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[Page 44753-44756]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-28920; Directorate Identifier 2007-NM-162-AD; Amendment 39-15152; AD 2007-16-13]

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 superseding an existing airworthiness directive (AD) that applies to certain Boeing Model 757-200, -200PF, and -200CB series airplanes. The existing AD currently requires repetitive inspections of the shim installation between the vertical flange and bulkhead, and repair if necessary. This new AD adds, for certain airplanes, an inspection for cracking of the four critical fastener holes in the horizontal flange, and repair if necessary. This AD results from reports of cracking in the pylon under bolts that appear to be undamaged during the existing AD inspections. 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, which could result in damage to the strut and consequent separation of the strut and engine from the airplane.

DATES: This AD becomes effective August 24, 2007.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of August 24, 2007.

We must receive any comments on this AD by October 9, 2007.

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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- Fax: (202) 493-2251.

- Hand Delivery: Room W12-140 on the ground floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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

FOR FURTHER INFORMATION CONTACT: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6450; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Discussion

On May 26, 2005, we issued AD 2005-12-04, amendment 39-14120 (70 FR 34313, June 14, 2005). That AD applies to certain Boeing Model 757-200, -200PF, and -200CB series airplanes. That AD requires repetitive inspections of the shim installation between the vertical flange and bulkhead, and repair if necessary. That AD resulted from 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 actions specified in that AD are intended 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.

Actions Since AD Was Issued

Since we issued that AD, we have received reports of cracking in the pylon under bolts that appear to be undamaged during the existing AD inspections. Although the cracking was underneath non-discrepant bolts, it was adjacent to bolts subject to AD 2005-12-04 that were loose for a period of time long enough to cause this cracking.

Other Relevant Rulemaking

On May 25, 2004, we issued AD 2004-12-07, amendment 39-13666 (69 FR 33561, June 16, 2004), for certain Boeing Model 757 series airplanes. That AD requires, for certain airplanes, repetitive detailed inspections of certain aft bulkhead fasteners for loose or missing fasteners, and corrective action if necessary. That AD also requires, for certain other airplanes, a one-time detailed inspection of the middle gusset of the inboard side load fitting for proper alignment and realignment if necessary; a one-time eddy current inspection of certain fastener holes for cracking, and repair if necessary; and a detailed inspection of certain fasteners for loose or missing fasteners; and replacement with new fasteners if necessary. Accomplishing the actions specified in this AD terminates the requirements specified in paragraphs (b) and (c) of AD 2004-12-07.

Relevant Service Information

We have reviewed Boeing Alert Service Bulletin 757-54A0047, Revision 3, dated June 27, 2007 (we referred to Boeing Service Bulletin 757-54A0047, Revision 1, dated March 24, 2005, as the appropriate source of service information for accomplishing the required actions specified in AD 2005-12-04). The alert service bulletin describes basically the same procedures (as required by AD 2005-12-04) for repetitive detailed inspections of the shim installation between the vertical flange and bulkhead and repair if necessary; however, the description of the actions has been revised. The alert service bulletin specifies to do repetitive inspections as follows:

- Do detailed inspections of the shim installations between the vertical flange and bulkhead to determine if there are signs of movement.
- Do detailed inspections of the four fasteners in the vertical flange to determine if there are signs of movement or if there are gaps under the head or collar.
- Do detailed inspections of the fasteners that hold the strut to the horizontal flange of the strut-to-diagonal brace fitting to determine if there are signs of movement or if there are gaps under the head or collar.

The alert service bulletin specifies to do related investigative actions and repairs as follows:

- Repair the shim if cumulative movement is 0.50 inch or less.
- Replace the shim if cumulative movement is more than 0.50 inch and do the inspection and repair of the four critical fastener holes on the horizontal flange specified in Part IV of the alert service bulletin.
- If any fastener is rejected, inspect the fastener hole for cracking and repair if necessary, increase the diameter of the hole, install oversize fasteners, and do the inspection and repair of the four critical fastener holes on the horizontal flange specified in Part IV of the alert service bulletin.

In addition to the repetitive inspections, the alert service bulletin describes procedures for an additional one-time inspection as follows: If any findings from inspections done in accordance with the original issue or Revision 1 of the service bulletin led to a rejection of any fasteners, or if there were any equivalent findings prior to the original issue of the service bulletin (except for findings on airplanes identified as Group 1, Configuration 2 in Revision 3 of the alert service bulletin that are prior to the incorporation of Boeing Service Bulletin 757-54-0035), the alert service bulletin describes a high frequency eddy current (HFEC) inspection for cracking of the four critical fastener holes in the horizontal flange and repair if necessary.

Depending on the group and configuration specified in the alert service bulletin, the initial compliance time ranges from 90 days after the date on the service bulletin to 6,000 flight cycles or 36 months, whichever occurs first, after the incorporation of Boeing Service Bulletin 757-54-0035. Depending on the group and configuration specified in the alert service bulletin, the repetitive interval ranges from 6,000 flight cycles or 36 months, whichever occurs first, to 9,000 flight cycles or 54 months, whichever occurs first.

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. For this reason, we are issuing this AD to supersede AD 2005-12-04. This new AD continues to require repetitive inspections of the shim installation between the vertical flange and bulkhead, and repair if necessary. This AD also requires, for certain airplanes, an inspection for cracking of the four critical fastener holes in the horizontal flange, and repair if necessary.

Differences Between This AD and the Alert Service Bulletin

The alert service bulletin specifies to contact the manufacturer for instructions on how to repair certain conditions, but this AD requires repairing those conditions in one of the following ways:

- Using a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by an Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization whom we have authorized to make those findings.

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 in the ADDRESSES section. Include "Docket No. FAA-2007-28920; Directorate Identifier 2007-NM-162-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

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 that 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 may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647-5527) is located on the ground level of the West 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 receives them.

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 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, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA 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. The Federal Aviation Administration (FAA) amends § 39.13 by removing amendment 39-14120 (70 FR 34313, June 14, 2005) and adding the following new airworthiness directive (AD):



2007-16-13 Boeing: Docket No. FAA-2007-28920; Directorate Identifier 2007-NM-162-AD; Amendment 39-15152.

Effective Date

(a) This AD becomes effective August 24, 2007.

Affected ADs

(b) This AD supersedes AD 2005-12-04. Accomplishing the actions specified in this AD terminates certain requirements of AD 2004-12-07, amendment 39-13666.

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 results from reports of cracking in the pylon under bolts that appear to be undamaged during the existing AD inspections. 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, 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 Bulletin Reference

(f) The term "alert service bulletin," as used in this AD, means Boeing Alert Service Bulletin 757-54A0047, Revision 3, dated June 27, 2007.

One-Time Inspection and Repair

(g) For airplanes identified in paragraphs (g)(1) and (g)(2) of this AD: Within 90 days after the effective date of this AD, do a high frequency eddy current (HFEC) inspection for cracking of the four critical fastener holes in the horizontal flange and, before further flight, do all applicable repairs, in accordance with Part IV of the Accomplishment Instructions of the alert service bulletin, except as required by paragraph (k) of this AD.

(1) Airplanes on which findings on the horizontal or vertical fasteners or the shims led to a rejection of any fastener during the actions specified in Boeing Alert Service Bulletin 757-54A0047,

dated November 13, 2003; or Boeing Service Bulletin 757-54A0047, Revision 1, dated March 24, 2005.

(2) Airplanes that had equivalent findings prior to Boeing Alert Service Bulletin 757-54A0047, dated November 13, 2003, except for findings on airplanes identified as Group 1, Configuration 2 in the alert service bulletin that were prior to the incorporation of Boeing Service Bulletin 757-54-0035.

Repetitive Inspections and Repair

(h) At the applicable times specified in paragraph 1.E., "Compliance," of the alert service bulletin, except as required by paragraphs (i) and (j) of this AD: Do the inspections specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD and, before further flight, do all applicable related investigative actions and repairs, by doing all the actions specified in Parts I and II of the Accomplishment Instructions of the alert service bulletin, except as required by paragraph (k) of this AD.

(1) Do detailed inspections of the shim installations between the vertical flange and bulkhead to determine if there are signs of movement.

(2) Do detailed inspections of the four fasteners in the vertical flange to determine if there are signs of movement or if there are gaps under the head or collar.

(3) Do detailed inspections of the fasteners that hold the strut to the horizontal flange of the strut-to-diagonal brace fitting to determine if there are signs of movement or if there are gaps under the head or collar.

Exceptions to Alert Service Bulletin Procedures

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

(j) Where the alert service bulletin specifies a compliance time relative to the "date of issuance of airworthiness certificate," this AD requires compliance within the corresponding time relative to the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

(k) If any crack is found during any inspection required by this AD, and the alert service bulletin specifies to contact Boeing for appropriate action: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (o) of this AD

Credit for Actions Done Using Previous Service Information

(l) Actions done before the effective date of this AD in accordance with Boeing Service Bulletin 757-54A0047, Revision 1, dated March 24, 2005; and Boeing Alert Service Bulletin 757-54A0047, Revision 2, dated January 31, 2007; are considered acceptable for compliance with the corresponding actions specified in this AD.

(m) An inspection and corrective actions done before June 29, 2005 (the effective date of AD 2005-12-04), in accordance with paragraph (b) or (c), as applicable, of AD 2004-12-07, are acceptable for compliance with the initial inspection requirement of paragraph (h) of this AD.

An Acceptable Method of Compliance With Certain Requirements of AD 2004-12-07

(n) Accomplishing the actions specified in this AD terminates the requirements specified in paragraphs (b) and (c) of AD 2004-12-07.

Alternative Methods of Compliance (AMOCs)

(o)(1) The Manager, Seattle Aircraft Certification Office (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.

(3) 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 Commercial Airplanes 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.

(4) AMOCs approved previously in accordance with AD 2004-12-07 are approved as AMOCs for the corresponding provisions of this AD.

(5) AMOCs approved previously in accordance with AD 2005-12-04 are approved as AMOCs for the corresponding provisions of this AD.

Material Incorporated by Reference

(p) You must use Boeing Alert Service Bulletin 757-54A0047, Revision 3, dated June 27, 2007, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or 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 July 31, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-15419 Filed 8-8-07; 8:45 am]