

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-4205; Directorate Identifier 2015-NM-149-AD; Amendment 39-18301; AD 2015-21-08]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. This AD requires repetitive eddy current inspections for any cracking in the in spar upper skin, and related investigative and corrective actions if necessary. This AD was prompted by a report that an operator discovered a crack in a certain section of the in spar upper skin, just forward of the rear spar on the right wing. We are issuing this AD to detect and correct any cracking in the in spar upper skin and rear spar upper chord, which could result in the inability of the structure to carry limit load, or result in a fuel leak, which could prevent continued safe flight and landing.

DATES: This AD is effective November 12, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of November 12, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of April 9, 2014 (79 FR 12368, March 5, 2014). We must receive comments on this AD by December 14, 2015.

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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, 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 view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-4205.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-4205; 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 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: Jennifer Tsakoumakis, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We have received a report that an operator discovered a crack in the inspar upper skin at wing buttock line 157, just forward of the rear spar on the right wing. The crack measured 2.375 inches long. Two additional cracks were found in the skin at two holes common to the rear spar in the same area. Subsequent inspections specified in Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013, revealed that the rear spar upper chord was almost completely severed. Web cracks were also discovered on both wings. This condition, if not corrected, could result in the inability of the structure to carry limit load, or result in a fuel leak, which could prevent continued safe flight and landing. We are issuing this AD to correct the unsafe condition on these products.

Related Service Information Under 1 CFR Part 51

We reviewed Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015. The service information describes procedures for repetitive eddy current inspections for any cracking in the inspar upper skin, and applicable related investigative and corrective actions. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Other Relevant Rulemaking

AD 2014-12-13, Amendment 39-17874 (79 FR 39300, July 10, 2014), was issued for all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. AD 2014-12-13 requires repetitive inspections for cracking of the aft support fitting for the main landing gear beam, and the rear spar upper chord and rear spar web in the area of rear spar station 224.14; and repair if

necessary. AD 2014-12-13 refers to Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013, as the appropriate source of service information for accomplishing the required actions.

For those airplanes that have not yet done the high frequency eddy current open-hole inspection specified in Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013, this AD specifies using Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, to do the eddy current inspections for any cracking in the inspar upper skin area near the rear spar at wing buttock line 157. The eddy current inspections specified in Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, are intended to ensure there are no undetected cracks in the inspar upper skin area near the rear spar at wing buttock 157 prior to the accomplishment of the inspections specified in Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013.

FAA's Determination

We are issuing 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.

AD Requirements

This AD requires accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the AD and the Service Information."

"Related investigative actions" are follow-on actions that (1) are related to the primary action, and (2) further investigate the nature of any condition found. Related investigative actions in an AD could include, for example, inspections.

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

Differences Between the AD and the Service Information

Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, 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:

- 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.

The effectivity of Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, includes Group 1, configuration 1, airplanes. Those airplanes have been inspected using a high frequency eddy current open-hole inspection, in accordance with Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013. We have determined that only those airplanes that have not done the high frequency eddy current open-hole inspection, in accordance with Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013, are affected by the identified unsafe condition addressed in this AD. Therefore, we have excluded Group 1, configuration 1, airplanes from the applicability of this AD.

Explanation of "RC" Steps in Service Information

The FAA worked in conjunction with industry, under the Airworthiness Directive Implementation Aviation Rulemaking Committee (ARC), to enhance the AD system. One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is

expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The steps identified as Required for Compliance (RC) in any service information identified previously have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

For service information that contains steps that are labeled as RC, the following provisions apply: (1) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD, and an AMOC is required for any deviations to RC steps, including substeps and identified figures; and (2) steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because cracking in the inspar upper skin and rear spar upper chord could result in the inability of the structure to carry limit load, or result in a fuel leak, which could prevent continued safe flight and landing. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2015-4205 and Directorate Identifier 2015-NM-149-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this 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 AD.

Costs of Compliance

We estimate that this AD affects 495 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
Inspection	1 work-hour × \$85 per hour = \$85 per inspection cycle	\$0	\$85 per inspection cycle	\$42,075 per inspection cycle.

We estimate the following costs to do any necessary repairs 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 repairs:

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
One-time inspection	86 work-hours × \$85 per hour = \$7,310	\$0	\$7,310
Repair	3,700 work-hours × \$85 per hour = \$314,500	0	314,500

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):



2015-21-08 The Boeing Company: Amendment 39-18301; Docket No. FAA-2015-4205; Directorate Identifier 2015-NM-149-AD.

(a) Effective Date

This AD is effective November 12, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015; except for Group 1, configuration 1, airplanes identified in Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by a report that an operator discovered a crack in the inspar upper skin at wing buttock line 157, just forward of the rear spar on the right wing. We are issuing this AD to detect and correct any cracking in the inspar upper skin and rear spar upper chord, which could result in the inability of the structure to carry limit load, or result in a fuel leak, which could prevent continued safe flight and landing.

(f) Compliance

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

(g) Inspection and Corrective Actions

Except as provided by paragraph (h) of this AD, at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015: Do an eddy current inspection for any cracking in the inspar upper skin, and repair doublers and repair triplers, as applicable, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015; except as provided by paragraph (h) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection thereafter at the applicable intervals specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015.

(h) Exceptions to the Service Information

(1) Where Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, specifies a compliance time "after the original issue date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) The "Condition" column of table 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, refers to total flight cycles "as of the original issue date of this service bulletin." However, for this condition, this AD applies to the airplanes with the specified total flight cycles as of the effective date of this AD.

(3) Although Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, specifies to contact Boeing for certain repair instructions, and specifies that action as "RC" (Required for Compliance), this AD requires repair before further flight using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Terminating Actions for Certain Airplanes

For Group 1, configurations 5 through 7, airplanes specified in Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015, accomplishment of any applicable high frequency eddy current inspection, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013 (which was incorporated by reference in AD 2014-03-06, Amendment 39-17743 (79 FR 12368, March 5, 2014), and continues to be incorporated by reference in AD 2014-12-13, Amendment 39-17874 (79 FR 39300, July 10, 2014)), terminates the repetitive inspections in paragraph (g) of this AD for those airplanes, provided if any cracking is found, repair is done before further flight using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

Note 1 to paragraph (i) of this AD: AD 2014-12-13, Amendment 39-17874 (79 FR 39300, July 10, 2014), refers to Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013, as the appropriate source of service information for accomplishing the actions required in that AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles 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 (k) of this AD. Information may be emailed to: 9-ANM-LAACO-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, Los Angeles 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) Except as required by paragraph (h) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(4)(i) and (j)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with this AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

For more information about this AD, contact Jennifer Tsakoumakis, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

(l) Material Incorporated by Reference

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

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

(3) The following service information was approved for IBR on November 12, 2015.

(i) Boeing Alert Service Bulletin 737-57A1326, dated September 22, 2015.

(ii) Reserved.

(4) The following service information was approved for IBR on April 9, 2014 (79 FR 12368, March 5, 2014).

(i) Boeing Special Attention Service Bulletin 737-57-1318, dated May 15, 2013.

(ii) Reserved.

(5) For Boeing 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>.

(6) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may view this 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 October 11, 2015.

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