[Federal Register: June 14, 2005 (Volume 70, Number 113)] [Rules and Regulations] [Page 34313-34316] From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr14jn05-4]

# DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-21358; Directorate Identifier 2005-NM-088-AD; Amendment 39-14120; AD 2005-12-04]

**RIN 2120-AA64** 

# Airworthiness Directives; Boeing Model 757-200, -200PF, and -200CB Series Airplanes

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 757-200, -200PF, and -200CB series airplanes. This AD requires repetitive inspections of the shim installation between the vertical flange and bulkhead. This AD is prompted by reports of cracks, loose and broken bolts, and shim migration in the joint between the aft torque bulkhead and the strutto-diagonal brace fitting. We are issuing this AD to detect and correct such cracks, loose and broken bolts, and shim migration, which could result in damage to the strut and consequent separation of the strut and engine from the airplane.

DATES: Effective June 29, 2005.

The incorporation by reference of certain publications listed in the AD is approved by the Director of the Federal Register as of June 29, 2005.

We must receive comments on this AD by August 15, 2005.

ADDRESSES: Use one of the following addresses to submit comments on this AD.

• DOT Docket Web site: Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.

• Government-wide Rulemaking Web site: Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.

• Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, room PL-401, Washington, DC 20590.

- Fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street

SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box

3707, Seattle, Washington 98124-2207.

You can examine the contents of this 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., room PL-401, on the plaza level of the Nassif Building, Washington, DC. This docket number is FAA-2005-21358; the directorate identifier for this docket is 2005-NM-088-AD.

### **Examining the Dockets**

You can examine the 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 DOT street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the Docket Management System (DMS) receives them.

**FOR FURTHER INFORMATION CONTACT:** Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6450; fax (425) 917-6590.

**SUPPLEMENTARY INFORMATION:** Boeing advises that, since 1993, it has received 17 reports of cracks, loose and broken bolts, and shim migration in the joint between the aft torque bulkhead and the strut-to-diagonal brace fitting on Boeing Model 757-200 series airplanes. Those conditions, if not corrected, could result in damage and consequent loss of the strut and engine from the airplane.

## **Other Relevant Rulemaking**

On May 25, 2004, we issued AD 2004-12-07, amendment 13666 (69 FR 33561, June 16, 2004). That AD applies to Boeing Model 757 series airplanes, line numbers 1 through 735 inclusive, equipped with Rolls Royce RB211 engines.

That AD requires modification of the nacelle strut and wing structure; and inspections for loose/missing fasteners of certain aft bulkhead fasteners, proper alignment of the middle gusset of the inboard side load fitting, cracking of certain fastener holes; and corrective action if necessary. That AD cites various revision levels of Boeing Service Bulletin 757-54-0035 as the appropriate source of service information for the required actions.

That AD also mandated inspections of the 20 fasteners that are subject to this new AD. The threshold for those initial inspections is 15,000 total flight cycles. We have received reports of missing or loose fasteners in the affected joint as low as approximately 7,500 total flight cycles. In addition, that AD mandated inspections of the 20 fasteners of airplanes modified in accordance with Boeing Service Bulletin 757-54-0035 (original), but did not mandate inspections for airplanes modified in accordance with Revisions 1 or 2 of that service bulletin or airplanes that had been modified in production. Loose or missing fasteners have been found on airplanes with all versions of the modification.

The actions required by that AD were intended to prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut, but based on this service experience, we have concluded that the inspection requirements of that AD are not adequate.

### **Relevant Service Information**

We have reviewed Boeing Service Bulletin 757-54A0047, Revision 1, dated March 24, 2005. The service bulletin describes procedures for repetitive detailed inspections of the shim installation between the vertical flange and bulkhead. Specifically, the service bulletin provides procedures to:

- Inspect for damaged sealant around the shim;
- Inspect for signs of shim movement;

• Measure the horizontal and vertical movement of the shim from the installed position to determine the total cumulative movement of the shims;

• Inspect for signs of movement of the four fasteners in the vertical flange; and

• Detect signs of damaged paint and/or sealant or signs of movement of the 16 fasteners that hold the bulkhead assembly to the horizontal flange of the strut-to-diagonal brace fitting.

The service bulletin also describes four different interim repairs, depending on the amount of shim movement revealed during the inspections. The various interim repair actions include doing an eddy current inspection of the fastener holes for cracks, for which the service bulletin recommends contacting the manufacturer for repair instructions; replacing the shims with new shims; oversizing the holes and replacing discrepant fasteners with oversize fasteners; and applying sealant/primer on the shim of the vertical flange.

For airplanes modified in accordance with Service Bulletin 757-54-0035, the compliance time for the initial inspection is 6,000 flight cycles/36 months after the modification, with a grace period of 3,000 flight cycles/18 months. For unmodified airplanes, the compliance time is 90 days. The repetitive intervals range from 6,000 to 9,000 flight cycles/36 to 54 months. Interim repairs are due before further flight after a positive finding.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

# FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other airplanes of the same type design. Therefore, we are issuing this AD to detect and correct cracks, loose and broken bolts, and shim migration in the joint between the aft torque bulkhead and the strut-to-diagonal brace fitting. These conditions could result in damage to the strut and consequent separation of the strut and engine from the airplane. This AD requires accomplishing the actions specified in the service information described previously, except as discussed below.

# Differences Between the AD and the Service Bulletin

The service bulletin specifies compliance times relative to the issue date of the service bulletin; this AD requires corresponding compliance times relative to the effective date of the AD.

The service bulletin specifies that you may contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require you to repair those conditions using either a method that we approve, or data that meet the certification basis of the airplane and have been approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization whom we have authorized to make those findings.

# **Clarification of Certain Compliance Times**

For Group 2 airplanes, the service bulletin specifies an inspection threshold relative to the date of issuance of the "original Airworthiness Certificate \* \* \*" For these same airplanes, however, this AD requires an inspection threshold relative to the date of issuance of the "original standard airworthiness certificate \* \* \*" We find that the addition of the term "standard" will establish this date with certainty.

### FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD; therefore, providing notice and opportunity for public comment before the AD is issued is impracticable, and good cause exists to make this AD effective in less than 30 days.

# **Comments Invited**

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2005-21358; Directorate Identifier 2005-NM-088-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to *http://dms.dot.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of our docket Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You can review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you can visit *http://dms.dot.gov*.

### 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 the 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 AD. 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, Incorporation by reference, Safety.

# PART 39-AIRWORTHINESS DIRECTIVES

# Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

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 airworthiness directive (AD):

# **AIRWORTHINESS DIRECTIVE**



Aircraft Certification Service Washington, DC

#### We post ADs on the internet at "www.faa.gov"

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 3 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 immedia 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) aut 39, subpart 39.3).

**2005-12-04 Boeing:** Amendment 39-14120. Docket No. FAA-2005-21358; Directorate Identifier 2005-NM-088-AD.

### **Effective Date**

(a) This AD becomes effective June 29, 2005.

### Affected ADs

(b) None.

### Applicability

(c) This AD applies to Boeing Model 757-200, -200PF, and -200CB series airplanes; certificated in any category; line numbers 1 through 1048 inclusive; powered by Rolls Royce engines.

### **Unsafe Condition**

(d) This AD was prompted by reports of cracks, loose and broken bolts, and shim migration in the joint between the aft torque bulkhead and the strut-to-diagonal brace fitting. The FAA is issuing this AD to detect and correct such conditions, which could result in damage to the strut and consequent separation of the strut and engine from 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.

# Service Information

(f) For purposes of this AD, "the service bulletin" refers to Boeing Service Bulletin 757-54A0047, Revision 1, dated March 24, 2005.

### Inspections

(g) Inspect the joint between the aft torque bulkhead and the strut-to-diagonal brace fitting, and repair any loose shim or loose, missing, or damaged fastener, by doing all actions at the times specified in the Accomplishment Instructions of the service bulletin, as applicable, except as required by paragraphs (i), (j), and (k) of this AD.

(h) An inspection and corrective actions done before the effective date of this AD in accordance with paragraph (b) or (c), as applicable, of AD 2004-12-07, amendment 39-13666, are acceptable for compliance with the initial inspection requirement of paragraph (g) of this AD.

## **Exceptions to Service Bulletin Procedures**

(i) Where the service bulletin specifies a compliance time relative to the issue date of the service bulletin, this AD requires compliance within the corresponding specified time relative to the effective date of this AD.

(j) For purposes of this AD, for Group 2 airplanes having line numbers 736 through 1048, the initial inspection must be done within the specified time after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness. The grace period for these airplanes is 3,000 flights from the effective date of this AD.

(k) If any crack is found during any inspection required by this AD, and the service bulletin specifies to contact Boeing for appropriate action: Before further flight, repair the crack according to a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or according to data meeting the certification basis of the airplane approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the approval must specifically refer to this AD.

# Alternative Methods of Compliance (AMOCs)

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

(2) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

# Material Incorporated by Reference

(m) You must use Boeing Service Bulletin 757-54A0047, Revision 1, dated March 24, 2005, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approves the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get copies of the service information, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207. To view the AD docket, go to the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, Nassif Building, Washington, DC. To review copies of the service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to *http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html*.

Issued in Renton, Washington, on May 26, 2005. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service. [FR Doc. 05-11515 Filed 6-13-05; 8:45 am] BILLING CODE 4910-13-P