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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NM-237-AD; Amendment 39-13977; AD 2005-04-05]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 and -145 Series Airplanes

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

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain EMBRAER Model EMB-135 and -145 series airplanes. This AD requires repetitive detailed inspections of the oil in the air turbine starter (ATS) to determine the quantity of the oil and the amount of debris contamination in the oil. If the oil quantity is incorrect or if excessive debris is found in the oil, this AD requires replacement of the ATS with a new or serviceable ATS, and continued repetitive detailed inspections. This AD also requires eventual replacement of each ATS with a new, improved ATS, which constitutes terminating action for the repetitive detailed inspections. This action is necessary to prevent a flash fire in the nacelle, which would result in the flightcrew shutting down the engine during flight, and consequent reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective March 24, 2005.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 24, 2005.

ADDRESSES: The service information referenced in this AD may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 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/code_of_federal_regulations/ibr_locations.html.

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

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain EMBRAER Model EMB-135 and -145 series airplanes was published in the Federal Register on February 19, 2004 (69 FR 7707). That action proposed to require repetitive detailed inspections of the oil in the air turbine starter (ATS) to determine the quantity of the oil and the amount of debris contamination in the oil. If the oil quantity was incorrect or if excessive debris was found in the oil, that proposal would have required replacement of the ATS with a new or serviceable ATS having the same part number, and continued repetitive detailed inspections. That proposal would also have required eventual replacement of each ATS with a new improved ATS having a new part number, which would constitute terminating action for the repetitive detailed inspections.

Actions Since Proposed AD Was Issued

Since we issued the proposed AD, we have determined that the Departamento de Aviacao Civil (DAC), which is the airworthiness authority for Brazil, issued two Brazilian airworthiness directives that address that same unsafe condition. The DAC issued Brazilian airworthiness directive 2001-09-04, dated October 10, 2001. The DAC also issued Brazilian airworthiness directive 2003-07-01, Revision 01, dated December 23, 2003. We issued a parallel proposed AD for each Brazilian airworthiness directive. One proposed AD, Directorate Identifier 2002-NM-352-AD, was published in the Federal Register on December 18, 2003 (68 FR 243). The other proposed AD, Directorate Identifier 2003-NM-237-AD, was published in the Federal Register on February 19, 2004 (69 FR 7707).

Upon further evaluation, and based on comments received in response to the proposed AD with Directorate Identifier 2002-NM-352-AD, we have determined that it is in the best interest of the FAA and the U.S. operators to combine the requirements of both of our proposed ADs into this AD. The requirements in this AD adequately address the identified unsafe condition specified in 2002-NM-352-AD. Accordingly, the proposed AD with Directorate Identifier 2002-NM-352-AD will be withdrawn after this AD is issued. The DAC and the airplane manufacturer support our decision.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Request To Allow Part Number (P/N) 3505910-6 as a Replacement Part

Three commenters request that air turbine starter (ATS) P/N 3505910-6 be included in the proposed AD as an acceptable replacement part. (The proposed AD states that an affected ATS should be replaced with a new or serviceable ATS having P/N 3505910-4 or P/N 3505910-5.)

We agree with the commenters' requests. We have revised the Summary section of this AD by deleting the text that states that the ATS should be replaced with an ATS having the same part number. Paragraph (d) of this AD has been revised to include P/N 3505910-6 as an additional acceptable replacement part.

Request To Allow Replacement of ATS Within 50 Hours Instead of Before Further Flight

Two commenters request that the proposed AD be revised so that, if the results of an inspection of the oil indicate that the ATS should be replaced, operators may continue to use that ATS for an additional 50 flight hours before doing the replacement. (Paragraph (d) of the proposed AD specifies that the ATS should be replaced prior to further flight.) One commenter states that the 50-hour grace period should be acceptable because Brazilian airworthiness directive 2003-07-01R1, dated December 23, 2003, allows ATS units that don't show evidence of wear or failure to go back into service for 50 flight hours before replacement. The commenter also states that, based on service history, the additional 50 flight hours is very conservative. The other commenter states that EMBRAER Service Bulletin 145-80-0005, Revision 02, dated September 16, 2003, allows a grace period of 50 flight hours, and that operators incorporating that service bulletin have not reported failures or service interruptions within 50 hours of the service inspection.

We agree to allow a 50-hour grace period for ATSs that meet the criteria specified in EMBRAER Service Bulletin 145-80-0005, Revision 02. We misinterpreted the Brazilian airworthiness directive and, in the proposed AD, identified the 50-hour grace period as a difference between the proposed AD and the Brazilian airworthiness directive. We have determined that a 50-hour grace period will allow airplanes to continue to operate without compromising safety. Paragraph (d) of this AD has been revised to specify that an ATS should be replaced at the times specified in the applicable service bulletin.

Request To Change Compliance Time for Initial Inspection

One commenter requests that the FAA revise the compliance time for the initial detailed inspection specified in paragraph (b) of the proposed AD. The commenter provides two suggestions for making this change. The first suggestion is to either delete the statement "whichever comes first" or change that statement to "whichever comes later." The second suggestion is to change the initial inspection threshold from "Within 200 flight hours or 90 days" to "Within 500 flight hours or 180 days." The commenter states that it is already accomplishing the intent of the proposed AD. Since August 2003, the commenter has repetitively inspected the ATS in its fleet of airplanes at intervals of 500 flight hours. The commenter contends that, by changing the threshold for the initial inspection in the proposed AD, the FAA and the commenter would conserve resources regarding the processing of requests for alternative methods of compliance (AMOCs) related to the compliance time for the initial detailed inspection.

We do not agree with the commenter's request to change the threshold for the initial detailed inspection. In developing an appropriate threshold for this AD, we considered the safety implications, the manufacturer's recommendations, the Brazilian airworthiness authority's recommendations, and operators' maintenance schedules. Under the provisions of paragraph (g) of this AD, however, we may consider requests for adjustments to this compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety.

Request To Include Secondary Test for Certain ATSs

One commenter notes that Brazilian airworthiness directive 2003-07-01R1 includes a provision that a new ATS should not be replaced during the first 400 hours of operation after installation if oil system debris is detected during an inspection. The proposed AD does not include that provision. The commenter states that metallic debris is normal during the "wear-in" of a new ATS. Such debris does not necessarily indicate abnormal wear or imminent failure of the part. The commenter also states that EMBRAER Service Bulletins 145-80-0005, Revision 02, dated September 16, 2003; and 145LEG-80-0001, Revision 01, dated April 10, 2003; include a secondary test (referred to as a "penalty run" in the service bulletins) that should be conducted on new ATSs that show metallic

particles on the magnetic drain plug. (Those service bulletins were cited in the proposed AD as acceptable sources of service information for inspecting the ATS.) The results of the secondary test will help operators determine if metal debris is a result of the normal "wear-in" period or abnormal ATS wear, or is from a different part of the engine.

We agree that, if an ATS has less than 400 flight hours since new or last overhaul, operators should be allowed the option of performing the secondary test. This option allows airplanes to continue to operate without compromising safety. Paragraph (d) of this AD has been revised to allow operators the option of replacing the ATS before further flight or performing the secondary test in accordance with the applicable service bulletin.

Request To Include Additional Service Information

One commenter requests that the proposed AD be revised to require operators to incorporate Rolls-Royce Service Bulletin AE 3007A-72-253, dated September 13, 2002. The commenter states that the Rolls-Royce service bulletin includes procedures for installing a vented quick access drain (QAD) adapter. The QAD adapter alleviates a contributing cause of the ATS failure.

We partially agree. We agree that installing the QAD adapter alleviates a contributing cause of the ATS failure; however, we will not revise this AD to require operators to perform the actions in the Rolls-Royce service bulletin. The parallel Brazilian airworthiness directive does not require operators to incorporate the Rolls-Royce service bulletin, and the associated EMBRAER service bulletins include procedures for operators that have incorporated the Rolls-Royce service bulletin and procedures for operators that have not incorporated the Rolls-Royce service bulletin. Also, operators may voluntarily incorporate the Rolls-Royce service bulletin. No change has been made to this AD regarding this issue.

The same commenter states that requiring the EMBRAER EMB-135 and -145 fleet to install P/N 3505910-6 within two years after the effective date of the proposed AD is an unnecessary hardship given the improvements made by incorporating the Rolls-Royce service bulletin. The commenter states that the procedures in the Rolls-Royce service bulletin include removing the drain cap, which would attenuate the oil migration and seal damage, making the potential for a low-oil/backdrive failure much less likely. The commenter notes that it took operators almost a year to accomplish the "simple" Rolls-Royce service bulletin. We infer that the commenter requests an extension of the compliance time specified in paragraph (e) of the proposed AD.

We do not agree to extend the compliance time in paragraph (e) of this AD. Although the preventative measures provided in the Rolls-Royce service bulletin address the primary cause of backdrive events, other contributing causes of backdrive events still exist. Also, the commenter did not provide data that substantiate that all operators have incorporated the Rolls-Royce service bulletin. Furthermore, the parallel Brazilian airworthiness directive specifies that all ATS P/Ns 3505910-4 and -5 should be replaced with ATS, P/N 3505910-6, before March 1, 2006. Since we do not use calendar dates in the compliance times for our ADs, we considered the safety implications, the manufacturer's recommendations, and the Brazilian airworthiness authority's recommendations, and determined that accomplishment of the part replacement within 26 months after the effective date of the AD represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety. However, under the provisions of paragraph (g) of this AD, we may consider requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety.

Request To Clarify Unsafe Condition

Two commenters mention that the unsafe condition statement in the proposed AD is inaccurate. One commenter states that the unsafe condition statement implies that a fire in an engine section is a direct cause of the engine shutdown, when actually a fire started by an ATS would be detected by the

fire detection system and annunciated to the flightcrew. The engine shutdown is a result of the flightcrew's response to the fire. The other commenter states that the phrases "prevent a flash fire" and "cause the engine to shut down" are incorrect. The commenter notes that the improved ATS, P/N 3505910-6, prevents ATS backdrive failures. The commenter states that backdrive failures do not necessarily result in a flash fire or always result in engine shutdown. We infer that the commenters are requesting that the unsafe condition statement in the proposed AD be revised.

We agree that the unsafe condition statement implies that a fire in an engine section directly causes an engine shutdown. We do not agree that the phrases "prevent a flash fire" and "cause the engine to shut down" are incorrect. The end result of the unsafe condition is the possibility of a flash fire and an engine shutdown. The intent of this AD is to require operators to install the new, improved ATS, P/N 3505910-6, which prevents the ATS backdrive failures. Therefore, until operators install P/N 3505910-6, the possibility of a flash fire and engine shutdown still exists. The unsafe condition statement in this AD has been revised to state: "To prevent a flash fire in the nacelle, which would result in the flightcrew shutting down the engine during flight, and consequent reduced controllability of the airplane."

Request To Allow Alternative Method for Repetitive Inspections

One commenter states that it services the ATS oil system of its fleet every routine check (7 days), as specified in Subtask 80-10-01-610-001-A00, dated August 28, 2004, in Chapter 80-10-01 of the EMBRAER EMB-145 Aircraft Maintenance Manual (AMM). The commenter asks if it is acceptable to the FAA to continue this practice. We infer that the commenter is requesting to perform the repetitive inspections in the AMM instead of the repetitive detailed inspections specified in paragraph (b) of this AD.

It is acceptable for the commenter to continue doing the procedures specified in Subtask 80-10-01-610-001-A00. However, after reviewing the subtask, we have determined that those procedures do not satisfy the requirements of this AD. The procedures in the subtask are for determining the oil level of the ATS, not for inspecting the oil in the ATS for debris. As provided by paragraph (g) of this AD, the commenter may apply for an AMOC.

Request To Omit Repetitive Inspections

One commenter supports the issuance of the proposed AD but raises several questions. The commenter questions the purpose of including repetitive inspections in the proposed AD. The commenter also asks if 180 "hours" between inspections is too much time. The commenter notes that if abrasive particles become suspended in a lubricating substance within the first 90 days, there is an ineffective lubrication system for 90 more days. The commenter also proposes several solutions for addressing the unsafe condition of debris in the oil of the ATS. The commenter states that requiring the immediate replacement of the ATS when the AD is published would be more cost effective than requiring repetitive inspections and eventual replacement of the ATS. The commenter states that the immediate part replacement would also be safer. We infer that the commenter is requesting that the proposed AD be revised to omit the repetitive inspections specified in paragraph (b) of that AD, and to mandate only the replacement of any ATS having P/N 3505910-4 or P/N 3505910-5 with an ATS having P/N 3505910-6, as specified in paragraph (e) of that AD. We also infer that the commenter is requesting a reduction of the compliance time for the repetitive inspection intervals.

We do not agree that the repetitive inspections of the ATS oil should be deleted from paragraph (e) of this AD, or that the compliance time for the repetitive inspection intervals should be reduced. Also, the repetitive inspection interval specified in paragraph (b) of this AD is 180 days, not 180 hours. The commenter did not provide any data to substantiate the termination of the repetitive inspections of the oil in the ATS, or the reduction of the compliance time for the repetitive inspection intervals. Both the Brazilian airworthiness directive and EMBRAER Service Bulletins 145-80-0005,

Revision 02, dated September 16, 2003; and 145LEG-80-0001, Revision 01, dated April 10, 2003; include provisions for repetitive inspections. The Brazilian airworthiness directive mandates the detailed inspections at intervals of 500 flight hours or 180 days, whichever occurs first. We have determined that the repetitive inspections are needed to ensure the continued operational safety of the affected airplanes. No change has been made to this AD regarding these issues.

Request To Delete Note Regarding Submission of Information

One commenter states that the proposed AD mentions that Honeywell Service Bulletin 3505910-80-1789, dated August 19, 2003, specifies to submit certain information to Honeywell. (That service bulletin was referenced as an additional source of service information in the proposed AD.) The commenter states that Service Bulletin 3505910-80-1789 has been revised and no longer requests operators to submit information to Honeywell. We infer that the commenter is requesting that the references to submitting certain information to Honeywell be deleted from the proposed AD.

We do not agree to revise this AD regarding the submission of information to Honeywell. To date, we have not received a copy of the revised service bulletin and to our knowledge the revised service bulletin has not been issued. Furthermore, when the revised service bulletin is issued, the requirements of this AD will not be affected by the omission of the request to submit information to Honeywell. Since the Honeywell service bulletin is cited as a secondary source of service information in this AD, it is referenced in a note. Notes in ADs provide additional information only and do not include requirements. No change has been made to this AD regarding this issue.

Conclusion

After careful review of the available data, including the comments noted above, we have determined that air safety and the public interest require the adoption of the rule with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

We estimate that 459 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to inspect the oil in the ATS, and that the average labor rate is \$65 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$29,835, or \$65 per airplane, per inspection cycle.

We estimate it will take approximately 2 work hours per airplane to replace the ATS, and that the average labor rate is \$65 per work hour. Based on these figures, the cost impact of the replacement on U.S operators is estimated to be \$59,670, or \$130 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. 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.

This rulemaking is promulgated 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 AD.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

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

We post ADs on the internet at "www.faa.gov"

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).

2005-04-05 Empresa Brasileira De Aeronautica S.A. (Embraer): Amendment 39-13977. Docket 2003-NM-237-AD.

Applicability: Model EMB-135 and -145 series airplanes, with air turbine starter (ATS) units having part numbers (P/N) 3505910-4 or -5; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent a flash fire in the nacelle, which would result in the flightcrew shutting down the engine during flight, and consequent reduced controllability of the airplane, accomplish the following:

Service Bulletin Reference

(a) The term "service bulletin," as used in this AD, means the Accomplishment Instructions of the following service bulletins, as applicable:

(1) For the detailed inspection and replacements specified in paragraphs (b), (c) and (d) of this AD: For Model EMB-135 BJ series airplanes, EMBRAER Service Bulletin 145LEG-80-0001, Revision 01, dated April 10, 2003; and for all other affected airplanes, EMBRAER Service Bulletin 145-80-0005, Revision 02, dated September 16, 2003.

(2) For the replacement specified in paragraph (e) of this AD: For Model EMB-135 BJ series airplanes, EMBRAER Service Bulletin 145LEG-80-0002, dated October 2, 2003; and for all other affected airplanes, EMBRAER Service Bulletin 145-80-0006, dated October 2, 2003.

Note 1: These service bulletins refer to Honeywell Service Bulletin 3505910-80-1789, dated August 19, 2003, as an additional source of service information. The Honeywell service bulletin is included in the EMBRAER service bulletins. Although this Honeywell service bulletin specifies to submit certain information to the manufacturer, this AD does not include such a requirement.

Repetitive Detailed Inspection

(b) Within 200 flight hours or 90 days after the effective date of this AD, whichever occurs first: Perform a detailed inspection of the oil in the air turbine starter (ATS) to determine the quantity of oil and to determine the amount of debris contamination in the oil in accordance with the applicable service bulletin. Repeat the inspection at intervals not to exceed 500 flight hours or 180 days, whichever occurs first.

Note 2: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at

intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Oil Replacement if Oil Quantity Is Correct and No Excessive Debris Is Found

(c) If, during the inspection required by paragraph (b) of this AD, no oil debris contamination is found that is in excess of the limits allowed by the applicable service bulletin; and if the amount of oil in the ATS is correct: Prior to further flight, replace the oil in the ATS with new oil, in accordance with the applicable service bulletin.

ATS Replacement if Oil Quantity Is Incorrect or if Excessive Debris Is Found

(d) If, during the inspection required by paragraph (b) of this AD, the oil quantity is found to be incorrect; or if oil debris contamination is found that is in excess of the limits allowed by the applicable service bulletin: Replace the ATS with a new or serviceable ATS having part number (P/N) 3505910-4, P/N 3505910-5, or P/N 3505910-6, at the times specified in and in accordance with the applicable service bulletin. If an affected ATS has less than 400 flight hours since new or last overhaul, the "penalty run" test may be performed before further flight and the ATS replaced at the times specified in and in accordance with the applicable service bulletin.

Terminating Action

(e) Within 26 months after the effective date of this AD, replace any ATS having P/N 3505910-4 or -5 with a new ATS having P/N 3505910-6 in accordance with the applicable service bulletin. This replacement constitutes terminating action for the repetitive detailed inspections required by paragraph (b) of this AD.

Actions Accomplished per Previous Issue of Service Bulletin 145-80-0005

(f) Actions accomplished before the effective date of this AD per EMBRAER Service Bulletin 145-80-0005, Revision 01, dated April 10, 2003, are considered acceptable for compliance with the corresponding actions specified in this AD.

Alternative Methods of Compliance

(g) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(h) The actions shall be done in accordance with the service information specified in Table 1 of this AD, as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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/code_of_federal_regulations/ibr_locations.html.

TABLE 1.—MATERIAL INCORPORATED BY REFERENCE

EMBRAER service bulletin	Revision level	Date
145-80-0005	02	Sept. 16, 2003.
145-80-0006	Original	Oct. 2, 2003.
145LEG-80-0001.	01	Apr. 10, 2003.
145LEG-80-0002.	Original	Oct. 2, 2003.

Note 3: The subject of this AD is addressed in Brazilian airworthiness directive 2003-07-01R1, dated December 23, 2003.

Effective Date

(i) This amendment becomes effective on March 24, 2005.

Issued in Renton, Washington, on February 2, 2005.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-2842 Filed 2-16-05; 8:45 am]

BILLING CODE 4910-13-P