

[Federal Register: September 27, 2005 (Volume 70, Number 186)]  
[Rules and Regulations]  
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[DOCID:fr27se05-4]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2005-20785; Directorate Identifier 2005-NM-002-AD; Amendment 39-14295; AD 2005-20-02]**

**RIN 2120-AA64**

### **Airworthiness Directives; Boeing Model 707 Airplanes, and Boeing Model 720 and 720B Series Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Boeing Model 707 airplanes, and all Boeing Model 720 and 720B series airplanes. This AD requires revising the Limitations section of the airplane flight manual (AFM). The AFM revisions include instructions for monitoring the low pressure lights for the center tank fuel pumps, and a statement prohibiting the resetting of a tripped circuit breaker for a fuel pump in any tank. This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent dry operation of the fuel pumps in the center fuel tank, which could result in high temperatures or sparks inside the fuel tank, ignition of fuel vapors, and consequent fire or explosion. We are also issuing this AD to prohibit the resetting of a tripped circuit breaker for a fuel pump in any tank, which could allow an electrical fault to override the protective features of the circuit breaker, and result in sparks inside the fuel tank, ignition of fuel vapors, and consequent fire or explosion.

**DATES:** This AD becomes effective November 1, 2005.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, room PL-401, Washington, DC.

Contact Boeing Commercial Airplanes, PO Box 3707, Seattle, Washington 98124-2207, for service information identified in this AD.

**FOR FURTHER INFORMATION CONTACT:** Sulmo Mariano, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6501; fax (425) 917-6590.

## **SUPPLEMENTARY INFORMATION:**

### **Examining the Docket**

You may examine the airworthiness directive (AD) docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section.

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to all Boeing Model 707 airplanes, and all Boeing Model 720 and 720B series airplanes. That NPRM was published in the Federal Register on April 1, 2005 (70 FR 16767). That NPRM proposed to require revising the Limitations section of the airplane flight manual (AFM). The AFM revisions include instructions for monitoring the low pressure lights for the center tank fuel pumps, and a statement prohibiting the resetting of a tripped circuit breaker for a fuel pump in any tank.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

### **Support for the AD**

One commenter supports the AD.

### **Request to Change Airplane Flight Manual (AFM) Wording to be Similar to Other AFMs**

The commenter, the airplane manufacturer, requests that we revise the wording for the AFM revision that is specified in paragraph (f) of the NPRM. The commenter states that the wording should be changed to agree with the wording in an FAA-approved AFM, and to be similar to the AFM wording for other Boeing airplane models.

We agree with the commenter. The wording in the AFM revision should agree with the previously approved AFM and be similar to the AFM wording for other Boeing airplane models. These changes will reduce confusion and provide the greatest clarity for the AFM revision. We have revised paragraph (f) of the final rule to include the commenter's requested changes. However, operators that have previously incorporated the information in Approval Reference Number 045151 of the Boeing Model 707 AFM, dated December 6, 2004, are not required to change the AFM. That exclusion is noted in revised wording in paragraph (g) of the final rule that emphasizes previous accomplishment of this revision.

### **Request to Include Sentences for Ground Operations and Flight Operations in AFM Revision**

The same commenter requests that we revise the first paragraph of the AFM revision specified in paragraph (f) of the NPRM to include two sentences regarding resetting the circuit breaker: one for the flight case and one for the ground case. The commenter states that the proposed change in wording would allow the circuit breaker to be reset during ground operations after maintenance has determined it is safe to do so. The commenter states that the proposed change is currently provided in most flightcrew operations manuals (FCOMs).

We do not agree with the commenter. We met with the commenter on June 30, 2005, to discuss this comment and our response to it. During the meeting we discussed the fact that the AFM provides limitations for flightcrews to follow during flight operations. The proposed change to the AFM would put the flightcrew in the role of maintenance by allowing the flightcrew to reset a tripped circuit breaker during ground operations. It is more appropriate to incorporate ground limitations (and warnings) in the airplane maintenance manual (AMM) rather than the AFM, to ensure that these procedures are done by maintenance personnel. We also discussed that the procedures in the FAA-approved AFM take priority over the FCOM, which is not FAA-approved. During the meeting, the commenter stated that, if the proposed changes are not made, it would revise the FCOM to prohibit resetting the fuel pump circuit breakers both in-flight and on the ground. We are considering additional rulemaking to revise the Airworthiness Limitations section of the AMM to ensure that maintenance does not reset the circuit breaker until it is safe to do so. We have not changed the final rule in this regard.

**Explanation of Change in Applicability**

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

**Clarification of Alternative Method of Compliance (AMOC) Paragraph**

We have revised this action to clarify the appropriate procedure for notifying the principal inspector before using any approved AMOC on any airplane to which the AMOC applies.

**Conclusion**

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD 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.

**Costs of Compliance**

There are about 225 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for U.S. operators to comply with this AD.

| <b>ESTIMATED COSTS</b> |                   |                                    |              |                          |  |                   |
|------------------------|-------------------|------------------------------------|--------------|--------------------------|--|-------------------|
| <b>Action</b>          | <b>Work hours</b> | <b>Average labor rate per hour</b> | <b>Parts</b> | <b>Cost per airplane</b> | <b>Number of U.S.-registered airplanes</b> | <b>Fleet cost</b> |
| Revising AFM           | 1                 | \$65                               | None         | \$65                     | 90   | \$5,850           |

**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 AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify that this AD:

- (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.

We prepared a regulatory evaluation of the estimated costs to comply with this 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.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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):

# 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/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)*

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).

**2005-20-02 Boeing:** Amendment 39-14295. Docket No. FAA-2005-20785; Directorate Identifier 2005-M-002-AD.

## Effective Date

- (a) This AD becomes effective November 1, 2005.

## Affected ADs

- (b) None.

## Applicability

(c) This AD applies to all Boeing Model 707-100 long body, -200, -100B long body, and -100B short body series airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B series airplanes; certificated in any category.

## Unsafe Condition

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent dry operation of the fuel pumps in the center fuel tank, which could result in high temperatures or sparks inside the fuel tank, ignition of fuel vapors, and consequent fire or explosion. We are also issuing this AD to prohibit the resetting of a tripped circuit breaker for a fuel pump in any tank, which could allow an electrical fault to override the protective features of the circuit breaker, and result in sparks inside the fuel tank, ignition of fuel vapors, and consequent fire or explosion.

## 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.

## Airplane Flight Manual (AFM) Revisions

(f) Within 30 days after the effective date of this AD: Revise the Limitations section of the Boeing 707 AFM to include the following information. This may be done by inserting a copy of this AD into the AFM. Thereafter, operate the airplane in accordance with the limitations specified in these AFM revisions.

## *"Fuel Pumps*

For ground and flight operations, a fuel pump circuit breaker which has tripped must not be reset.

### *Center Tank Fuel Pumps*

Center tank fuel pumps must be `OFF' unless personnel are available in the flight deck to monitor low pressure lights.

Each center tank fuel pump switch must be positioned to `OFF' without delay when the respective center tank fuel pump low pressure light illuminates."

**Note 1:** When information identical to that in paragraph (f) of this AD has been included in the general revision of the AFM, the general revision may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

### **Actions Accomplished Previously**

(g) Incorporation of the information in Approval Reference Number 045151 of the Boeing Model 707 Airplane Flight Manual before the effective date of this AD is considered acceptable for compliance with the corresponding action specified in this AD.

### **Alternative Methods of Compliance (AMOCs)**

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

(2) Before using any AMOC approved in accordance with 14 CFR 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

(3) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

### **Material Incorporated by Reference**

(i) None.

Issued in Renton, Washington, on September 16, 2005.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-19140 Filed 9-26-05; 8:45 am]

BILLING CODE 4910-13-P