

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0429; Directorate Identifier 2007-NM-059-AD; Amendment 39-16038; AD 2009-21-01]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-300 and 737-400 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Boeing Model 737-300 and 737-400 series airplanes. This AD requires repetitive inspections to detect cracking of the aft fuselage skin, and related investigative/corrective actions if necessary. This AD results from reports of cracks in the aft fuselage skin on both sides of the airplane. We are issuing this AD to detect and correct cracking in the aft fuselage skin along the longitudinal edges of the bonded skin doubler, which could result in reduced structural integrity of the airplane.

DATES: This AD is effective November 17, 2009.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of November 17, 2009.

ADDRESSES: 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>.

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 (telephone 800-647-5527) is the 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: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6447; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to certain Boeing Model 737-300 and 737-400 series airplanes. That NPRM was published in the Federal Register on May 7, 2009 (74 FR 21278). That NPRM proposed to require repetitive inspections to detect cracking of the aft fuselage skin, and related investigative/corrective actions if necessary.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received from the three commenters.

Support for the AD

Boeing concurs with the content of the NPRM.

Request To Allow Use of Previous Service Information

Southwest Airlines requests that skin panel replacements accomplished in accordance with Part 3 of Boeing Service Bulletin 737-53-1168, Revision 1, dated August 17, 1995; and Revision 2, dated November 27, 1996; also be considered as terminating action for the inspections specified in paragraph (g) of the NPRM. (We referred to Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006, as the appropriate source of service information for accomplishing the actions specified in paragraph (g) of the NPRM for Model 737-300 series airplanes.)

We agree. We have reviewed the following service bulletins and have determined that these documents are also acceptable for terminating the inspections specified in paragraph (g) of this AD. Therefore, we have revised paragraph (j) of this AD to include these additional documents. Also, for easier readability, we have added a table in paragraph (j) of this AD to specify the acceptable service documents.

Table—Acceptable Service Information for Optional Terminating Action

Model	Document
Model 737-300 series airplanes.	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, dated March 16, 1995.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 1, dated August 17, 1995.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 2, dated November 27, 1996.

Model 737-400 series airplanes.	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, dated November 2, 1995.
	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, Revision 1, dated January 16, 1997.

Request To Publish Effectivity and Compliance Information

The Aviation Group requests that paragraphs 1.E., "Compliance," and 1.A., "Effectivity," of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; and Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; be added to the NPRM, either within the body of the AD or as an incorporated attachment. The commenter asserts that many owners, lessors, or their respective representatives, are routinely denied access to the manufacturer's Web site where the referenced service information is archived, making it very difficult or impossible to evaluate and schedule compliance with this AD.

We do not agree to add the compliance and effectivity sections of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; and Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; to this AD. Due to the length and complexity of the applicability and compliance times required in this AD, we referred directly to the service information to ensure the accuracy of those sections in this AD. We also gave notice for the compliance times in the "Relevant Service Information" section of the NPRM. Operators should note that type certificate holders are required under the Federal Aviation Regulations to make available the service information necessary for accomplishing AD requirements to affected operators. All service information that we incorporate by reference in our AD is available to those who operate the product that is the subject of the AD. The necessary service information has also been incorporated by reference in this AD; therefore, this information is also available for review at the FAA or the Office of the Federal Register, as specified in the Addresses section and paragraph (n) of this AD. We have made no change to this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects about 516 airplanes of U.S. registry. The following table provides the estimated costs for U.S. operators to comply with this AD. The average labor rate is \$80 per work hour.

Estimated Costs					
Action	Work hours	Parts	Cost per product	Number of U.S.-registered airplanes	Fleet cost
Inspection to determine inspection zones	1	\$0	\$80	516	\$41,280.

Repetitive inspections—Option 1	64	0	\$5,120, per inspection cycle.	516	Up to \$2,641,920.
Repetitive inspections—Option 2	62	0	\$4,960, per inspection cycle.	516	Up to \$2,559,360.
Internal inspection	5, per inspection zone (3 zones).	0	\$1,200	516	\$619,200.

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

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), 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.

You can find our regulatory evaluation and the estimated costs of compliance in the AD Docket.

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 adding the following new AD:

SUPERSEDED



FAA
Aircraft Certification Service

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2009-21-01 Boeing: Amendment 39-16038. Docket No. FAA-2009-0429; Directorate Identifier 2007-NM-059-AD.

Effective Date

- (a) This airworthiness directive (AD) is effective November 17, 2009.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Boeing Model 737-300 series airplanes as identified in Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006.

(2) Boeing Model 737-400 series airplanes as identified in Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007.

Subject

- (d) Air Transport Association (ATA) of America Code 53: Fuselage.

Unsafe Condition

(e) This AD results from reports of cracks in the aft fuselage skin on both sides of the airplane. We are issuing this AD to detect and correct cracking in the aft fuselage skin along the longitudinal edges of the bonded skin doubler, which could result in reduced structural integrity of the airplane.

Compliance

- (f) Comply with this AD within the compliance times specified, unless already done.

Inspections, Related Investigative and Corrective Actions

(g) At the applicable times specified in Tables 1 and 2 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Table 1 of paragraph 1.E., of Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); except as provided by paragraph (k) of this AD: Do the applicable inspections and related investigative actions to detect cracks in the aft fuselage skin panels, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; including Note (f) of Table 1 of paragraph 1.E. And, do the applicable corrective actions specified in the

Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; except as provided by paragraphs (h), (i), and (l) of this AD. Repeat the applicable inspections and related investigative actions thereafter at the applicable intervals specified in Tables 1 and 2 of paragraph 1.E. of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Table 1 of paragraph 1.E. of Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable.

(h) If any crack is found during any inspection or corrective action required by this AD, before further flight, repair in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); except, where Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; specifies to contact Boeing, before further flight, repair according to a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(i) If any cracking of a repaired area is found during any inspection required by this AD, and Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); specifies contacting Boeing for appropriate action. Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

Optional Terminating Action

(j) Doing the skin panel replacement before the effective date of this AD, in accordance with the service information specified in Table 1 of this AD, as applicable, terminates the inspection requirements of paragraph (g) of this AD for that skin panel only. As of the effective date of this AD, doing the skin panel replacement, in accordance with Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; terminates the inspection requirements of paragraph (g) of this AD for that skin panel only.

Table 1—Acceptable Service Information for Optional Terminating Action

Model	Document
Model 737-300 series airplanes.	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, dated March 16, 1995.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 1, dated August 17, 1995.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 2, dated November 27, 1996.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006.

Model 737-400 series airplanes.	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, dated November 2, 1995.
	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, Revision 1, dated January 16, 1997.
	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007.

Exception to Service Bulletins

(k) Where Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); specifies compliance times after the release date of those service bulletins, this AD requires that the specified actions be done within the specified compliance times after the effective date of this AD.

No Reporting Required

(l) Although Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); and Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); specify to submit information to the manufacturer, this AD does not include such a requirement.

Alternative Methods of Compliance (AMOCs)

(m)(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. Send information to ATTN: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6447; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(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 principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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.

Material Incorporated by Reference

(n) You must use Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. If you do the optional terminating action specified in this AD, you must use the service information specified in Table 2 of this AD, as applicable, to do the optional terminating action, unless the AD specifies otherwise.

Table 2—Service Information for Optional Terminating Action

Boeing Service Bulletin—	Revision—	Dated—
737–53–1168	Original	March 16, 1995.
737–53–1168	1	August 17, 1995.
737–53–1168	2	November 27, 1996.
737–53–1168	3	November 28, 2006.
737–53–1187	Original	November 2, 1995.
737–53–1187	1	January 16, 1997.
737–53–1187	2	May 9, 2007.

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

(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>.

(3) You may review copies of the 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 or 425-227-1152.

(4) You may also review copies of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on September 25, 2009.

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