

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[FAA-2013-0545; Directorate Identifier 2013-NM-048-AD; Amendment 39-17787; AD 2014-05-14]

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 727 airplanes. This AD was prompted by certain mandated programs intended to support the airplane reaching its limit of validity of the engineering data that support the established structural maintenance program. This AD requires an inspection for cracks in the main wheel well pressure floor and a preventive modification or permanent repair, as applicable. We are issuing this AD to prevent cracking in the main wheel well pressure floor, which could result in reduced structural integrity of the airplane, and decompression of the cabin.

DATES: This AD is effective May 1, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 14, 1992 (57 FR 53247, November 9, 1992).

ADDRESSES: 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 the referenced 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.

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-2013-0545; 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 Docket 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: Chandraduth Ramdoss, Aerospace Engineer, Airframe Branch, ANM-120L, Los Angeles Aircraft Certification Office (ACO), FAA, 3960 Paramount Boulevard, Suite 100, Lakewood, CA 90712-4137; phone: 562-627-5329; fax: 562-627-5210; email: chandraduth.ramdoss@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 727 airplanes. The NPRM published in the Federal Register on July 18, 2013 (78 FR 42900). The NPRM was prompted by certain mandated programs intended to support the airplane reaching its limit of validity of the engineering data that support the established structural maintenance program. The NPRM proposed to require an inspection for cracks in the main wheel well pressure floor and a preventive modification or permanent repair, as applicable. We are issuing this AD to prevent cracking in the main wheel well pressure floor, which could result in reduced structural integrity of the airplane, and decompression of the cabin.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (78 FR 42900, July 18, 2013) and the FAA's response to each comment.

Request To Clarify the Reason for Issuing the NPRM (78 FR 42900, July 18, 2013)

Boeing requested that we clarify a statement in the "Discussion" section of the preamble of the NPRM (78 FR 42900, July 18, 2013). Boeing stated that the "Discussion" section in the preamble of the NPRM did not explain that the reason for proposing the NPRM was to complete one of the recommendations contained in Boeing's 727 Service Action Requirement Program. Boeing noted that in the NPRM's "Discussion" section references were made to "certain programs" and "previously established program," but should have specifically referred to the Boeing 727 Service Action Requirement Program. Boeing also noted that the service information referenced in the NPRM is related to the Boeing 727 Service Action Requirement Program.

We agree that the references to "certain programs" and "previously established program" were both referring to the Boeing 727 Service Action Requirement Program, and that the service information referenced in the NPRM (78 FR 42900, July 18, 2013) is related to that program. However, the portion of the NPRM's "Discussion" section that Boeing referred to is not carried over into this final rule; therefore, no change to this final rule is necessary in this regard.

Request To Correct Statements Regarding Other Relevant Rulemaking

Boeing requested that we correct the statements regarding the AD requirements of the other relevant rulemaking mentioned in the preamble of the NPRM (78 FR 42900, July 18, 2013). Boeing stated that the discussion regarding AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992), incorrectly stated that AD 92-19-11 required the preventative modification or permanent repair for airplanes having line numbers 001 through 1432. Boeing noted that AD 92-19-11 did not

require the preventative modification, but provided the option to terminate the repetitive inspections if the preventative modification or permanent repair was installed on airplanes with line numbers 001 through 1432. Boeing also stated that, in a different rulemaking action, the "Other Relevant Rulemaking" section provided a clearer description of the actions required by AD 90-06-09, Amendment 39-6488 (55 FR 8370, March 7, 1990), and AD 92-19-11, and requested that the NPRM be revised to include the language from the other rulemaking action.

We agree that the NPRM (78 FR 42900, July 18, 2013) incorrectly stated that AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992), requires the preventive modification or permanent repair. However, in its comment, Boeing stated that the option to terminate the repetitive inspections provided in AD 92-19-11 was for airplanes having line numbers 001 through 1432, which is not correct. AD 92-19-11 provides the option to terminate the repetitive inspection requirements for all Model 727 airplanes once the permanent repair or preventive modification is installed.

We are issuing this final rule to require the permanent repair or modification for Model 727 airplanes with line positions 1433 through 1832 inclusive. AD 90-06-09, Amendment 39-6488 (55 FR 8370, March 7, 1990), only requires the permanent repair or terminating modification, in accordance with Boeing Service Bulletin 727-53-0149, Revision 2, dated March 20, 1981, which only applies to airplanes having line numbers 001 through 1432 inclusive. AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992), does not require the permanent repair or terminating modification, but provides it as an option.

The "Other Relevant Rulemaking" section of the NPRM (78 FR 42900, July 18, 2013) is not carried over into this final rule; therefore, no change to this final rule is necessary in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 42900, July 18, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 42900, July 18, 2013).

Costs of Compliance

We estimate that this AD affects 106 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	2 work-hours × \$85 per hour = \$170	\$0	\$170	\$18,020.
Modification/repair	Up to 272 work-hours × \$85 per hour = \$23,120	5,565	Up to \$28,685	Up to \$3,040,610.

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):



2014-05-14 The Boeing Company: Amendment 39-17787; Docket No. FAA-2013-0545; Directorate Identifier 2013-NM-048-AD.

(a) Effective Date

This AD is effective May 1, 2014.

(b) Affected ADs

This AD affects AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992).

(c) Applicability

This AD applies to The Boeing Company Model 727, 727C, 727-100, 727-100C, 727-200, and 727-200F series airplanes, certificated in any category, having line position 1433 through 1832 inclusive, identified as Group 2 airplanes in Boeing Service Bulletin 727-53-0149, Revision 4, dated June 27, 1991.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by certain mandated programs intended to support the airplane reaching its limit of validity of the engineering data that support the established structural maintenance program. We are issuing this AD to prevent cracking in the main wheel well pressure floor, which could result in reduced structural integrity of the airplane, and decompression of the cabin.

(f) Compliance

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

(g) Definition of Detailed Inspection

For the purposes of this AD, a detailed inspection is an intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.

(h) Inspection and Repair/Modification

At the later of the times specified in paragraphs (h)(1) and (h)(2) of this AD: Do a one-time detailed, high frequency eddy current (HFEC), or dye penetrant inspection for cracks in the main

wheel well pressure floor at body stations 930, 940, and 950, between left and right buttock line 50 and the side of the airplane body, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 727-53-0149, Revision 4, dated June 27, 1991.

- (1) Prior to the accumulation of 60,000 total flight cycles; or
- (2) Within 2,500 flight cycles or 2 years after the effective date of this AD, whichever occurs first.

Note 1 to paragraph (h) of this AD: If a detailed inspection is performed, stripping the paint will help ensure accurate inspection results.

(i) Preventive Modification

If no cracks are found during the inspection required by paragraph (h) of this AD: Before further flight, do the preventive modification, in accordance with Part IV of the Accomplishment Instructions of Boeing Service Bulletin 727-53-0149, Revision 4, dated June 27, 1991. Doing the preventive modification terminates the repetitive inspections required by paragraph (d) of AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992).

(j) Permanent Repair

If any crack is found during the inspection required by paragraph (h) of this AD: Before further flight, do the permanent repair, in accordance with Part III of the Accomplishment Instructions of Boeing Service Bulletin 727-53-0149, Revision 4, dated June 27, 1991. Doing the permanent repair terminates the repetitive inspections required by paragraph (d) of AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992).

(k) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin 727-53-0149, Revision 3, dated November 2, 1989, which was incorporated by reference in AD 92-19-11, Amendment 39-8369 (57 FR 53247, November 9, 1992).

(l) 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 (m) of this AD.

(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.

(m) Related Information

(1) For more information about this AD, contact Chandraduth Ramdoss, Aerospace Engineer, Airframe Branch, ANM-120L, Los Angeles Aircraft Certification Office (ACO), FAA, 3960 Paramount Boulevard, Suite 100, Lakewood, CA 90712-4137; phone: 562-627-5329; fax: 562-627-5210; email: chandraduth.ramdoss@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference in this AD may be obtained at the addresses specified in paragraphs (n)(4) and (n)(5) of this AD.

(n) 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 December 14, 1992 (57 FR 53247, November 9, 1992).

(i) Boeing Service Bulletin 727-53-0149, Revision 4, dated June 27, 1991.

(ii) Reserved.

(4) 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>.

(5) You may view this service information at 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.

(6) 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 February 18, 2014.

Ross Landes,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.