

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

[Docket No. 2004–NM–47–AD; Amendment 39–13754; AD 2004–15–20]

RIN 2120–AA64

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

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain EMBRAER Model EMB–135 and –145 series airplanes, that requires replacing the electrical harness for the tail boom strobe light with a new, improved harness that has a built-in metallic overbraid, and performing an operational test following the replacement. This action is necessary to ensure that there is sufficient lightning bonding at the electrical harness for the tail boom strobe light, and to prevent the simultaneous failure of multiple avionics systems in the event of a lightning strike, which could result in reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Effective September 3, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 3, 2004.

**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](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, Washington 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 May 7, 2004 (69 FR 25523). That action proposed to require replacing the electrical harness for the tail boom strobe light with a new, improved harness that has a built-in metallic overbraid, and performing an operational test following the replacement.

**Comments**

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

**Request To Use Latest Revision of Service Bulletin**

The commenter, the airplane manufacturer, requests that we refer to Revision 01 of EMBRAER Service Bulletin 145–33–0032 as an appropriate source of service information for certain airplanes. This revision is dated April 27, 2004. The revision corrects the configuration group to which certain airplanes belong, but does not change the scope of the replacement and test that were proposed for those airplanes.

We agree with the commenter that we should use Revision 01 of this service bulletin, and have revised the applicability and paragraph (a) of the final rule to include Revision 01. We have also included a new paragraph (b) in the final rule that gives credit to operators who may have accomplished the actions in accordance with the original issue of the service bulletin.

**Conclusion**

After careful review of the available data, including the comment 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 548 airplanes of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per airplane to accomplish the required replacement, and that the average labor rate is \$65 per work hour. Required parts will cost between \$915 and \$1,255 per airplane, depending on the airplane configuration. Based on these figures,

the cost impact of the AD on U.S. operators is estimated to be between \$572,660 and \$758,980, or between \$1,045 and \$1,385 per airplane.

The cost impact figure discussed above is 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.

**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:

**2004-15-20 Empresa Brasileira de Aeronautica S.A. (EMBRAER):**

Amendment 39-13754. Docket 2004-NM-47-AD.

*Applicability:* Model EMB-135 and -145 series airplanes, as listed in EMBRAER Service Bulletin 145-33-0032, Revision 01, dated April 27, 2004; and EMBRAER Service Bulletin 145LEG-33-0004, dated November 5, 2003; certificated in any category.

*Compliance:* Required as indicated, unless accomplished previously.

To ensure that there is sufficient lightning bonding at the electrical harness for the tail boom strobe light, and to prevent the simultaneous failure of multiple avionics systems in the event of a lightning strike, which could result in reduced controllability of the airplane, accomplish the following:

**Replacement and Test**

(a) Within 5,000 flight hours or 30 months after the effective date of this AD, whichever occurs first: Replace the electrical harness of the tail boom strobe light with a new, improved harness that has a built-in metallic overbraid, and perform an operational test on the navigation lights and the anti-collision light after the replacement. Do the actions per the Accomplishment Instructions of the applicable service bulletin in paragraph (a)(1) or (a)(2) of this AD.

(1) EMBRAER Service Bulletin 145-33-0032, Revision 01, dated April 27, 2004 (for Model EMB-135 and -145 series airplanes, except Model EMB-135BJ series airplanes).

(2) EMBRAER Service Bulletin 145LEG-33-0004, dated November 5, 2003 (for Model EMB-135BJ series airplanes).

**Actions Accomplished Per Previous Issue of Service Bulletin**

(b) Actions accomplished before the effective date of this AD per EMBRAER Service Bulletin 145-33-0032, dated November 5, 2003, are considered acceptable for compliance with the corresponding action specified in this AD.

**Alternative Methods of Compliance**

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

**Incorporation by Reference**

(d) Unless otherwise specified in this AD, the actions shall be done in accordance with EMBRAER Service Bulletin 145-33-0032, Revision 01, dated April 27, 2004; or EMBRAER Service Bulletin 145LEG-33-0004, dated November 5, 2003; 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; 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Note 1:** The subject of this AD is addressed in Brazilian airworthiness directive 2004-01-05, dated February 5, 2004.

**Effective Date**

(e) This amendment becomes effective on September 3, 2004.

Issued in Renton, Washington, on July 21, 2004.

**Kevin M. Mullin,**

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

[FR Doc. 04-17222 Filed 7-29-04; 8:45 am]

**BILLING CODE 4910-13-P**

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

[Docket No. 2004-CE-05-AD; Amendment 39-13749; AD 2004-15-15]

**RIN 2120-AA64**

**Airworthiness Directives; Air Tractor, Inc. Models AT-401, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-502, AT-502A, AT-502B, AT-503A, AT-602, AT-802, and AT-802A Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** The FAA supersedes Airworthiness Directive (AD) 2002-19-10, which applies to certain Air Tractor, Inc. (Air Tractor) Models AT-402, AT-402A, AT-402B, AT-602, AT-802, and AT-802A airplanes. AD 2002-19-10 currently requires you to repetitively inspect the upper longeron and upper diagonal tube on the left hand side of the aft fuselage structure for cracks and contact the manufacturer for a repair scheme if cracks are found. This AD is the result of reports of the same cracks recently found on AT-500 series airplanes. The manufacturer has also issued new and revised service information that incorporates a modification to terminate the repetitive inspection requirements. Consequently, this AD retains the inspection actions required in AD 2002-19-10, adds certain AT-500 series airplanes to the applicability section, changes the compliance times, and incorporates new and revised manufacturer service information that contains a terminating

action for the repetitive inspection requirement. We are issuing this AD to detect and correct cracks in the upper aft longeron, which could cause the fuselage to fail. Such failure could result in loss of control of the airplane.

**DATES:** This AD becomes effective on September 7, 2004.

As of September 7, 2004, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

**ADDRESSES:** You may get the service information identified in this AD from Air Tractor, Incorporated, P.O. Box 485, Olney, Texas 76374.

You may view the AD docket at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2004-CE-05-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. Office hours are 8 a.m. to 4 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:**

Andrew D. McAnaul, Aerospace Engineer, FAA, Fort Worth Airplane Certification Office (ACO), 2601 Meacham Boulevard, Fort Worth, Texas 76193-0150. Current duty station: San Antonio Manufacturing Inspection District Office (MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; telephone: (210) 308-3365; facsimile: (210) 308-3370.

**SUPPLEMENTARY INFORMATION:****Discussion**

*Has FAA taken any action to this point?* We received reports of cracks found on the left hand upper longeron and upper diagonal support tubes where they intersect on the left hand side of the fuselage frame just forward of the vertical fin front spar attachment point on Air Tractor Model AT-602 airplanes. Additional cracking was later reported on AT-400, AT-602, and AT-802 series airplanes.

Air Tractor started installing extended reinforcement gussets on AT-402 and AT-802 series airplanes at the factory to alleviate the crack condition from occurring. The extended reinforcement gussets were intended to transfer the loads away from the joint. However, an AT-802 airplane with the extended reinforcement gusset installed during factory production was discovered cracked in service at the forward end of the gusset.

These conditions caused us to issue AD 2002-19-10, Amendment 39-12890 (67 FR 61481, October 1, 2002). AD 2002-19-10 currently requires you to do the following on certain Air Tractor Models AT-402, AT-402A, AT-402B, AT-602, AT-802, and AT-802A airplanes: