

[Federal Register Volume 78, Number 31 (Thursday, February 14, 2013)]  
[Rules and Regulations]  
[Pages 10499-10501]  
From the Federal Register Online via the Government Printing Office [www.gpo.gov]  
[FR Doc No: 2013-03267]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2012-1110; Directorate Identifier 2012-NM-013-AD; Amendment 39-17353; AD 2013-03-19]**

**RIN 2120-AA64**

#### **Airworthiness Directives; The Boeing Company Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** We are superseding an existing airworthiness directive (AD) for certain The Boeing Company Model 707 airplanes, and Model 720 and 720B series airplanes. That AD currently requires replacing wiring for the fuel boost pumps and override pumps with new wiring, installing Teflon sleeving on the wiring, and doing associated actions; and doing repetitive inspections to detect damage of the wiring or evidence of a fuel leak. This new AD reduces the repetitive inspection interval. This AD was prompted by a determination that an inspection interval must be reduced. We are issuing this AD to detect and correct damaged wiring for the fuel boost pumps and override pumps, which could cause electrical arcing that could puncture the conduit containing the wire, and result in a fuel tank explosion or a fire adjacent to the fuel tank.

**DATES:** This AD is effective March 21, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of October 1, 2001 (66 FR 44954, August 27, 2001).

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Rebel Nichols, Aerospace Engineer, Propulsion Branch, ANM-140S, Seattle Aircraft Certification Office (ACO), FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6509; fax: 425-917-6590; email: Rebel.Nichols@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001). That AD applies to the specified products. The NPRM published in the Federal Register on October 29, 2012 (77 FR 65501). That NPRM proposed to continue to require replacing wiring for the fuel boost pumps and override pumps with new wiring, installing Teflon sleeving on the wiring, and doing associated actions; and doing repetitive inspections to detect damage of the wiring or evidence of a fuel leak with a reduced repetitive inspection interval.

**Comment**

We gave the public the opportunity to participate in developing this AD. We have considered the comment received. Boeing stated that it has reviewed the NPRM (77 FR 65501, October 29, 2012), and concurs with the proposed rule.

**Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD as proposed—except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 65501, October 29, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 65501, October 29, 2012).

**Costs of Compliance**

We estimate that this AD affects 5 airplanes of U.S. registry.  
We estimate the following costs to comply with this AD:

<b>Estimated Costs</b>				
<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Replacement [retained action from AD 2001–17–20, Amendment 39–12411 (66 FR 44954, August 27, 2001)].	38 work-hours × \$85 per hour = \$3,230	\$9,943	\$13,173	\$65,865.

Inspection [retained action from AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001)].	3 work-hours × \$85 per hour = \$255 per inspection cycle.	\$0	\$255 per inspection cycle.	\$1,275 per inspection cycle.
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The new requirements of this AD add no additional economic burden. The increase in replacement labor costs of 31 work hours in AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001), to the 38 work hours specified in this AD, is due to the opening and closing hours being included in the cost of this AD. We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

### **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),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, 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 FAA amends § 39.13 by removing airworthiness directive (AD) 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001), and adding the following new AD:



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**2013-03-19 The Boeing Company:** Amendment 39-17353; Docket No. FAA-2012-1110; Directorate Identifier 2012-NM-013-AD.

**(a) Effective Date**

This AD is effective March 21, 2013.

**(b) Affected ADs**

This AD supersedes AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001).

**(c) Applicability**

This AD applies to The Boeing Company 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; line numbers 1 through 941 inclusive.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 24, Electrical Power.

**(e) Unsafe Condition**

This AD was prompted by a report that, while investigating a fuel leak around the bolts on the number 1 fuel boost pump on a Boeing Model 707 series airplane, an operator found wire damage where the fuel boost pump wiring exited the boost pump and entered the boost pump access area. We are issuing this AD to detect and correct damaged wiring for the fuel boost pumps and override pumps, which could cause electrical arcing that could puncture the conduit containing the wire, and result in a fuel tank explosion or a fire adjacent to the fuel tank.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Retained Replacement of Wiring, Installation of Sleeving, and Associated Actions**

This paragraph restates the requirements of paragraph (a) of AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001). Within 1 year or 4,000 flight hours after October 1, 2001 (the effective date of AD 2001-17-20), whichever occurs first: Replace the wiring for the fuel boost pumps and override pumps, install Teflon sleeving over the wiring, and do all associated actions, per the Accomplishment Instructions of Boeing Service Bulletin A3500, Revision 1, dated April 26, 2001. The associated actions include performing a general visual inspection of the area around each fuel boost pump and override pump for evidence of a fuel leak; finding the source of any fuel leak

and repairing the affected area; replacing the conduit, if required; and performing a detailed visual inspection of the wiring installed in the conduit for evidence of electrical arcing or a fuel leak, or exposed copper wire. If replacement of the conduit is deferred per the Accomplishment Instructions of Boeing Service Bulletin A3500, Revision 1, dated April 26, 2001, repeat the inspection for fuel leaks every 500 flight hours until the conduit is replaced, and replace the conduit within 6,000 flight hours or 18 months, whichever occurs first.

(1) For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(2) For the purposes of this AD, a detailed visual 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."

#### **(h) Retained Repetitive Inspections**

This paragraph restates the requirements of paragraph (b) of AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001), with a new compliance time. After replacement of the wiring per paragraph (g) of this AD, repeat the detailed visual inspection of the wiring for the fuel boost pumps and override pumps for damage, such as evidence of electrical arcing or exposed copper wire, or evidence of a fuel leak. After the effective date of this AD, repeat the inspection one time at the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD, per the Accomplishment Instructions of Boeing Service Bulletin A3500, Revision 1, dated April 26, 2001. If any electrical arcing or exposed copper wire or evidence of a fuel leak is detected during any inspection per this paragraph, before further flight, do the applicable corrective actions (including finding the source of any fuel leak and repairing the affected area, replacing the wiring, replacing the conduit, or installing new Teflon sleeving; as applicable) according to the Accomplishment Instructions of Boeing Service Bulletin A3500, Revision 1, dated April 26, 2001. Repeat the inspection thereafter at intervals not to exceed 15,000 flight hours.

(1) Within 30,000 flight hours after the most recent inspection.

(2) At the later of the compliance times specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD.

(i) Within 15,000 flight hours after the most recent inspection.

(ii) Within 3 years after the effective date of this AD.

#### **(i) Credit for Previous Actions**

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before October 1, 2001 (the effective date of AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001)), using Boeing Alert Service Bulletin A3500, dated July 27, 2000, which is not incorporated by reference in this AD.

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

(1) The Manager, Seattle Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the

person identified in the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) AMOCs approved previously in accordance with AD 2001-17-20, Amendment 39-12411 (66 FR 44954, August 27, 2001), are approved as AMOCs for the corresponding provisions of this AD, except for AMOCs that change the inspection frequency.

#### **(k) Related Information**

(1) For more information about this AD, contact Rebel Nichols, Aerospace Engineer, Propulsion Branch, ANM-140S, Seattle Aircraft Certification Office (ACO), FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6509; fax: 425-917-6590; email: Rebel.Nichols@faa.gov.

(2) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

#### **(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on October 1, 2001 (66 FR 44954, August 27, 2001).

(i) Boeing Service Bulletin A3500, Revision 1, dated April 26, 2001.

(ii) Reserved.

(4) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(5) You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(6) You may view this service information that is incorporated by reference 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/cfr/ibr-locations.html>.

Issued in Renton, Washington on February 6, 2013.

Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.