

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0546; Directorate Identifier 2013-NM-050-AD; Amendment 39-17631; AD 2013-21-07]

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 727 airplanes. This AD was prompted by certain mandated programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program. This AD requires, for certain airplanes, a modification of the web of the horizontal stabilizer center section rear spar. For the other airplanes, this AD requires an inspection for cracks in the web, and repair or modification as applicable. We are issuing this AD to prevent cracking at the upper fastener holes in the riveted web in the horizontal stabilizer center section rear spar, which could result in failure of the spar forging and lead to horizontal stabilizer separation and loss of control of the airplane.

DATES: This AD is effective December 5, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 5, 2013.

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 this 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: Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: berhane.alazar@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 the specified products. The NPRM published in the Federal Register on July 17, 2013 (78 FR 42720). The NPRM proposed to require for certain airplanes, a modification of the web of the horizontal stabilizer center section rear spar. For the other airplanes, the NPRM proposed to require an inspection for cracks in the web, and repair or modification as applicable.

Comments

We gave the public the opportunity to participate in developing this AD. We have considered the comment received. Boeing supported the NPRM (78 FR 42720, July 17, 2013).

Clarification of Applicability

Since the NPRM (78 FR 42720, July 17, 2013) was published, we have clarified the applicability in paragraph (c) of this final rule to reflect the most recent type certificate data sheet for The Boeing Company Model 727 airplanes.

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 42720, July 17, 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 42720, July 17, 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
Modification	32 work-hours × \$85 per hour = \$2,720	\$7,154	\$9,874	\$1,036,770

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):



FAA
Aviation Safety

AIRWORTHINESS DIRECTIVE

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

2013-21-07 The Boeing Company: Amendment 39-17631; Docket No. FAA-2013-0546; Directorate Identifier 2013-NM-050-AD.

(a) Effective Date

This AD is effective December 5, 2013.

(b) Affected ADs

None.

(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, identified as Group III and Group IV in Boeing Service Bulletin 55-46, dated April 8, 1970.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Unsafe Condition

This AD is intended to complete 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 at the upper fastener holes in the riveted web in the horizontal stabilizer center section rear spar, which could lead to horizontal stabilizer separation and loss of control of the airplane.

(f) Compliance

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

(g) Group III Airplanes: Inspection

For airplanes identified as Group III in Boeing Service Bulletin 55-46, dated April 8, 1970: At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD, do an eddy-current inspection for cracks in the web, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 55-46, dated April 8, 1970.

- (1) Before the accumulation of 60,000 total flight cycles.
- (2) Within 24 months or 2,500 flight cycles after the effective date of this AD, whichever occurs first.

(h) Group III Airplanes: Corrective Actions

For airplanes identified as Group III in Boeing Service Bulletin 55-46, dated April 8, 1970: After the inspection required by paragraph (g) of this AD, do the applicable actions specified in paragraph (h)(1) or (h)(2) of this AD.

(1) If no crack is found, before further flight, modify the web of the horizontal stabilizer center section rear spar, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 55-46, dated April 8, 1970.

(2) If any crack is found, repair before further flight using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Group IV Airplanes: Modification

For airplanes identified as Group IV in Boeing Service Bulletin 55-46, dated April 8, 1970: At the later of the times specified in paragraphs (i)(1) and (i)(2) of this AD, modify the web of the horizontal stabilizer center section rear spar, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 55-46, dated April 8, 1970.

(1) Before the accumulation of 60,000 total flight cycles.

(2) Within 24 months or 2,500 flight cycles after the effective date of this AD, whichever occurs first.

(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, send it to the attention of the person identified in paragraph (k) of this AD. Information 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 Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: berhane.alazar@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.

(i) Boeing Service Bulletin 55-46, dated April 8, 1970.

(ii) Reserved.

(3) 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>.

(4) You may view this service information at 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.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on October 15, 2013.

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