

for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$58,536, or \$542 per product.

#### 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 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 this 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 proposed AD and placed it in the AD docket.

#### 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 AD:

#### EMPRESA BRASILEIRA DE

#### AERONAUTICA S.A. (EMBRAER):

Docket No. FAA-2007-0082; Directorate Identifier 2007-NM-219-AD.

#### Comments Due Date

(a) We must receive comments by November 26, 2007.

#### Affected ADs

(b) None.

#### Applicability

(c) This AD applies to EMBRAER Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes, certificated in any category, as identified in Embraer Service Bulletin 170-34-0019, dated February 26, 2007; and Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes; certificated in any category, as identified in Embraer Service Bulletin 190-34-0009, dated February 26, 2007.

#### Subject

(d) Air Transport Association (ATA) of America Code 34: Navigation.

#### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

It has been found that the implementation of the Inertial Reference Units (IRU) on the ERJ-170 [and ERJ-190] may lead, in certain degraded modes, to an erroneous Flight Path Angle (FPA) indication on both Primary Flight Displays, with no alert to the flight crew. On the ERJ-170 [and ERJ-190], FPA is considered as important as pitch and bank angle for piloting purposes.

The unsafe condition is reduced ability of the flightcrew to control the flight path of the airplane. The corrective action is removal of certain wiring connections in the electrical connectors of both IRUs.

#### Actions and Compliance

(f) Within 18 months after the effective date of this AD, unless already done, remove the wiring connections from pins 51 and 52 in the electrical connectors of both IRUs, in accordance with the Accomplishment Instructions of Embraer Service Bulletin 170-34-0019 or 190-34-0009, as applicable, both dated February 26, 2007.

#### FAA AD Differences

**Note:** This AD differs from the MCAI and/or service information as follows: No differences.

#### Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1405; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) *Reporting Requirements:* For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

#### Related Information

(h) Refer to MCAI Brazilian Airworthiness Directives 2007-08-03 and 2007-08-04, both effective August 27, 2007, and to Embraer Service Bulletins 170-34-0019 and 190-34-0009, both dated February 26, 2007, for related information.

Issued in Renton, Washington, on October 12, 2007.

**Stephen P. Boyd,**

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

[FR Doc. E7-21005 Filed 10-24-07; 8:45 am]

**BILLING CODE 4910-13-P**

### DEPARTMENT OF TRANSPORTATION

#### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2007-0089; Directorate Identifier 2007-NM-117-AD]

RIN 2120-AA64

#### Airworthiness Directives; Various Transport Category Airplanes Equipped With Auxiliary Fuel Tanks Installed in Accordance With Certain Supplemental Type Certificates

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for

various transport category airplanes. This proposed AD would require deactivation of Rogerson Aircraft Corporation auxiliary fuel tanks. This proposed AD results from fuel system reviews conducted by the manufacturer, which identified potential unsafe conditions for which the manufacturer has not provided corrective actions. We are proposing this AD to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

**DATES:** We must receive comments on this proposed AD by December 10, 2007.

**ADDRESSES:** You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Fax:* 202-493-2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5254; fax (562) 627-5210.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No.

FAA-2007-0089; Directorate Identifier 2007-NM-117-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

The FAA has examined the underlying safety issues involved in fuel tank explosions on several large transport airplanes, including the adequacy of existing regulations, the service history of airplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, we issued a regulation titled "Transport Airplane Fuel Tank System Design Review, Flammability Reduction and Maintenance and Inspection Requirements" (67 FR 23086, May 7, 2001). In addition to new airworthiness standards for transport airplanes and new maintenance requirements, this rule included Special Federal Aviation Regulation No. 88 ("SFAR 88," Amendment 21-78, and subsequent Amendments 21-82 and 21-83).

Among other actions, SFAR 88 requires certain type design (*i.e.*, type certificate (TC) and supplemental type certificate (STC) design approval) holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to design approval holders for large turbine-powered transport airplanes and for subsequent modifications to those airplanes. It requires them to perform design reviews and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. As explained in the preamble to the rule, we intended to adopt airworthiness directives to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these design reviews, we have established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these

criteria. The other three criteria address the failure types under evaluation: single failures, single failures in combination with another latent condition(s), and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

We have determined that the actions identified in this AD are necessary to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

#### Supplemental Type Certificates (STCs) for Rogerson Auxiliary Fuel Tanks

The auxiliary fuel tank STCs on affected airplanes are of two basic type designs: a box-and-bladder type, and a double-walled cylindrical type. The box-and-bladder tanks are emptied and vented into the airplane center wing tank using either pneumatic air pressure supplied from the airplane, or electrical power from the airplane to power fuel pumps installed in the tank external dry bay area. The double-walled cylindrical tanks use pneumatic air pressure to empty into the airplane center wing tank. All auxiliary tanks use some type of electrical fuel quantity indication system (FQIS), flight deck control and annunciation panels, float level switches, valves and venting systems, electrical wiring connections in the dry bay area, and electrical bonding methods.

#### FAA's Findings

During the SFAR 88 safety assessment, it was determined that the Rogerson Aircraft Corporation FQIS and float level switch did not meet intrinsically safe electrical energy levels as described in the guidelines of advisory circular (AC) 25.981-1B, Fuel Tank Ignition Source Prevention Guidelines. Rogerson identified potential ignition sources resulting from a combination of single and latent failures for the Rogerson fuel tank subsystems. To prevent high electrical energy levels from the FQIS and float level switch from entering the auxiliary fuel tank, we have determined that the appropriate solution (depending on the type of auxiliary tank) for continued use is a combination of actions. First, installing a transient suppression device (TSD) on FQIS and float level switches would be needed. In order to maximize wire separation, the TSD must be installed as close as possible to the points where the FQIS and float level switch wires exit the TSD and enter the auxiliary tank. Other actions might

include replacing high-energy FQISs, and float level switches that are impractical for TSD application, with intrinsically safe FQISs, providing wire separation, conducting a one time inspection and/or replacing aging float level switch conduit assemblies, periodically inspecting the external dry bay system components and wires, and testing the integrity of bonding resistances.

Furthermore, to reduce fuel vapor ignition risks associated with dry running of fuel pumps and fuel pump failures, operational limitations are needed to ensure that the fuel pumps are turned off when the auxiliary tank is emptied. An inspection to detect fuel leakage in the dry bay and vent pipe shrouds needs to be included in the operator's maintenance program. Rogerson Aircraft Corporation has declared all STCs as high-flammability exposure installations, and has reported a few service difficulties with fuel leakage and damage to tank bladders during maintenance activities.

Rogerson has not provided the service information required under SFAR 88

that would lead the FAA to make a finding of compliance; therefore, we must mandate the deactivation of all Rogerson Aircraft Corporation auxiliary fuel tanks.

If operators do not wish to deactivate their auxiliary fuel tanks, we will consider requests for alternative methods of compliance (AMOCs). The most likely requests would be to allow continued use of the tanks by showing compliance with SFAR 88. This would involve obtaining STCs and developing maintenance procedures to address the safety issues identified above.

Once an operator has deactivated the tank as required by this AD, the operator might wish to remove the tank. This would require a separate design approval, if an approved tank removal procedure does not exist.

FAA’s Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design. For this reason, we are proposing this AD, which would require

deactivation to prevent usage of auxiliary fuel tanks.

Explanation of Compliance Time

In most ADs, we adopt a compliance time allowing a specified amount of time after the AD’s effective date. In this case, however, the FAA has already issued regulations that require operators to revise their maintenance/inspection programs to address fuel tank safety issues. The compliance date for these regulations is December 16, 2008. To provide for coordinated implementation of these regulations and this proposed AD, we are using this same compliance date in this proposed AD.

Costs of Compliance

There are about 148 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for the 39 U.S.-registered airplanes to comply with this proposed AD. Based on these figures, the estimated costs for U.S. operators could be as high as \$194,400 to prepare and report the deactivation procedures, and \$140,400 to deactivate the tank.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Individual cost
Report .....	1	\$80	None	\$80, per STC.
Preparation of tank deactivation procedure .....	80	80	None	\$6,400, per STC.
Physical tank deactivation .....	30	80	\$1,200	\$3,600, 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 proposed AD and placed it in the AD docket. See the ADDRESSES section

for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

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

Various Transport Category Airplanes:  
Docket No. FAA–2007–0089; Directorate Identifier 2007–NM–117–AD.

**Comments Due Date**

(a) The FAA must receive comments on this AD action by December 10, 2007.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to airplanes, certificated in any category and equipped with auxiliary fuel tanks installed in accordance with specified Supplemental

Type Certificates (STCs), as identified in Table 1 of this AD.

**TABLE 1.—AFFECTED AIRPLANES**

Airplanes	Auxiliary tank STC
Boeing Model 707 airplanes .....	SA4053WE, SA1308NM.
Boeing Model 727–100 series airplanes .....	SA2970WE, SA3674WE, SA3157WE, SA3319WE, SA3559WE, SA2734WE, SA3920NM, SA3810WE, SA1979NM, SA1398NM, SA3483WE.
Boeing Model 727–200 series airplanes .....	SA3065WE, SA1051NW.
Boeing Model 737–200 series airplanes .....	SA1082NW, SA2153WE, SA1054NW.
Boeing Model 737–400 and –500 series airplanes .....	SA3992NM, SA3980NM.
Boeing Model 767–200 series airplanes .....	SA5544NM.
British Aerospace Model 1–11–400 series airplanes .....	SA1995WE, SA1626WE, SA3819WE, SA2971WE.
McDonnell Douglas Model DC–9–15 and DC–9–15F airplanes.	SA3558WE, SA2587WE, SA1050NW.
McDonnell Douglas Model DC–9–32F (C–9B) airplanes ..	SA3436NM, SA3495NM.

**Unsafe Condition**

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss 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.

**Report**

(f) Within 45 days after the effective date of this AD, submit a report to the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. The report must include the following information:

(1) The airplane registration and auxiliary tank STC number installed.

(2) The usage frequency in terms of total number of flights per year and total number of flights for which the auxiliary tank is used.

**Prevent Usage of Auxiliary Fuel Tanks**

(g) On or before December 16, 2008, deactivate the auxiliary fuel tanks, in accordance with a deactivation procedure approved by the Manager of the Los Angeles ACO. Any auxiliary tank component that remains on the airplane must be secured and must have no effect on the continued operational safety and airworthiness of the airplane. Deactivation may not result in the need for additional instructions for continued airworthiness.

**Note 1:** Appendix A of this AD provides criteria that should be included in the deactivation procedure. The proposed deactivation procedures should be submitted to the Los Angeles ACO as soon as possible to ensure timely review and approval.

**Note 2:** For technical information, contact John Cox, Director of Engineering, Rogerson Aircraft Corporation, 16940 Von Karman, Irvine, California 92606; phone (949) 442–2381; fax (949) 442–2311.

**Alternative Methods of Compliance (AMOCs)**

(h)(1) The Manager, Los Angeles ACO, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

**Appendix A—Deactivation Criteria**

The auxiliary fuel tank deactivation procedure required by paragraph (g) of this AD should address the following actions.

(1) Permanently drain auxiliary fuel tanks, and clear them of fuel vapors to eliminate the possibility of out-gassing of fuel vapors from the emptied auxiliary tank.

**Note:** If applicable, removing the bladder might help eliminate out-gassing.

(2) Disconnect all electrical connections from the fuel quantity indication system (FQIS), fuel pumps if applicable, float switches, and all other electrical connections required for auxiliary tank operation, and stow them at the auxiliary tank interface.

(3) Disconnect all pneumatic connections if applicable, cap them at the pneumatic source, and secure them.

(4) Disconnect all fuel feed and fuel vent plumbing interfaces with airplane original equipment manufacturer (OEM) tanks, cap them at the airplane tank side, and secure them in accordance with a method approved by the FAA; one approved method is specified in AC 25–8 Fuel Tank Flammability Minimization. In order to eliminate the possibility of structural deformation during cabin decompression, leave open and secure the disconnected auxiliary fuel tank vent lines.

(5) Pull and collar all circuit breakers used to operate the auxiliary tank.

(6) Revise the weight and balance document, if required, and obtain FAA approval.

(7) Amend the applicable sections of the applicable airplane flight manual (AFM) to indicate that the auxiliary fuel tank is deactivated. Remove auxiliary fuel tank operating procedures to ensure that only the OEM fuel system operational procedures are contained in the AFM. Amend the Limitations Section of the AFM to indicate that the AFM Supplement for the STC is not in effect. Place a placard in the flight deck indicating that the auxiliary tank is deactivated. The AFM revisions specified in this paragraph may be accomplished by inserting a copy of this AD into the AFM.

(8) Amend the applicable sections of the applicable airplane maintenance manual to remove auxiliary tank maintenance procedures.

(9) After the auxiliary fuel tank is deactivated, accomplish procedures such as leak checks and pressure checks deemed necessary before returning the airplane to service. These procedures must include verification that the airplane FQIS and fuel distribution systems have not been adversely affected.

(10) Include with the operator's proposed procedures any relevant information or additional steps that are deemed necessary by the operator to comply with the deactivation and return the airplane to service.

Issued in Renton, Washington, on October 15, 2007.

**Ali Bahrami,**

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

[FR Doc. E7–21001 Filed 10–24–07; 8:45 am]

**BILLING CODE 4910–13–P**