



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0452; Product Identifier 2017-NM-150-AD; Amendment 39-19439; AD 2018-20-05]

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 all The Boeing Company Model 727C, 727-100, 727-100C, 727-200, and 727-200F series airplanes.

This AD was prompted by the results of a fleet survey, which revealed cracking in bulkhead frame webs at a certain body station. This AD requires repetitive inspections of the bulkhead frame web at a certain body station and applicable on-condition actions. We are 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, Transport Standards 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 <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0452.

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-2018-0452; 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, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is Docket Operations, 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: George Garrido, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5232; fax: 562-627-5210; email: george.garrido@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 all The Boeing Company Model 727C, 727-100, 727-100C, 727-200, and 727-200F series airplanes. The NPRM published in the Federal Register on May 29, 2018 (83 FR 24433). The NPRM was prompted by the results of a fleet survey on retired Model 737 airplanes, which revealed cracking in bulkhead frame webs at a certain body station. No cracks have been reported on Model 727 airplanes but Model 727 and Model 737 airplanes have a similar frame installation at station 259.5.

The NPRM proposed to require repetitive inspections of the bulkhead frame web at a certain body station and applicable on-condition actions.

We are issuing this AD to address cracking in the station 259.5 bulkhead frame web from the first stiffener above stringer S-10 to S-13. Such cracking may lead to subsequent failure of the skin and cockpit window surround structure, and could result in rapid decompression.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

Boeing concurred with the NPRM.

Request to Specify Repetitive Inspection Interval

The commenter, Lynise Hogue, indicated that the reports mentioned in the Discussion section of the NPRM revealed cracking in the bulkhead frame of retired Boeing Model 737 airplanes but there was no evidence of cracking in the bulkhead frame of Boeing Model 727 airplanes, despite those airplanes having a similar frame installation. The commenter stated this posed concerns and asked how often would "... said repetitive inspections be conducted?"

We infer the commenter is asking about the repetitive inspections required by this AD and agree to clarify the inspection interval. As stated in paragraph (g) of this AD inspections are done at the applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017, which is at intervals not to exceed 8,600 flight cycles. We have determined that these intervals and inspections are adequate to address the unsafe condition. This AD has not been changed in this regard.

Request to Clarify Unsafe Condition

The commenter, Lynise Hogue, inquired if the unsafe product was confined to a certain batch or if it is an overall poor product. The commenter further questioned that if it is indeed an overall poor product, what measures other than an annual inspection are being taken to prevent cracking in additional bulkhead frames.

We agree to clarify. Airplane maintenance and inspection programs include many types of inspections, which are designed to detect and address potential unsafe conditions. However, when those inspections are not adequate to prevent an unsafe condition, we issue an AD to address the identified unsafe condition, such as this one. We are currently not planning additional rulemaking on other bulkhead frames. However, as we obtain and analyze additional data, we might consider further rulemaking. This AD has not been changed in this regard.

Request to Expand Applicability to All Boeing Airplanes

The commenter, Lynise Hogue, requested that we change the applicability to all Boeing airplanes because the proposed AD addresses “an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.” The commenter provided no further justification for the request.

We do not agree with the commenter's request to change the applicability of this AD. The commenter has not provided any additional data, views, or arguments to support this request. Furthermore, such a change would expand the scope of this AD and therefore require additional public review and delay issuance of this final rule. This AD applies only to those airplanes affected by the identified unsafe condition. We are currently not planning additional rulemaking for other airplanes. However, as we obtain and analyze additional data, we might consider further rulemaking. We have not changed this AD 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 final rule 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 for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017. The service information describes procedures for repetitive high frequency eddy current inspections and low frequency eddy current inspections for cracks of the station 259.5 bulkhead frame web from the first stiffener above S-10 to S-13, on the left and right sides of the airplane, and applicable on-condition 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.

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 for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections	41 work-hours X \$85 per hour = \$3,485 per inspection cycle	\$0	\$3,485 per inspection cycle	\$369,410 per inspection cycle

We have received no definitive data that would enable us 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.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance

and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

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):

2018-20-05 The Boeing Company: Amendment 39-19439; Docket No. FAA-2018-0452; Product Identifier 2017-NM-150-AD.

(a) Effective Date

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

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 727C, 727-100, 727-100C, 727-200, and 727-200F series airplanes, certificated in any category.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by the results of a fleet survey, which revealed cracking in bulkhead frame webs at a certain body station. We are issuing this AD to address cracking in the station 259.5 bulkhead frame web from the first stiffener above stringer S-10 to S-13. Such cracking may lead to subsequent failure of the skin and cockpit window surround structure, and could result in rapid decompression.

(f) Compliance

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

(g) Required Actions

Except as required by paragraph (h) of this AD: At the applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017.

Note 1 to paragraph (g) of this AD: Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 727-53A0235, dated October 12, 2017, which is referred to in Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017.

(h) Exceptions to Service Information Specifications

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017, uses the phrase “the original issue date of Requirements Bulletin 727-53A0235 RB,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017, specifies contacting Boeing, this AD requires repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Special Flight Permit

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), may be issued to operate the airplane to a location where the requirements of this AD can be accomplished, but concurrence by the Manager, Los Angeles ACO Branch, FAA, is required before issuance of the special flight permit.

(j) 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 (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, modification, or alteration 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 Branch, 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.

(k) Related Information

For more information about this AD, contact George Garrido, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5232; fax: 562-627-5210; email: george.garrido@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 Alert Requirements Bulletin 727-53A0235 RB, dated October 12, 2017.

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

Issued in Des Moines, Washington, on September 13, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.
[FR Doc. 2018-20917 Filed: 9/27/2018 8:45 am; Publication Date: 9/28/2018]