



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0836; Directorate Identifier 2013-NM-126-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 airworthiness directive (AD) 2005-07-12 that applies to certain The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. AD 2005-07-12 requires detailed and eddy current inspections to detect cracking of the frame web around the cutout for the doorstop intercostal strap at the aft side of the station (STA) 291.5 frame at stringer 16R, and corrective action if necessary. Since we issued AD 2005-07-12, we received reports of new findings of cracking at various locations of the STA 277 to STA 291.5 frames and intercostals, including webs, chords, clips, and shear ties, between stringers 7R and 17R. This proposed AD would add new inspections for cracking at the forward galley door cutout, and corrective actions if necessary. This proposed AD would also reduce a certain inspection threshold required by AD 2005-07-12. We are proposing this AD to detect and correct fatigue cracking of the aft frame and frame support structure of the forward galley door, which could result in a severed fuselage frame web, rapid decompression of the airplane, and possible loss of the forward galley door.

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, using the procedures found in 14 CFR 11.43 and 11.45, 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, 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 Ave. 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: Alan Pohl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA Seattle Aircraft Certification Office, 1601 Lind

Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6450; fax:
425-917-6590; email: alan.pohl@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-2013-0836; Directorate Identifier 2013-NM-126-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 March 25, 2005, we issued AD 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005), for certain The Boeing Company Model 737-100, -200, -300, -400, and -500 series airplanes. AD 2005-07-12 requires repetitive detailed and eddy current inspections to detect cracking of the frame web around the cutout for the doorstop intercostal strap at the aft side of STA 291.5 frame at stringer 16R, and corrective actions if necessary. We issued AD 2005-07-12 to detect and correct fatigue cracking of the aft frame and frame support structure of the forward galley door.

Actions Since AD 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005) Was Issued

Since we issued AD 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005) Boeing has received 24 reports of cracking of the STA 291.5 frame web around the doorstop intercostal strap cutout at stringer 16R. There have been 23 reports of cracks propagating down from the lower radius of the cutout on airplanes that had accumulated between 35,597 and 68,133 total flight cycles. Boeing also received one report of a crack propagating outboard from the upper radius through two countersunk fastener locations on an airplane that had accumulated 31,611 total flight cycles. In addition, Boeing received reports of cracking in other areas of the forward galley door cutout that are determined to be safety related.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for Docket No. FAA-2013-0836.

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

Although this proposed AD does not explicitly restate the requirements of AD 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005) this proposed AD would retain all of the requirements of AD 2005-07-12. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (h) of this proposed AD. For certain airplanes, this proposed AD would reduce the compliance threshold for a certain inspection. This proposed AD would also require accomplishing the actions identified in the service information identified

previously, except as discussed under “Differences Between the Proposed AD and the Service Information.”

The phrase “corrective actions” is used in this proposed AD. “Corrective actions” are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

Differences Between the Proposed AD and the Service Information

Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, specifies to contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Costs of Compliance

We estimate that this proposed AD affects 419 airplanes of U.S. registry.

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

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections [retained from AD 2005-07-12, Amendment 39-14036 (70 FR 17596)]	2 work-hours X \$85 per hour = \$170 per inspection cycle	None	\$170 per inspection cycle	\$71,230 per inspection cycle

Inspections [new proposed action]	40 work-hours X \$85 per hour = \$3,400 per inspection cycle	None	\$3,400 per inspection cycle	\$1,424,600 per inspection cycle
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We have received no definitive data that would enable us to provide a cost estimate for the on-condition actions specified in the service information.

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 proposed 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) 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005), and adding the following new AD:

The Boeing Company: Docket No. FAA-2013-0836; Directorate Identifier 2013-NM-126-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 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005).

(c) Applicability

This AD applies to The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, as identified in Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013.

(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 new findings of cracking at various locations of the stations (STA) 277 to STA 291.5 frames and intercostals, including webs, chords, clips, and shear ties, between stringers 7R and 17R. We are issuing this AD to detect and correct fatigue cracking of the aft frame and frame support structure of the forward galley door, which could result in a severed fuselage frame web, rapid decompression of the airplane, and possible loss of the forward galley door.

(f) Compliance

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

(g) Group 1 Airplanes: Inspections and Corrective Actions

For airplanes identified as Group 1 in Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013: Within 120 days after the effective date of this AD, do inspections for cracking from STA 277 to STA 328, stringer 7R to 17R of the forward galley door cutout, using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Do all applicable corrective actions before further flight using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(h) Group 2 and Group 3 Airplanes: Inspections and Corrective Actions

(1) For airplanes identified as Group 2 and Group 3 in Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013: Except as provided by paragraph (j)(2) of this AD, at the applicable times specified in tables 1 and 2 in paragraph 1.E, “Compliance,” of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, do detailed and surface HFEC inspections, as applicable, for cracking in the forward galley door cutout, in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013. Repeat the detailed and surface HFEC inspections thereafter at the applicable intervals specified in tables 1 and 2 in paragraph 1.E, “Compliance,” of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013. If any crack is found, before further flight, do all applicable corrective actions in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, except as required by paragraph (j)(1) of this AD. Doing the repair in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, terminates the repetitive inspections required by this paragraph for the repaired area only.

(2) Removal and replacement of a cracked part, in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, does not terminate the repetitive inspections required by paragraph (h)(1) of this AD.

(i) Optional Terminating Action

Accomplishment of the preventive modification on the STA 291.5 frame web, in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, terminates the repetitive

inspections required by paragraph (h)(1) of this AD for the area that is common to the preventive modification.

(j) Exceptions to the Service Information

(1) Where Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, specifies to contact Boeing for a corrective action: Before further flight, do the applicable action using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(2) Where paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-53A1241, Revision 1, dated June 11, 2013, specifies a compliance time “after the date on Revision 1 of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(k) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (h)(1) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-53A1241, dated June 13, 2002, which is not incorporated by reference in this AD.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft 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 paragraph (m) 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) 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 the actions specified in AD 2005-07-12, Amendment 39-14036 (70 FR 17596, April 7, 2005), are approved as AMOCs for the corresponding provisions of this AD.

(m) Related Information

(1) For more information about this AD, contact Alan Pohl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6450; fax: 425-917-6590; email: alan.pohl@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, 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 Ave. SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington on September 25, 2013.

Jeffrey E. Duven,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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