



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1326; Directorate Identifier 2010-NM-177-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to The Boeing Company Model 757-200, -200CB, and -300 series airplanes. The existing AD currently requires initial and repetitive inspections of the fuselage skin and bear strap at the forward, upper corner of the L1 entry door cutout for cracking, and repair if necessary. That action also provides an optional terminating action for the repetitive inspections. Since we issued that AD, we have received reports of additional cracking in the fuselage skin. This proposed AD would add inspections for airplanes having repairs or preventative modifications installed and supplemental inspections for certain airplanes. This proposed AD also would add airplanes to the applicability. We are proposing this AD to detect and correct cracking of the fuselage skin and bear strap at the forward, upper corner of the L1 entry door cutout, which could result in reduced structural integrity of the L1 entry door and consequent rapid decompression of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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: Deliver to Mail address above 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, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; 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, Washington. 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6440; fax: 425-917-6590; e-mail: nancy.marsh@faa.gov.

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-2011-1326; Directorate Identifier 2010-NM-177-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

On April 28, 2004, we issued AD 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004), for certain Model 757-200 series airplanes. That AD requires initial and repetitive inspections of the fuselage skin and bear strap at the forward, upper corner of the L1 entry door cutout for cracking, and repair if necessary. That AD also provides an optional terminating action for the repetitive inspections. That AD resulted from reports of cracking in the fuselage skin and bear strap at the forward, upper corner of the L1 entry door cutout. We issued that AD to detect and correct cracking of the fuselage skin and bear strap at the forward, upper corner of the L1 entry door cutout, which could result in reduced structural integrity of the L1 entry door and consequent rapid decompression of the airplane.

Actions Since Existing AD Was Issued

Since we issued AD 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004), we have received reports of additional cracking in the fuselage skin. We also have determined that all Model 757-200, -200CB, and -300 series airplanes may be subject to the unsafe condition, and that the existing actions may not adequately address the unsafe condition.

Relevant Service Information

We reviewed Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009. The service information describes procedures for the following repetitive inspections, depending on configuration:

- High frequency eddy current (HFEC) and low frequency eddy current (LFEC) inspections for cracking of the skin and bear strap at the forward upper corner of the L1 entry door cutout.
- Supplemental HFEC and LFEC inspections for cracking of the bear strap and inner chord strap on airplanes having a repair doubler, tripler, and quadrupler installed.
- Supplemental HFEC, LFEC, and detailed inspections for cracking of the skin, bear strap, doubler, tripler, and quadrupler on airplanes having a repair doubler, tripler, and quadrupler installed.
- Supplemental HFEC, LFEC, and detailed inspections for cracking of the skin, bear strap, inner chord strap, doubler, and tripler on airplanes having a repair doubler and tripler installed.
- Supplemental HFEC, LFEC, and detailed inspections for cracking of the skin, bear strap, and doubler on airplanes having a preventive modification doubler installed.
- Supplemental HFEC and LFEC inspections for cracking of the bear strap and inner chord strap on airplanes having a doubler installed.

That service bulletin also provides procedures for corrective actions, which include repairing certain cracks, and contacting Boeing for certain other repair instructions.

The compliance times for the initial inspections are either before 22,000 total flight cycles or within 500 flight cycles after the issue date on Boeing Special Attention Service Bulletin 757-53-0094, dated January 16, 2008, whichever occurs later; or within 12,000 flight cycles after the modification, or within 500 flight cycles after the issue date on Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, whichever occurs later; depending on configuration. The repetitive inspection interval for these inspections is 1,400 flight cycles.

The compliance times for the initial supplemental inspections are 37,500 total flight cycles (for inspection of the skin, bear strap, doubler, and tripler), or 50,000 total flight cycles (for inspection of the bear strap and inner chord strap). The repetitive inspection interval for these inspections is either 4,000 flight cycles or 12,000 flight cycles, depending on configuration.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would retain all requirements of AD 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004). This proposed AD would add inspections for airplanes having repairs or preventative modifications installed, and supplemental inspections for certain airplanes; and repair, if necessary. This proposed AD also would add airplanes to the applicability of the existing AD.

Exceptions to Certain Compliance Times

The service bulletin specifies to do certain HFEC, LFEC, and detailed inspections before the accumulation of 37,500 total flight cycles. However, in order to address airplanes that might have already exceeded that threshold, this proposed AD would require the inspections to be accomplished at the latest of the times below:

- Before the accumulation of 37,500 total flight cycles.
- Within 4,000 flight cycles since installation of the modification.
- Within 24 months after the effective date of this AD.

Changes to Existing AD

This proposed AD would retain all requirements of AD 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004). Since AD 2004-09-32 was issued, the AD format has been revised, and certain paragraphs have been rearranged. As a result, the corresponding paragraph identifiers have changed in this proposed AD, as listed in the following table:

Revised paragraph identifiers

Requirement in AD 2004-09-32	Corresponding requirement in this proposed AD
paragraph (a)	paragraph (g)
paragraph (b)	paragraph (h)
paragraph (c)	paragraph (i)
paragraph (d)	paragraph (j)

Boeing Commercial Airplanes has received an Organization Designation Authorization (ODA). We have revised paragraph (i) of this proposed AD to delegate the authority to approve an alternative method of compliance for any repair required by this proposed AD to the Boeing Commercial Airplanes ODA rather than a Designated Engineering Representative (DER).

Costs of Compliance

We estimate that this proposed AD affects 591 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated Costs

Action	Work-hours	Average labor rate per hour	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Inspections (retained actions from existing AD)	2	\$85	\$170 per inspection cycle	57	\$9,690 per inspection cycle
Inspection (new proposed action)	3	\$85	\$255 per inspection cycle	591	\$150,705 per inspection cycle
Supplemental inspection	15	\$85	\$1,275 per inspection cycle	591	\$753,525 per inspection cycle

We estimate the following costs to do any necessary repairs that would be required based on the results of the proposed inspections. We have no way of determining the number of aircraft that might need these repairs:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Repair	Up to 26 work-hours X \$85 = Up to \$2,210	Up to \$2,661	Up to \$4,871 depending on configuration
Preventive modification	18 work-hours X \$85 = \$1,530	\$1,338	\$2,868

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),
- (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.

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 removing airworthiness directive (AD) 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004), and adding the following new AD:

The Boeing Company: Docket No. FAA-2011-1326; Directorate Identifier 2010-NM-177-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004).

(c) Applicability

This AD applies to all The Boeing Company Model 757-200, -200CB, and -300 series airplanes; certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53: Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of cracks in the fuselage skin and bear strap at the forward upper corner of the L1 entry door cutout. We are issuing this AD to detect and correct cracking of the fuselage skin and bear strap at the forward, upper corner of the L1 entry door cutout, which could result in reduced structural integrity of the L1 entry door and consequent rapid decompression of the airplane.

(f) Compliance

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

RESTATEMENT OF REQUIREMENTS OF AD 2004-09-32, AMENDMENT 39-13622 (69 FR 25481, MAY 7, 2004), WITH NEW TERMINATING ACTION:

(g) Initial Inspections

For airplanes having line numbers 1 through 90 inclusive: Within 500 flight cycles after May 24, 2004 (the effective date of AD 2004-09-32 Amendment 39-13622 (69 FR 25481, May 7, 2004)), or within 90 days after May 24, 2004, whichever occurs later, do the inspections of the forward, upper corner of the L1 entry door cutout specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, per Part 1 of the Work Instructions of Boeing Special Attention Service Bulletin 757-53-0089, dated March 18, 2004, until the initial inspection required by paragraph (k) of this AD has been done. Doing the repair specified in paragraph (i) or (l) of this AD, or doing the preventive modification specified in paragraph (j) of this AD, terminates the inspection required by this paragraph.

(1) Do a high frequency eddy current (HFEC) inspection for cracking of the fuselage skin around the adjacent fasteners.

(2) Do an HFEC inspection for cracking along the edge of the skin and bear strap.

(3) Do a low frequency eddy current (LFEC) inspection of the bear strap.

(h) No Crack Detected: Repetitive Inspections and New Terminating Modification

If no crack is detected during any inspection required by paragraph (g) of this AD: Repeat the inspections required by paragraph (g) of this AD at intervals not to exceed

1,400 flight cycles, until the requirements of paragraph (k) are done. Doing the repair specified in paragraph (l) of this AD, or doing the preventive modification specified in paragraph (j) of this AD, as applicable, terminates the repetitive inspections required by this paragraph.

(i) Any Crack Detected: Repair, With New Repair Option

If any crack is detected during any inspection required by paragraph (g) or (h) of this AD, and Boeing Special Attention Service Bulletin 757-53-0089, dated March 18, 2004, specifies to contact Boeing for appropriate action: Before further flight, repair, in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Organization Designation Authorization who has been authorized by the Manager, Seattle ACO, to make such findings, or using a method approved in accordance with the procedures specified in paragraph (q) of this AD. For a repair method to be approved, the approval must specifically reference this AD. Doing the repair terminates the inspections required by paragraphs (g) and (h) of this AD.

(j) Optional Preventive Modification

As an alternative to accomplishing the inspections required by paragraphs (g) and (h) of this AD, do the optional preventative modification of the forward, upper corner of the L1 entry door cutout, and do all applicable related investigative/corrective actions, by accomplishing all the actions specified in Part 2 of the Work Instructions of Boeing Special Attention Service Bulletin 757-53-0089, dated March 18, 2004. Accomplishment of the modification constitutes terminating action for the inspections required by paragraphs (g) and (h) of this AD.

NEW REQUIREMENTS OF THIS AD

(k) Inspections

For airplanes in Group 1, Configurations 1-2, and Group 2, Configuration 1, as identified in Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009: At the applicable times specified in paragraph 1.E, “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, do HFEC and LFEC inspections for cracking of the skin and bear strap at the forward upper corner of the L1 entry door cutout, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009. Repeat the inspections thereafter at intervals not to exceed 1,400 flight cycles. Doing the initial inspection required by this paragraph terminates the inspections required by paragraphs (g) and (h) of this AD. Doing the repair specified in paragraph (l) of this AD, or doing the optional preventive modification specified in paragraph (m) of this AD, terminates the inspections required by this paragraph.

(l) Repair

If any cracking is found during any inspection required by paragraph (k) of this AD, before further flight, repair, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009; except as required by paragraph (p)(3) of this AD. Doing the repair terminates the repetitive inspections required by paragraph (k) of this AD.

(m) Optional Preventive Modification

Accomplishment of the optional preventive modification, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, terminates the repetitive inspections required by paragraph (k) of this AD.

(n) Supplemental Inspections and Repair

For airplanes in Group 1, Configurations 3-5, and Group 2, Configurations 2-4 as identified in Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009; on which a repair doubler, tripler, or quadrupler is installed, or on which a preventive modification doubler is installed: At the applicable times in paragraph 1.E, "Compliance," of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, except as required by paragraph (p)(2) of this AD, do LFEC, HFEC, and detailed inspections, as applicable, for cracking of the doubler, tripler, quadrupler, skin, bear strap, and inner chord strap, as applicable, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009. Repeat the inspections thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009.

(o) Supplemental Repair

If any cracking is found during any inspection required by paragraph (n) of this AD, before further flight, repair the crack in accordance with the procedures specified in paragraph (q) of this AD.

(p) Exceptions to Service Bulletin Specifications

The following exceptions apply to this AD.

(1) Where Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, specifies a compliance time after the "original issue date" or "Revision 1 date of the service bulletin," this AD requires compliance after the effective date of this AD.

(2) Where Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, specifies doing the HFEC, LFEC, and detailed inspections required by paragraph (n) of this AD before the accumulation of 37,500 total flight

cycles, this AD requires the inspections to be accomplished at the latest of the times specified in paragraphs (p)(2)(i) and (p)(2)(ii) of this AD.

(i) Before the accumulation of 37,500 total flight cycles.

(ii) Within 24 months after the effective date of this AD.

(3) Where Boeing Special Attention Service Bulletin 757-53-0094, Revision 1, dated August 12, 2009, specifies contacting Boeing for repair instructions, this AD requires repairing in accordance with the procedures specified in paragraph (q) of this AD.

(q) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle 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 ACO, send it to ATTN: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6440; fax: 425-917-6432; e-mail: nancy.marsh@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) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that 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 for AD 2004-09-32, Amendment 39-13622 (69 FR 25481, May 7, 2004), are approved as AMOCs for the corresponding actions in paragraphs (g), (h), and (i) of this AD.

(r) Related Information

(1) For more information about this AD, contact Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6440; fax: 425-917-6432; e-mail: nancy.marsh@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; 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, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on December 16, 2011.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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