 2.—SERVICE BULLETINS FOR UPGRADING FADEC ASSEMBLIES

For EMBRAER model—	EMBRAER service bulletin	Revision	Date
EMB–135ER, –135KE, –135KL, –135LR, –145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP.	145–73–0021	Original	July 23, 2004.
EMB–135ER, –135KE, –135KL, –135LR, –145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP.	145–73–0022	01	July 15, 2004.
EMB–135ER, –135KE, –135KL, –135LR, –145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP.	145–73–0023	Original	June 28, 2004.
EMB–135ER, –135KE, –135KL, –135LR, –145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP.	145–73–0024	01	July 15, 2004.
EMB–135ER, –135KE, –135KL, –135LR, –145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP.	145–73–0025	Original	July 23, 2004.
EMB–145XR	145–73–0026	Original	June 28, 2004.
EMB–135BJ	145LEG–73–0003.	01	July 15, 2004.
EMB–135BJ	145LEG–73–0004.	02	October 6, 2004.

Alternative Methods of Compliance (AMOCs)

(i) 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.

Related Information

(j) Brazilian airworthiness directive 2004–01–02R2, dated November 29, 2004, also addresses the subject of this AD.

Issued in Renton, Washington, on August 9, 2005.

Ali Bahrami,

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

[FR Doc. 05–16262 Filed 8–16–05; 8:45 am]

BILLING CODE 4910–13–P

SOCIAL SECURITY ADMINISTRATION

20 CFR Part 404

[Regulation No. 4]

RIN 0960–AF34

Revised Medical Criteria for Evaluating Visual Disorders

AGENCY: Social Security Administration.

ACTION: Proposed rules.

SUMMARY: We propose to revise the criteria in the Listing of Impairments (the listings) that we use to evaluate