DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0998; Directorate Identifier 2011-NM-249-AD; Amendment 39-17605; AD 2013-19-23]

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 737-600, -700, -700C, -800, -900, and -900ER series airplanes. This AD was prompted by a new revision to the airworthiness limitations of the maintenance planning data (MPD) document. This AD requires revising the maintenance program to update inspection requirements to detect fatigue cracking of principal structural elements (PSEs). We are issuing this AD to detect and correct fatigue cracking of various principal structural elements (PSEs), which could adversely affect the structural integrity of these airplanes.

DATES: This AD is effective November 7, 2013

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of November 7, 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, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may review copies of the 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
SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. The NPRM published in the Federal Register on September 24, 2012 (77 FR 58791). The NPRM proposed to require revising the maintenance program to update inspection requirements to detect fatigue cracking of PSEs.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 58791, September 24, 2012) and the FAA's response to each comment.

Requests To Use the Most Recent MPD Document

Boeing and American Airlines (AAL) requested that the most recent MPD document be incorporated into the NPRM (77 FR 58791, September 24, 2012).

Boeing stated that the NPRM (77 FR 58791, September 24, 2012) should reference Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision December 2011. Boeing stated that this is the most recent MPD document and that this revision incorporates more stringent restrictions that should be included before the final rule is issued.

AAL stated that the Relevant Service Information section and paragraph (g) of the NPRM (77 FR 58791, September 24, 2012) refer to Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011. AAL stated that the most recent revision of that document is Revision August 2012, and that it should be incorporated into the NPRM.

We agree with the commenters' requests. The Relevant Service Information section of the NPRM (77 FR 58791, September 24, 2012) is not restated in the final rule. However, we have added both Revision December 2011 and Revision August 2012 of Subsection B, AWLs– Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR to paragraph (g) of this AD as acceptable options for doing the actions required by this AD. We also re-organized paragraph (g) of this AD to improve readability. Because Revision August 2012 of Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR is a more stringent document, we might consider future rulemaking to require the actions specified in that document.
All Nippon Airways (ANA) requested the use of a later-approved MPD document. ANA noted that the NPRM (77 FR 58791, September 24, 2012) refers to Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011, and that the current document is Revision December 2011. ANA stated that once the NPRM becomes a final rule, an alternative method of compliance (AMOC) will be necessary to do the actions in the latest document. ANA also stated that airworthiness limitations and CMR documents are revised periodically; if an AMOC is necessary for each revision of the document, it will burden the operators. ANA stated that if paragraph (g) of the NPRM addresses "D626A001-CMR revision July 2011, or later," then an AMOC will not be necessary for each later revision of the document. ANA stated that, since the document is reviewed by the FAA prior to public release, the FAA is able to confirm if the document meets the adequate level of safety.

We disagree with ANA's request. We cannot use the phrase, "or later FAA-approved revisions," in an AD when referring to the service document because doing so violates Office of the Federal Register (OFR) regulations for approval of materials "incorporated by reference" in rules. See 1 CFR 51.1(f).

In general terms, we are required by OFR regulations to either publish the service document contents as part of the actual AD language; or submit the service document to the OFR for approval as "referenced" material, in which case we may only refer to such material in the text of an AD. The AD may refer to the service document only if the OFR approved it for "incorporation by reference." See 1 CFR part 51.

To allow operators to use later revisions of the referenced document (issued after publication of the AD), either we must revise the AD to reference specific later revisions, or operators must request approval to use later revisions as an AMOC with this AD under the provisions of paragraph (j)(1) of this AD. As stated previously, we have added Revision December 2011 and Revision August 2012 of Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR to paragraph (g) of this AD as acceptable options for doing the required actions.

Requests for an AMOC Exception

WestJet and AAL requested an AMOC exception.

WestJet stated that in paragraph (c)(2) of the NPRM (77 FR 58791, September 24, 2012) the wording "may not be able to" implies that if an inspection to a modified, altered, or repaired area can be accomplished, then an AMOC is not required. WestJet also stated that an AMOC should not be required for Boeing repairs that have damage tolerant assessments and for supplemental type certificates (STCs) that have FAA-approved airworthiness limitation structural inspections.

AAL stated that paragraph (c)(2) of the NPRM (77 FR 58791, September 24, 2012) provides minimal information on how operators should address new and existing repairs in a PSE area, as defined in Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011. AAL also stated that all repairs in a PSE area that hide a portion of the inspection area will need an alternate inspection method approved by the Seattle Aircraft Certification Office to ensure continued damage tolerance of the affected structure. AAL stated that the current process will create an unnecessary burden on operators. AAL said that repairs approved under section 25.571(b) or 26.43(d) of the Federal Aviation Regulations (14 CFR 25.571(b) and 14 CFR 26.43(d), respectively) would provide the required level of safety for the continued damage tolerance of the affected structure for the NPRM.
We disagree with the commenters' requests. The revised set of inspections in Subsection B, AWLs—Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011, resulted from an updated analysis of The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. The analysis includes consideration of updated loads and flight lengths that increase the stresses on the structure. Previously approved repairs, modifications, and alterations may not include consideration of the updated analysis, and therefore, a review is required before an AMOC can be issued for them. Affected operators, however, may request approval of an AMOC under the provisions of paragraph (j)(1) of this AD by submitting data substantiating that the change would provide an acceptable level of safety. We have not changed this final rule in this regard.

Request To Reference Different Advisory Circular (AC)

AAL requested that the NPRM (77 FR 58791, September 24, 2012) reference a different AC. AAL stated that paragraph (c)(2) of the NPRM provides FAA guidance for determining the changes necessary for the required inspections to satisfy the continued damage tolerance of the affected structure. AAL stated that the NPRM references FAA AC 25.1529-1A, dated November 20, 2007 (http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC%2025.1529-1A.pdf), for guidance regarding alternative inspection procedures; however, AC 25.1529-1A, dated November 20, 2007, applies only to airplanes that have a passenger seating capacity of less than 30 and a maximum payload capacity of less than 7,500 pounds. AAL stated that FAA AC 120-93, dated November 20, 2007 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%20120-93.pdf), refers to the damage tolerance inspection for repairs and alteration.

We agree with the commenter's request. We have revised paragraph (c)(2) of this AD by specifying FAA AC 120-93, dated November 20, 2007 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%20120-93.pdf), in lieu of FAA AC 25.1529-1A, dated November 20, 2007 (http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC%2025.1529-1A.pdf.)

STC Comment

Aviation Partners Boeing stated that the installation of winglets per STC ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/$FILE/ST00830SE.pdf) affects the accomplishment of the manufacturer's service instructions.

We have added paragraph (c)(3) of this AD to state that installation of STC ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/$FILE/ST00830SE.pdf) affects the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" AMOC approval request might be necessary to comply with the requirements of 14 CFR 39.17.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously—and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 58791, September 24, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 58791, September 24, 2012).
We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

**Costs of Compliance**

We estimate that this AD affects 1,200 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

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<th>Estimated Costs</th>
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<td><strong>Action</strong></td>
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<td>Document Revision</td>
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**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 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 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

**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):
2013-19-23 The Boeing Company: Amendment 39-17605 ; Docket No. FAA-2012-0998; Directorate Identifier 2011-NM-249-AD.

(a) Effective Date

This AD is effective November 7, 2013.

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to the Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, with an original airworthiness certificate or original export certificate of airworthiness issued before April 3, 2012.

(2) This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) according to paragraph (j) of this AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure. The FAA has provided guidance for this determination in FAA Advisory Circular (AC) 120-93, dated November 20, 2007 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%202012-93.pdf).

(3) Installation of Supplemental Type Certificate (STC) ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/$FILE/ST00830SE.pdf) affects the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" AMOC approval request might be necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 52, Doors; 53, Fuselage; 54, Nacelles/Pylons; 55, Stabilizers; and 57, Wings.

(e) Unsafe Condition

This AD was prompted by a new revision to the airworthiness limitations of the maintenance planning data (MPD) document. We are issuing this AD to detect and correct fatigue cracking of various principal structural elements (PSEs), which could adversely affect the structural integrity of these airplanes.
(f) Compliance

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

(g) Maintenance Program Revision

(1) Within 12 months after the effective date of this AD, revise the maintenance program by incorporating the information in paragraph (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this AD, except as provided by paragraph (h) of this AD.

(i) Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011.

(ii) Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision December 2011.

(iii) Subsection B, AWLs–Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision August 2012.

(2) The initial compliance time for the inspections is within the applicable times specified in the documents identified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD, or within 18 months after the effective date of this AD, whichever occurs later; or within the applicable time specified in those documents from the time of installation of new parts.

(3) Reports specified in the documents identified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD may be submitted within 10 days after the airplane is returned to service, instead of 10 days after each individual finding as specified in Section 9 of the documents identified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD.

(h) No Alternative Inspections and Inspection Intervals

After accomplishing the actions required by paragraph (g) of this AD, no alternative actions (i.e., alternative inspections) or inspection intervals may be used or incorporated unless the alternative action or interval is approved as an AMOC in accordance with the procedures specified in paragraph (j) of this AD.

(i) 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 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), ANM-120S, 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 in the area affected 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 Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@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) Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER Maintenance Planning Data (MPD) Document, D626A001-CMR, Revision July 2011.

(ii) Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision December 2011.

(iii) Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision August 2012.

(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, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(4) You may review copies of the 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.

(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.