

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0336; Directorate Identifier 2011-NM-213-AD; Amendment 39-17154; AD 2012-16-07]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737-500 series airplanes. This AD was prompted by reports of chem-mill step cracking on the aft lower lobe fuselage skins. This AD requires inspections of the fuselage skin at the chem-mill steps, and repair if necessary. We are issuing this AD to detect and correct cracking on the aft lower lobe fuselage skins, which could result in decompression of the airplane.

DATES: This AD is effective September 18, 2012.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of September 18, 2012.

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; 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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is 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 (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6447; fax: 425-917-6590; email: wayne.lockett@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on April 17, 2012 (77 FR 22686). That NPRM proposed to require inspections of the fuselage skin at the chem-mill steps, and repair if necessary.

Comments

We gave the public the opportunity to participate in developing this AD. We have considered the comment received. Boeing supports the NPRM (77 FR 22686, April 17, 2012).

Clarification of Terms in the Relevant Service Information Section of the NPRM (77 FR 22686, April 17, 2012)

The Relevant Service Information section of the NPRM (77 FR 22686, April 17, 2012) specified that "Related investigative actions" and "corrective actions" are those actions specified in the service information that are necessary to address the identified unsafe condition. Those "necessary" actions are applicable to particular configurations and conditions. "Related investigative actions" are those actions that are identified as follow-on actions that are: (1) Related to the required action, and (2) are on-condition actions that further investigate the nature of any condition found. Related investigative actions could include, for example, inspections and operational tests. "Corrective actions" are those actions that are on-condition actions that correct or address any condition found. Corrective actions could include, for example, repairs, removal and replacement, and modifications.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD as proposed—with minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 22686, April 17, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 22686, April 17, 2012).

Costs of Compliance

We estimate that this AD affects 91 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections	23 work-hours × \$85 per hour = \$1,955 per inspection cycle.	\$0	\$1,955 per inspection cycle.	\$177,905 per inspection cycle.

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

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Inspection	2 work-hours × \$85 per hour = \$170	\$0	\$170
Repair	7 work-hours × \$85 per hour = \$595	0	595

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),
- (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.

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 airworthiness directive (AD):

SUPERSEDED



2012-16-07 The Boeing Company: Amendment 39-17154; Docket No. FAA-2012-0336; Directorate Identifier 2011-NM-213-AD.

(a) Effective Date

This AD is effective September 18, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-500 series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011.

(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 chem-mill step cracking on the aft lower lobe fuselage skins. We are issuing this AD to detect and correct cracking on the aft lower lobe fuselage skins, which could result in decompression of the airplane.

(f) Compliance

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

(g) Inspection

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011, except as required by paragraph (i)(1) of this AD: Do an external detailed inspection; and, as applicable, do an external or internal subsurface eddy current, magneto optic imager, or C-scan inspection; to detect cracks in the fuselage skin at the chem-mill steps; in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011. Repeat the inspections thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011.

(h) Repair

If any crack is found during any inspection required by paragraph (g) of this AD: At the applicable times specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011, do all the actions specified in either paragraph (h)(1) or (h)(2) of this AD.

(1) Do a time-limited repair; followed by applicable related investigative actions, corrective actions, and making the time-limited repair permanent; in accordance with Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011, except as required by paragraph (i)(2) of this AD.

(2) Do a permanent repair, including a detailed inspection of the bonded doubler for disbonding and a high frequency eddy current inspection for cracks of the bonded doubler, in accordance with Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011. Repair any cracks and disbonding before further flight, in accordance with Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011, except as required by paragraph (i)(2) of this AD. Accomplishment of the permanent repair terminates the repetitive inspections required by this AD for the area(s) of the repair only.

(i) Exceptions to Service Bulletin Specifications

The exceptions specified in paragraphs (i)(1) and (i)(2) of this AD apply to this AD.

(1) Where Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011, specifies a compliance time after "the date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011, specifies to contact Boeing for repair instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(j) 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, it 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.

(k) Related Information

For more information about this AD, contact Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6447; fax: 425-917-6590; email: wayne.lockett@faa.gov.

(I) Material Incorporated by Reference

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

(2) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Special Attention Service Bulletin 737-53-1315, dated July 29, 2011.

(ii) Reserved.

(3) 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>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98057-3356. For information on the availability of this material at the FAA call 425-227-1221.

(5) 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/cfr/ibr-locations.html>.

Issued in Renton, Washington, on July 31, 2012.

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