DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0789; Project Identifier AD-2020-00849-T]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2019-22-10, which applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. AD 2019-22-10 requires repetitive inspections for cracking of the left- and right-hand side outboard chords of frame fittings and failsafe straps at a certain station around eight fasteners, and repair if any cracking is found. Since the FAA issued AD 2019-22-10, it was determined that the initial inspection threshold and repetitive inspection interval are inadequate to address the cracking in a timely manner. For certain airplanes, this proposed AD would reduce the compliance time for the initial inspection, and for all airplanes this proposed AD would reduce the compliance time for the repetitive inspections. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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 https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster 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. 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-2020-0789.

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-2020-0789; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.
FOR FURTHER INFORMATION CONTACT: Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: Greg.Rutar@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views about this proposal. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should submit only one copy of the comments. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0789; Project Identifier AD-2020-00849-T” at the beginning of your comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received by the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this NPRM because of those comments.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM
contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to the person identified in the FOR FURTHER INFORMATION CONTACT section. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Discussion

The FAA issued AD 2019-22-10, Amendment 39-19789 (84 FR 61533, November 13, 2019) (“AD 2019-22-10”), for all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. AD 2019-22-10 requires inspections for cracking of the left- and right-hand side outboard chords of frame fittings and failsafe straps at a certain station around eight fasteners, and repair if any cracking is found. AD 2019-22-10 superseded AD 2019-20-02 Amendment 39–19755 (84 FR 52754, October 3, 2019) (“AD 2019-20-02”). AD 2019-22-10 resulted from reports of cracking discovered in the left- and right-hand side outboard chords of the station (STA) 663.75 frame fittings and failsafe straps adjacent to the stringer S-18A straps and a determination that the inspection area specified in AD 2019-20-02 needed to be expanded. The FAA issued AD 2019-22-10 to address cracking in the STA 663.75 frame fitting outboard chords and failsafe straps adjacent to the stringer S-18A straps, which could result in failure of a Principal Structural Element (PSE) to sustain limit load. This
condition could adversely affect the structural integrity of the airplane and result in loss of control of the airplane.

**Actions Since AD 2019-22-10 was Issued**

Since the FAA issued AD 2019-22-10, it was determined by an engineering analysis of the inspection reporting results and metallurgical evaluation of the submitted frame fitting assemblies that the initial inspection threshold for Model 737-900ER series airplanes, and the repetitive inspection interval for all affected airplanes is inadequate to address the cracking in a timely manner.

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

The FAA reviewed Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020. This service information describes procedures for repetitive detailed inspections for cracking of the left- and right-hand side outboard chords of the STA 663.75 frame fittings and failsafe straps around eight fasteners adjacent to the stringer S-18A straps.

This proposed AD also requires Boeing Multi-Operator Message MOM-MOM-19-0536-01B, dated September 30, 2019, which the Director of the Federal Register approved for incorporation by reference as of October 3, 2019 (84 FR 52754, October 3, 2019).

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.
FAA’s Determination

The FAA is proposing this AD because the agency 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.

Proposed AD Requirements

This proposed AD requires repetitive inspections for cracking of the left- and right-hand side outboard chords of the STA 663.75 frame fittings and failsafe straps around eight fasteners adjacent to the stringer S-18A straps. This proposed AD also requires repair of all cracking using a method approved by the FAA or The Boeing Company Organization Designation Authorization (ODA). Accomplishing the initial inspection required by paragraph (i) of this proposed AD would terminate the inspections originally required by paragraph (g) of AD 2019-22-10, which are retained in this proposed AD (the associated reporting specified in paragraph (h) of AD 2019-22-10 is also retained in this proposed AD). This proposed AD would also require sending a report of all results of the initial inspections specified in paragraph (i) of this proposed AD to Boeing.

Although this proposed AD does not explicitly restate the requirements of paragraphs (i), (j), and (k) of AD 2019-22-10, this proposed AD would retain those requirements with certain revised compliance times. Those requirements are referenced in Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020, which, in turn, is referenced in paragraphs (i) and (l) of this proposed AD.

For information on the procedures and compliance times, see this service information at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0789.
Explanation of New Compliance Times for Certain Configurations

For Boeing Model 737-600, -700, -700C, -800, and -900 series airplanes having less than 22,600 total flight cycles and on which an inspection specified in Boeing Multi-Operator Message MOM-MOM-19-0623-01B, dated November 5, 2019, has been done; and for Boeing Model 737-900ER series airplanes having less than 14,000 total flight cycles and on which an inspection specified in Boeing Multi-Operator Message MOM-MOM-19-0623-01B, dated November 5, 2019, has been done, the compliance times specified in Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020 (which will be required by this proposed AD), are relieving as compared to the compliance times in Boeing Multi-Operator Message MOM-MOM-19-0623-01B, dated November 5, 2019 (which is required by AD 2019-22-10).

For example, for a Boeing Model 737-600 series airplane on which the inspection was done and the airplane had accumulated 15,000 total flight cycles, the next inspection required by AD 2019-22-10 would be at 18,500 total flight cycles (i.e., 3,500 flight cycles after the inspection as specified in Boeing Multi-Operator Message MOM-MOM-19-0623-01B, dated November 5, 2019).

However, as specified in Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020, the next inspection for that airplane is prior to 22,600 total flight cycles or within 1,500 flight cycles from the last inspection in accordance with MOM-MOM-19-0623-01B, or within 30 days from the original issue date of MOM-MOM-20-0443-01B (R1) (which would correspond to 30 days after the effective date of the final rule for this proposed AD), whichever occurs latest.
In conclusion, if the inspection was done early, operators do not have to do the next inspection at the 3,500 interval required by AD 2019-22-10 after this proposed AD is a final rule; instead operators would then do the next inspection within the new compliance times specified in Boeing Multi-Operator Message MOM-MOM-20-0443-01B R1), dated June 2, 2020, for their configuration.

Interim Action

The FAA considers this proposed AD interim action. The inspection reports that are required by this proposed AD will enable the manufacturer to obtain better insight into the nature, cause, and extent of the cracking, and eventually to develop final action to address the unsafe condition. Once final action has been identified, the FAA might consider further rulemaking.

Costs of Compliance

The FAA estimates that this proposed AD affects 1,911 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection (retained action from AD 2019-22-10)</td>
<td>1 work-hour X $85 per hour = $85 per inspection cycle</td>
<td>$0</td>
<td>$85 per inspection cycle</td>
<td>$162,435 per inspection cycle</td>
</tr>
<tr>
<td>Reporting (retained action from AD 2019-22-10)</td>
<td>1 work-hour X $85 per hour = $85</td>
<td>$0</td>
<td>$85</td>
<td>$162,435</td>
</tr>
<tr>
<td>Inspection (new action)</td>
<td>1 work-hour(s) X $85 per hour = $85 per inspection cycle</td>
<td>$0</td>
<td>$85 per inspection cycle</td>
<td>$162,435 per inspection cycle</td>
</tr>
<tr>
<td>Reporting (new action)</td>
<td>1 work-hour X $85 per hour = $85</td>
<td>$0</td>
<td>$85</td>
<td>$162,435</td>
</tr>
</tbody>
</table>
The FAA has received no definitive data that would enable the agency to provide
cost estimates for the on-condition actions specified in this proposed AD.

**Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to
respond to, nor shall a person be subject to penalty for failure to comply with a collection
of information subject to the requirements of the Paperwork Reduction Act unless that
collection of information displays a current valid OMB control number. The control
number for the collection of information required by this proposed AD is 2120-0056. The
paperwork cost associated with this proposed AD has been detailed in the Costs of
Compliance section of this document and includes time for reviewing instructions, as
well as completing and reviewing the collection of information. Therefore, all reporting
associated with this proposed AD is mandatory. Comments concerning the accuracy of
this burden and suggestions for reducing the burden should be directed to Information
Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood
Parkway, Fort Worth, TX 76177-1524.

**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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

(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.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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) 2019-22-10, Amendment 39-19789 (84 FR 61533, November 13, 2019), and adding the following new AD:

The Boeing Company: Docket No. FAA-2020-0789; Project Identifier AD-2020-00849-T.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs


(c) Applicability

This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER 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 reports of cracking discovered in the station (STA) 663.75 frame fitting outboard chords and failsafe straps adjacent to the stringer S-18A straps and a determination that the initial inspection threshold for certain airplanes and the repetitive inspection interval specified in AD 2019-22-10 are inadequate to address the cracking in a timely manner. The FAA is issuing this AD to address cracking in the STA 663.75 frame fitting outboard chords and failsafe straps adjacent to the stringer
S-18A straps, which could result in failure of a Principal Structural Element (PSE) to sustain limit load. This condition could adversely affect the structural integrity of the airplane and result in loss of control of the airplane.

(f) Compliance

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

(g) Retained Inspection and Corrective Action with No Changes

This paragraph restates the requirements of paragraph (g) of AD 2019-22-10 with no changes. At the earlier of the times specified in paragraphs (g)(1) and (2) of this AD: Do a detailed inspection for cracking of the left- and right-hand side outboard chords of the STA 663.75 frame fittings and failsafe straps adjacent to the stringer S 18A straps, in accordance with Boeing Multi-Operator Message MOM-MOM-19-0536-01B, dated September 30, 2019. If any crack is found, repair before further flight using a method approved in accordance with the procedures specified in paragraph (n) of this AD. Repeat the inspection thereafter at intervals not to exceed 3,500 flight cycles until the initial inspection required by paragraph (i) of this AD is done.

(1) Prior to the accumulation of 30,000 total flight cycles, or within 7 days after October 3, 2019 (the effective date of AD 2019-20-02, Amendment 39 19755 (84 FR 52754, October 3, 2019) (“AD 2019-20-02”)), whichever occurs later.

(2) Prior to the accumulation of 22,600 total flight cycles, or within 1,000 flight cycles after October 3, 2019 (the effective date of AD 2019-20-02), whichever occurs later.

(h) Retained Reporting Requirement with No Changes

This paragraph restates the requirements of paragraph (h) of AD 2019-22-10, with no changes. At the applicable time specified in paragraph (h)(1) or (2) of this AD, submit
a report of all findings, positive and negative, of the initial inspection required by paragraph (g) of this AD. Submit the report in accordance with Boeing Multi-Operator Message MOM-MOM-19-0536-01B, dated September 30, 2019.

(1) If the inspection was done on or after October 3, 3019 (the effective date of AD 2019-20-02): Submit the report within 3 days after the inspection.

(2) If the inspection was done before October 3, 2019 (the effective date of AD 2019-20-02): Submit the report within 3 days after October 3, 2019.

(i) Inspection and Corrective Action with Reduced Compliance Times

Except as specified in paragraph (j) of this AD: At the applicable initial compliance time specified in Tables 1 and 2 of “Ref I” of Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020, do a detailed inspection of the left- and right-hand side outboard chords of the STA 663.75 frame fittings and failsafe straps around eight fasteners adjacent to the stringer S-18A straps, in accordance with Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020. If any crack is found, repair before further flight using a method approved in accordance with the procedures specified in paragraph (n) of this AD. Repeat the inspection thereafter at the applicable intervals specified in Tables 1 and 2 of “Ref I” of Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020. Accomplishing the initial inspection required by this paragraph or an initial inspection specified in Boeing Multi-Operator Message MOM-MOM-19-0623-01B, dated November 5, 2019, terminates the inspections required by paragraph (g) of this AD.
(j) Exceptions to Service Information Specifications

Where Boeing Multi-Operator Message MOM-MOM-20-0443-01B (R1), dated June 2, 2020, uses the phrase “the original issue date of MOM-MOM-20-0443-01B(R1),” this AD requires using “the effective date of this AD.”

(k) New Reporting Requirement

At the applicable time specified in paragraph (k)(1) or (2) of this AD, submit a report of all findings, positive and negative, of the initial inspection required by paragraph (i) of this AD. Submit the report in accordance with MOM-MOM-20-0443-01B (R1), dated June 2, 2020.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 3 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 3 days after the effective date of this AD.

(l) Special Flight Permit

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the airplane to a location where the airplane can be repaired if any crack is found, provided the Manager, Seattle ACO Branch, FAA, concurs with issuance of the special flight permit. Send requests for concurrence by email to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(m) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The
OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory as required by this AD. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

(n) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle 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 (o)(1) 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, 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, Seattle 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 2019-20-02 are approved as AMOCs for the corresponding provisions of this AD.

(5) AMOCs approved previously for AD 2019-22-10 are approved as AMOCs for the corresponding provisions of this AD.

(6) Related Information

(1) For more information about this AD, contact Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: Greg.Rutar@faa.gov.
(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com.

Issued on August 26, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-19582 Filed: 9/4/2020 8:45 am; Publication Date: 9/8/2020]