



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0096; Product Identifier 2019-NM-211-AD; Amendment 39-19913; AD 2020-10-10]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2016-07-28, which applied to all The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) airplanes, and Model MD-88 airplanes. AD 2016-07-28 required repetitive eddy current high frequency (ETHF) inspections for any cracking in the left and right side center wing lower skin, and repair if any crack was found. This AD continues to require repetitive ETHF inspections for any cracking in the left and right side center wing lower skin, and repair if any crack is found. This AD also requires expanding the inspection area to include adjacent stringers with similar stress levels and to perform repetitive inspections with increased sensitivity for crack detection. This AD was prompted by a report of a crack at a certain stringer not addressed by AD 2016-07-28, and cracks at certain other stringers and associated end fittings, and skins in the center wing fuel tank where the stringers meet the end fittings addressed by AD

2016-07-28. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0096.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0096; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is 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:** Mohit Garg, Aerospace Engineer,  
Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard,  
Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email:  
mohit.garg@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2016-07-28, Amendment 39-18473 (81 FR 21253, April 11, 2016) (“AD 2016-07-28”). AD 2016-07-28 applied to all The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) airplanes, and Model MD-88 airplanes. The NPRM published in the Federal Register on February 13, 2020 (85 FR 8209). The NPRM was prompted by a report of a crack at stringer S-13 which was not addressed by AD 2016-07-28, and by reports of cracks at stringers S-15, S-16, or S-17 and associated end fittings, and skins in the center wing fuel tank where the stringers meet the end fittings, which were addressed by AD 2016-07-28. The NPRM proposed to continue to require repetitive ETHF inspections for any cracking in the left and right side center wing lower skin, and repair if any crack is found. The NPRM also proposed to require expanding the inspection type and area to include repetitive eddy current low frequency (ETLF) inspections of the left and right side fastener holes and the forward and aft skins at certain locations for any cracking. The FAA is issuing this AD to detect and correct cracking in the center wing lower skin. Such cracking could cause structural failure of the wings.

## **Comments**

The FAA gave the public the opportunity to participate in developing this AD. The following represents the comment received on the NPRM and the FAA's response to that comment.

### **Request to Clarify Actions Since AD 2016-07-28 Was Issued**

Boeing requested a correction in the "Actions Since AD 2016-07-28 Was Issued" section of the NPRM. Boeing stated that the wording in the section suggests that there have been crack reports for other stringers not addressed in AD 2016- 07- 28 beyond the single crack report for stringer S- 13, and that these additional reports are the reason for expanding the inspection area. Boeing reiterated that AD 2016- 07- 28 addresses stringers S- 15, S- 16, and S- 17, and, with the exception of the single crack report for stringer S-13, the scope of stringers reported cracked since the issuance of AD 2016- 07- 28 has not increased.

Boeing contends that the reason for the new ruling is to expand the inspection area to include adjacent stringers with similar stress levels and to perform a new inspection with increased crack detection, as stated in the NPRM. Boeing stated that the first sentence in the "Actions Since AD 2016-07-28 Was Issued" section of the NPRM should read, "Since the FAA issued AD 2016-07-28, a single occurrence of cracking has been found in stringer S- 13, which is the only area not addressed by AD 2016- 07- 28."

The FAA agrees that the description in the NPRM is inaccurate. Since that section of the preamble does not reappear in the final rule, the requested change to the final rule is not necessary. However, the FAA has changed the SUMMARY and Discussion section of the preamble, and paragraph (e) of this AD, to reflect that this AD was prompted by

the single crack report at stringer S-13, and that stringer S-13 was not covered by AD 2016-07-28.

### **Conclusion**

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously, and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

### **Related Service Information under 1 CFR Part 51**

The FAA reviewed Boeing Alert Service Bulletin MD80-57A244, Revision 1, dated October 1, 2019. This service information describes procedures for a general visual inspection (GVI) for existing repairs; repetitive ETLF inspections of the left and right side fastener holes common to stringers 11 through 22 and the forward and aft skins for any crack; repetitive ETHF inspections of the lower skin at stringers 18 through 20 for any crack; an ETHF inspection of the left side and right side center wing lower skin for any crack; and applicable on-condition actions. On-condition actions include repair and an internal GVI for any cracks in stringers 11 through 22 between Xcw=0.0 and Xcw=20.0. 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.

**Costs of Compliance**

The FAA estimates that this AD affects 288 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**Estimated costs for required actions**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection (retained actions from AD 2016-07-28)	14 work-hours X \$85 per hour = \$1,190 per inspection cycle	\$0	\$1,190 per inspection cycle	\$342,720 per inspection cycle
Expanded inspection (new action)	Up to 48 work-hours X \$85 per hour = Up to \$4,080 per inspection cycle	\$0	Up to \$4,080 per inspection cycle	Up to \$1,175,040 per inspection cycle

The FAA has received no definitive data that would enable the agency to provide cost estimates for the on-condition actions specified in this AD.

**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.

The FAA is 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**

The FAA has determined that 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) Will not affect intrastate aviation in Alaska, 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.

### **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 removing Airworthiness Directive (AD) 2016-07-28, Amendment 39-18473 (81 FR 21253, April 11, 2016), and adding the following new AD:

**2020-10-10 The Boeing Company:** Amendment 39-19913; Docket No. FAA-2020-0096; Product Identifier 2019-NM-211-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 2016-07-28, Amendment 39-18473 (81 FR 21253, April 11, 2016) (“AD 2016-07-28”).

**(c) Applicability**

This AD applies to all The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) airplanes, and Model MD-88 airplanes, certificated in any category.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a report of a crack at a certain stringer not addressed by AD 2016-07-28, and cracks at certain other stringers and associated end fittings, and skins in the center wing fuel tank where the stringers meet the end fittings addressed by

AD 2016-07-28. The FAA is issuing this AD to detect and correct cracking in the center wing lower skin. Such cracking could cause structural failure of the wings.

**(f) Compliance**

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

**(g) Required Actions**

Except as specified in paragraph (h) of this AD: At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin MD80-57A244, Revision 1, dated October 1, 2019, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-57A244, Revision 1, dated October 1, 2019.

Note 1 to paragraph (g) of this AD: Boeing Alert Service Bulletin MD80-57A244, Revision 1, dated October 1, 2019, refers to Drawing SN09570007 for certain inspection sequences. If the pages of Drawing SN09570007 are illegible, guidance can be found in Boeing Multi Operator Message MOM-MOM-19-0549-01B, dated October 4, 2019.

**(h) Exception to Service Information Specifications**

Where Boeing Alert Service Bulletin MD80-57A244, Revision 1, dated October 1, 2019, specifies contacting Boeing for repair instructions or for alternative inspections: This AD requires doing the repair, or doing the alternative inspections and applicable on-condition actions before further flight using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles ACO Branch, 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 certification office, send it to the attention of the person identified in paragraph (j)(1) 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, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2016-07-28 are not approved as AMOCs for this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(5)(i) and (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 the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. 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.

**(j) Related Information**

(1) For more information about this AD, contact Mohit Garg, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: mohit.garg@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (4) of this AD.

**(k) 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.

(i) Boeing Alert Service Bulletin MD80-57A244, Revision 1, dated October 1, 2019.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd.,

MC 110 SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet  
<https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) 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, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to:  
<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 14, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-11034 Filed: 5/21/2020 8:45 am; Publication Date: 5/22/2020]