DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000–NM–66–AD; Amendment 39–13248; AD 2003–15–05]

RIN 2120–AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB–120 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain EMBRAER Model EMB–120 series airplanes, that currently requires repetitive visual checks or inspections to verify that the flight idle stop system circuit breakers are closed, and functional tests to determine if the backup flight idle stop system is operative. This amendment requires modification of the secondary flight idle stop system (SFISS), which terminates the repetitive actions. This amendment is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by this AD are intended to prevent inadvertent or intentional operation with the power levers below the flight idle stop during flight for airplanes that are not certificated for in-flight operation, which could result in engine overspeed and consequent loss of controllability of the airplane.

DATES: Effective September 4, 2003.

The incorporation by reference of certain publications, as listed in the regulations, is approved by the Director of the Federal Register as of September 4, 2003.

The incorporation by reference of certain other publications, as listed in the regulations, was approved previously by the Director of the Federal Register as of September 23, 1992 (57 FR 40838, September 8, 1992).

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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

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) by superseding AD 92–16–51, amendment 39–8355 (57 FR 40838, September 8, 1992), which is applicable to certain EMBRAER Model EMB–120 series airplanes, was published as a second supplemental notice of proposed rulemaking (NPRM) in the **Federal Register** on May 15, 2002 (67 FR 34641). That action proposed to continue to require repetitive visual checks or inspections to verify that the flight idle stop system circuit breakers are closed, and functional tests to determine if the backup flight idle stop system is operative. That action proposed to remove one airplane from the applicability, and add new inspections and corrective actions if necessary. Additionally, that action proposed to require modification of the secondary flight idle stop system (SFISS), which would terminate the repetitive actions.

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 to the second supplemental NPRM.

Request To Withdraw Proposed AD

One commenter states that an AD addressing the in-flight reversing issue is unjustified and inappropriate, and suggests that the proposed AD be withdrawn. The commenter asserts that an AD is unjustified because the subject unsafe condition is a pilot training issue and that, by adding further complexity to the propeller reversing controls, the proposed AD would only increase the opportunities for mechanical malfunction instead of improving safety. The commenter suggests that, instead of issuing an AD to address the unsafe condition, the FAA require operators to provide proper pilot training and oral testing specifically addressing the in-flight reversing issue.

The FAA does not agree that the AD be withdrawn or that the proposed actions would increase the opportunities for mechanical malfunction of the SFISS. We do not consider this unsafe condition to be simply a result of inadequate pilot training. Operational experience has shown that the existing SFISS is vulnerable to certain maintenance-originated failure modes, which could affect the operational reliability of the system. In addition, such failure modes do not result in a visual indication to the flightcrew of an inoperable condition. We find that these reliability concerns necessitate mandating installation of a more reliable SFISS design, one that also provides flightcrews with a real-time indication of the system's operability. We have determined that this design change adds more reliability and does not add significant complexity to the SFISS. Therefore, we find it necessary to issue the AD as proposed.

Request To Add Service Information for Certain Repair Procedures

The other commenter, the manufacturer, states that EMBRAER Service Bulletins 120–76–0018 and 120–76–0022 will be revised to include procedures for the bellcrank bolt hole repair provided in paragraph (e) of the second supplemental NPRM. The commenter also states that the revised service bulletins would eliminate the need for operators to contact the FAA or the Departmento de Aviacao Civil (DAC) (or its delegated agent) for approved methods of accomplishing the repair.

We agree. Since the issuance of the second supplemental NPRM, the manufacturer has issued EMBRAER Service Bulletins 120–76–0018, Change 06, dated August 9, 2002; and 120–76–0022, Change 03, dated August 9, 2002. The second supplemental NPRM specified that the FAA or DAC (or its delegated agent) be contacted for an approved method of compliance for the proposed repair. We have reviewed and approved these revised service bulletins and find that they do contain the appropriate repair instructions. Accordingly, we have revised paragraph (e) of this final rule to add those revised service bulletins as additional options for accomplishing the repair. However, we have not removed the provision for contacting the FAA or DAC (or its delegated agent) from that paragraph. Changing the requirements in such a manner would require us to issue a third supplemental NPRM, and we find that further delay in issuing this AD would be inappropriate in light of the identified unsafe condition.

Request To Remove Reference to Certain Service Information

The same commenter suggests that reference to EMBRAER Service Bulletin 120–76–0015 be removed from the proposed requirements because it is applicable to only one airplane (serial number (S/N) 120068), currently

operated under Brazilian registry, and therefore, does not affect the U.S. fleet.

We do not agree. We consider that those requirements with reference to Service Bulletin 120–76–0015 are necessary to be included in this AD to ensure that the unsafe condition is addressed in the event that the subject airplane is imported and placed on the U.S. Register in the future. No change to the final rule is necessary in this regard.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change previously described. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Changes to 14 CFR Part 39/Effect on the AD

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. However, for clarity and consistency in this final rule, we have retained the language of the second supplemental NPRM regarding that material.

Labor Rate Increase

After the second supplemental NPRM was issued, we reviewed the figures we use to calculate the labor rate to do the required actions. To account for various inflationary costs in the airline industry, we find it appropriate to increase the labor rate used in these calculations from $60 per work hour to $65 per work hour. The economic impact information, below, has been revised to reflect this increase in the specified hourly labor rate.

Cost Impact

The FAA estimates that 230 EMBRAER Model EMB–120 series airplanes of U.S. registry will be affected by this AD.

The actions that are currently required by AD 92–16–51 take approximately 5 work hours per airplane to accomplish, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of that AD on U.S. operators is estimated to be $69,000, or $300 per airplane, per inspection cycle.

The approximate cost, at an average labor rate of $65 per work hour, for the modifications required by this AD, are listed in the following table:

ESTIMATED COSTS

Service bulletin	Work hours	Parts cost	Cost per airplane
120–76–0015:			
Part I	5	$4,376	$4,701
Part II	3	14,331	14,526
Part III	1	53	118
120–76–0018:			
Part I	130	22,218	30,668
Part II	1	(1)	(1)
120–76–0022:			
Part I	3	14,456	14,651
Part II	3	2,465	2,660
Part III	3	14,525	14,720
Part IV	1	53	118

1 Cost varies with configuration.

Therefore, based on the figures included in the table above, the cost impact of the modification required by this AD on U.S. operators is estimated to range from $118 to $30,668 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the current or proposed 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 removing amendment 39–8355 (57 FR 40838, September 8, 1992), and by adding a new airworthiness directive (AD), amendment 39–13248, to read as follows:

2003–15–05 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39–13248. Docket 2000–NM–66–AD. Supersedes AD 92–16–51, Amendment 39–8355.

Applicability: Model EMB–120 series airplanes, certificated in any category; serial number 120004, and serial numbers 120006 through 120354 inclusive.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent inadvertent or intentional operation with the power levers below the flight idle stop during flight for airplanes that are not certificated for in-flight operation, which could result in engine overspeed and consequent loss of controllability of the airplane, accomplish the following:

Restatement of Certain Requirements of AD 92–16–51

Checks/Inspections

(a) For all airplanes: Within 5 days after September 23, 1992 (the effective date of AD 92–16–51, amendment 39–8355), and thereafter prior to the first flight of each day until the requirements of paragraph (d) of this AD have been accomplished, accomplish paragraph (a)(1) or (a)(2) of this AD, as applicable:

(1) For airplanes on which an inspection window has been installed on the left lateral console panel that permits visibility of the flight idle stop solenoid circuit breakers: Using an appropriate light source, perform a visual check to verify that both ''FLT IDLE STOP SOL'' circuit breakers CB0582 and CB0583 for engine 1 and engine 2 are closed.

Note 2: This check may be performed by a flightcrewmember.

Note 3: Instructions for installation of an inspection window can be found in EMBRAER Information Bulletin 120–076–0003, dated November 19, 1991; or EMBRAER Service Bulletin 120–076–0014, dated July 29, 1992.

(2) For airplanes on which an inspection window has not been installed on the left lateral console panel: Perform a visual inspection to verify that both ''FLT IDLE STOP SOL'' circuit breakers CB0582 and CB0583 for engine 1 and engine 2 are closed.

(b) As a result of the check or inspection performed in accordance with paragraph (a) of this AD: If circuit breakers CB0582 and CB0583 are not closed, prior to further flight, reset them and perform the functional test specified in paragraph (c) of this AD.

Functional Test

(c) Within 5 days after September 23, 1992, and thereafter at intervals not to exceed 75 hours time-in-service, or immediately following any maintenance action where the power levers are moved with the airplane on jacks, until the requirements of paragraph (d) of this AD have been accomplished, conduct a functional test of the backup flight idle stop system for engine 1 and engine 2 by performing the following steps:

(1) Move both power levers to the ''MAX'' position.

(2) Turn the aircraft power select switch on.

(3) Open both ''AIR/GROUND SYSTEM'' circuit breakers CB0283 and CB0286 to simulate in-flight conditions with weight-off-wheels. Wait for at least 15 seconds, then move both power levers back toward the propeller reverse position with the flight idle gate triggers raised. Verify that the power lever for each engine cannot be moved below the flight idle position, even though the flight idle gate trigger on each power lever is raised.

(4) If the power lever can be moved below the flight idle position, prior to further flight, restore the backup flight idle stop system to the configuration specified in EMBRAER 120–076–0009, Change No. 4, dated November 1, 1990; and perform a functional test.

Note 4: If the power lever can be moved below flight idle, this indicates that the backup flight idle stop system is inoperative.

(5) Move both power levers to the ''MAX'' position.

(6) Close both ''AIR/GROUND SYSTEM'' circuit breakers CB0283 and CB0286. Wait for at least 15 seconds, then move both power levers back toward the propeller reverse position with the flight idle gate triggers raised. Verify that the power lever for each engine can be moved below the flight idle position.

(7) If either or both power levers cannot be moved below the flight idle position, prior to further flight, inspect the backup flight idle stop system and the flight idle gate system, and accomplish either paragraph (c)(7)(i) or (c)(7)(ii) of this AD, as applicable:

(i) If the backup flight idle stop system is failing to disengage with weight-on-wheels, prior to further flight, restore the system to the configuration specified in EMBRAER Service Bulletin 120–076–0009, Change No. 4, dated November 1, 1990.

(ii) If the flight idle gate system is failing to open even though the trigger is raised, prior to further flight, repair in accordance with the EMBRAER Model EMB–120 maintenance manual.

(8) Turn the power select switch off. The functional test is completed.

New Requirements of This AD

Terminating Action

(d) Within 18 months or 4,000 flight hours after the effective date of this AD, whichever occurs earlier, modify the secondary flight idle stop system (SFISS), as required by paragraph (d)(1), (d)(2), or (d)(3) of this AD; as applicable. Accomplishment of the modification constitutes terminating action for the requirements of this AD.

(1) For airplanes having serial number 120004, and serial numbers 120006 through 120067 inclusive, and 120069 through 120344 inclusive; as listed in EMBRAER Service Bulletin 120–76–0018, Change 04, dated March 30, 2001: Accomplish the actions required by either paragraph (d)(1)(i) or (d)(1)(ii) of this AD, as applicable.

(i) If the actions specified by EMBRAER Service Bulletin 120–76–0018, Change 01, dated September 9, 1999; or Change 02, dated November 22, 1999; have not been accomplished: Modify the SFISS per the Accomplishment Instructions of EMBRAER Service Bulletin 120–76–0018, Change 03, dated May 26, 2000; or Change 04, dated March 30, 2001; or

(ii) If the actions specified by EMBRAER Service Bulletin 120–76–0018, Change 01 or Change 02 have been accomplished: Perform additional inspections per Part II of the Accomplishment Instructions of EMBRAER Service Bulletin 120–76–0018, Change 04.

(2) For the airplane having serial number 120068: Modify the SFISS per the Accomplishment Instructions of EMBRAER Service Bulletin 120–76–0015, Change 06, dated October 3, 2000.

(3) For airplanes having serial numbers 120345 through 120354 inclusive: Modify the SFISS per the Accomplishment Instructions of EMBRAER Service Bulletin 120–76–0022, Change 01, dated October 9, 2000; or Change 02, dated February 8, 2001.

Note 5: This AD references the following service information for applicability, inspection, and modification information: EMBRAER Service Bulletin 120–76–0015, Change 06, dated October 3, 2000; EMBRAER Service Bulletin 120–76–0018, Change 01, dated September 9, 1999; EMBRAER Service Bulletin 120–76–0018, Change 02, dated November 22, 1999; EMBRAER Service Bulletin 120–76–0018, Change 04, dated March 30, 2001; EMBRAER Service Bulletin 120–76–0022, Change 01, dated October 9, 2000; and EMBRAER Service Bulletin 120–76–0022, Change 02, dated February 8, 2001. In addition, this AD specifies compliance-time requirements beyond those included in Brazilian airworthiness directive 90–07–04R4, dated October 4, 1999; and the service information. Where there are differences between this AD and previously referenced documents, this AD prevails.

Note 6: Accomplishment of the requirements of paragraph (d) of this AD does not remove or otherwise alter the requirement to perform the repetitive (400-flight-hour) CAT 8 task checks specified by the Maintenance Review Board.

Corrective Actions

(e) During any visual check or inspection required by this AD, if any countersunk-head

bolt was not used to attach the power control cable to the bellcrank, or if any hex-head bolt was used to attach the cable to the bellcrank: Prior to further flight, repair per a method approved by the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the Departmento de Aviacao Civil (DAC) (or its delegated agent). Accomplishment of the repair per EMBRAER Service Bulletin 120–76–0018, Change 06, dated August 9, 2002; or EMBRAER Service Bulletin 120–76–0022, Change 03, dated August 9, 2002; as applicable; is acceptable for compliance with the requirements of this paragraph.

Alternative Methods of Compliance

(f)(1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM–116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the International Branch, ANM–116.

(2) Alternative methods of compliance, approved previously for paragraphs (a), (b), and (c) of AD 92–16–51, are considered to be approved as alternative methods of compliance with the inspection requirements of paragraphs (a), (b), and (c) of this AD. No alternative methods of compliance have been approved per AD 92–16–51 as terminating action for this AD.

Note 7: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM–116.

Special Flight Permits

(g) Special flight permits may be issued per sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) Unless otherwise specified by this AD, the actions shall be done in accordance with the applicable EMBRAER service bulletins listed in Table 1 of this AD as follows:

TABLE 1.—APPLICABLE SERVICE BULLETINS

Service bulletin	Page numbers	Change number shown on page	Date shown on page
120–076–0009, Change No. 4, November 1, 1990	1–87	4	November 1, 1990
120–76–0015, Change 06, October 3, 2000	1–44	06	October 3, 2000
120–76–0018, Change 03, May 26, 2000	1–117	03	May 26, 2000
120–76–0018, Change 04, March 30, 2001	1–117	04	March 30, 2001
120–76–0018, Change 06, August 9, 2002	1, 2, 7–10, 13–26, 31, 32, 115–119	06	August 9, 2002
	5, 6	04	March 30, 2001
	3, 4, 11, 12, 27–30, 33–114	03	May 26, 2000
120–76–0022, Change 01, October 9, 2000	1–43	01	October 9, 2000
120–76–0022, Change 02, February 8, 2001	1, 2, 43	02	February 8, 2001
	3–42	01	October 9, 2000
120–76–0022, Change 03, August 9, 2002	1	02	February 8, 2001
	2, 8, 14, 15, 17–19, 27, 28, 34–36, 42–45	03	August 9, 2002
	3–7, 9–13, 16, 20–26, 29–33, 37–41	01	October 9, 2000

(1) The incorporation by reference of EMBRAER service bulletins 120–76–0015, Change 06; 120–76–0018, Change 03; 120–76–0018, Change 04; 120–76–0018, Change 06; 120–76–0022, Change 01; 120–76–0022, Change 02; and 120–76–0022, Change 03; as stated in the table above; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of EMBRAER Service Bulletin 120–076–0009, Change No. 4, dated November 1, 1990, was approved previously by the Director of the Federal Register as of September 23, 1992 (57 FR 40838, September 8, 1992).

(3) 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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 8: The subject of this AD is addressed in Brazilian airworthiness directive 90–07–04R4, dated October 4, 1999.

Effective Date

(i) This amendment becomes effective on September 4, 2003.

Issued in Renton, Washington, on July 22, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03–19055 Filed 7–30–03; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. FAA–02–ANM–07]

Establishment of Class E5 Airspace at Afton Municipal Airport, Afton, WY

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action will establish Class E5 airspace at Afton, WY. Recently developed Area Navigation (RNAV)/Global Positioning System (GPS) Standard Terminal Arrival Routes (STARs) and Departure Procedures (SIDs) have made this proposal necessary. The establishment of Class E5 airspace is for containment of aircraft executing Instrument Flight Rule (IFR) operations at Afton Municipal Airport within controlled airspace. The intended effect of this action is to provide an increased level of safety for aircraft executing IFR operations between the terminal and en route phase of flight at Afton Municipal Airport, Afton, WY.

EFFECTIVE DATE: 0901 Coordinated Universal Time (UTC), October 30, 2003.

FOR FURTHER INFORMATION CONTACT: Ed Haeseker, ANM–520.7, Federal Aviation Administration, Docket No. 02–ANM–07.

SUPPLEMENTARY INFORMATION:

History

Effective November 29, 2002, the FAA proposed to amend Title 14 Code of Federal Regulations, part 71 (14 CFR part 71) by establishing Class E5 airspace at Afton Municipal Airport,