[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0683; Directorate Identifier 2014-NM-196-AD; Amendment 39-18355; AD 2015-26-07]

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 all The Boeing Company Model 767-200, -300, and -300F series airplanes. This AD was prompted by a finding that certain barrel nuts installed at the vertical fin may be subject to stress corrosion and cracking. This AD requires either repetitive inspections of vertical fin barrel nuts for corrosion or a magnetic check to identify certain barrel nuts, and corrective actions if necessary. We are issuing this AD to detect and correct corroded and loose barrel nuts that attach the vertical fin to body section 48; this condition could result in reduced structural integrity of the vertical fin attachment joint, loss of the vertical fin, and consequent loss of controllability of the airplane.

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: 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, WA. 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-2015-0683; 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: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6447; fax: 425-917-6590; email: wayne.lockett@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 767-200, -300, and -300F series airplanes. The NPRM published in the Federal Register on April 10, 2015 (80 FR 19248). The NPRM was prompted by a finding that certain barrel nuts installed at the vertical fin may be subject to stress corrosion and cracking. The NPRM proposed to require either repetitive inspections of vertical fin barrel nuts for corrosion or a magnetic

check to identify certain barrel nuts, and corrective actions if necessary. We are issuing this AD to detect and correct corroded and loose barrel nuts that attach the vertical fin to body section 48; this condition could result in reduced structural integrity of the vertical fin attachment joint, loss of the vertical fin, and consequent loss of controllability of the airplane.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (80 FR 19248, April 10, 2015) and the FAA's response to each comment.

Request to Revise Applicability

Boeing and Air New Zealand requested that additional clarification be added to paragraph (c) of the proposed AD (80 FR 19248, April 10, 2015). Boeing stated that this addition will add clarity because there is an existing AD (AD 2003-10-11, Amendment 39-13156 (68 FR 28703, May 27, 2003)) of a similar subject that covers only Boeing Model 767 airplanes, line numbers 1 through 574 inclusive. Boeing requested we clarify that Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, addresses only Boeing Model 767 airplanes with line numbers 575 through 681 inclusive. Air New Zealand asked whether the NPRM would supersede AD 2003-10-11.

We agree to provide clarification. Only Model 767 airplanes with line numbers 575 through 681 inclusive are affected by this AD. Some proposed requirements overlap with the requirements of AD 2003-10-11, Amendment 39-13156 (68 FR 28703, May 27, 2003). We have therefore revised the applicability of this AD to specify airplanes identified in Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, which limits the applicability to line numbers 575 through 681 inclusive.

Request to Add Clarification about the Previous Replacement of Discovered H-11 Barrel Nuts with Inconel Alternatives

Boeing stated that operators may have already replaced discovered H-11 barrel nuts with Inconel alternatives. Boeing requested that we revise the NPRM (80 FR 19248, April 10, 2015) to specify the "Compliance Time Exceptions" noted in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014. Those "exceptions" would specify that no further action is required at the vertical stabilizer attachment point, provided the following conditions are met:

- The vertical stabilizer attachment barrel nut has been inspected;
- No H-11 steel barrel nut was found during the inspection; and
- Any replacement barrel nut is either a drawing configuration barrel nut made from an alternative material to H-11 steel; or a barrel nut made from alternative material to H-11 steel approved by the FAA or by a Boeing Company Authorized Representative.

We do not agree with the request because paragraph (g) of this AD already makes reference to paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, which lists the compliance time exceptions. We have not changed this AD regarding this issue.

Request to Clarify Terminating Action for Repetitive Inspections and Replacement

United Parcel Service (UPS) requested that we provide terminating action similar to that provided in paragraph (i) of AD 2013-18-02, Amendment 39-17575 (78 FR 57049, September 17, 2013).

We agree with the commenter's request. The NPRM (80 FR 19248, April 10, 2015) is not clear whether the repetitive inspections are terminated by replacement with an Inconel barrel nut or by a finding of no H-11 steel barrel nut installed. Replacing a barrel nut at an attachment point location with a new Inconel barrel nut in accordance with Part 5 of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, terminates the inspections and replacement required by paragraph (g) of this AD for that

attachment point location only. In addition, if no H-11 steel barrel nut is found installed at an attachment point location, the repetitive inspections and replacement required by paragraph (g) of this AD are terminated for that attachment location only. We have added a new paragraph (h) to this AD to clarify the terminating action and redesignated the subsequent paragraphs accordingly.

Request for Clarification of Barrel Nuts to be Replaced

UPS requested that we provide clarification of paragraph (g)(1)(ii)(B) of the proposed AD (80 FR 19248, April 10, 2015). UPS stated that its interpretation of paragraph (g)(1)(ii)(B) of the proposed AD is that replacement of only H-11 steel barrel nuts is required, although it appears that all barrel nuts are to be replaced, even if the installed barrel nuts are Inconel or other approved barrel nuts.

We agree that clarification is necessary. Operators are required to do all actions specified in either paragraph (g)(1) or (g)(2) of this AD. Paragraph (g)(1) of this AD is only an internal and external detailed inspection of the barrel nuts and does not provide a method for determination of the material of the barrel nuts. Paragraph (g)(2) of this AD provides the method to determine if the material of the barrel nuts is H-11 steel.

Therefore, if operators have chosen to do the internal and external inspections along with the torque check specified in paragraph (g)(1) of this AD, and have not chosen to do the magnetic check specified in paragraph (g)(2) of this AD, then they have not determined the material of the barrel nuts. For airplanes on which the material of the barrel nuts has not been determined, the requirement is to replace all barrel nuts, as required by paragraph (g)(1)(ii)(B) of this AD.

Operators choosing to do the magnetic check specified in paragraph (g)(2) of this AD would have determined the material of the barrel nuts, and may replace only H-11 steel barrel nuts, as required by paragraph (g)(2)(i)(B)(2) of this AD.

Operators are not permitted to mix actions from paragraphs (g)(1) and (g)(2) of this AD. Operators may, however, submit requests for approval of an alternative method of compliance (AMOC) to the requirements of paragraph (g) of this AD along with justification of an equivalent level of safety. We have not changed this AD regarding this issue.

Request for Clarification of Compliance Time

UPS requested that we provide an exception to the initial inspection thresholds of the "last Torque Check Inspection" specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014. The specified compliance time is the later of 24 months after issuance of the service information or 36 months after the last torque check inspection specified in Task 53-734-00, "Internal, Special Detailed, Vertical Stabilizer Attach Bolt, of Section 2, "Structural Maintenance Requirements," of the Boeing Model 767 Maintenance Planning Document. The commenter understands that the most recent accomplishment of Task 53-734-00 must be done prior to the effective date of this AD. The commenter added that if the initial inspection required by paragraph (g)(1) or (g)(2) of the proposed AD (80 FR 19248, April 10, 2015) is done from the most recent accomplishment of Task 53-734-00 and that accomplishment occurs after the effective date of this AD, the time limits given in paragraphs (g)(1)(ii)(B) and (g)(2)(i)(B)(2) of this proposed AD may be exceeded (i.e., will have already passed).

We agree with the commenter's request and rationale regarding providing an exception to the specified initial inspection threshold. We have redesignated paragraph (h) of the proposed AD (80 FR 19248, April 10, 2015) as paragraph (i)(1) of this AD and added new paragraph (i)(2) to this AD to provide a compliance time exception to address the issue described by the commenter. If the most recent accomplishment of Task 53-734-00 occurs after the effective date of this AD, then

operators still have to comply with the requirements of paragraph (g)(1) or (g)(2) of this AD.

Request for Clarification of Effect of Winglets on Accomplishment of the Proposed Actions

Aviation Partners Boeing stated that accomplishing the supplemental type certificate (STC) ST01920SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/59027F43B9A7486E86257B1D006591EE) does not affect the actions specified in the NPRM (80 FR 19248, April 10, 2015).

We agree with the commenter's statement. We have redesignated paragraph (c) of the proposed AD (80 FR 19248, April 10, 2015) as paragraph (c)(1) of this AD, and added new paragraph (c)(2) to this AD to state that installation of STC ST01920SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/59027F43B9A7486E86257B1D006591EE) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01920SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/59027F43B9A7486E86257B1D006591EE) is installed, a "change in product" AMOC approval request is not 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 (80 FR 19248, April 10, 2015) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 19248, April 10, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

Boeing has issued Alert Service Bulletin 767-53A0261, dated August 12, 2014. The service information describes procedures for repetitive internal and external detailed inspections of the barrel nut holes and sealant for cracked/damaged sealant, corrosion, or a cracked/broken barrel nut, and replacement of the barrel nut with a new Inconel barrel nut if necessary. The service information also describes procedures for repetitive torque checks on each affected vertical fin attachment bolt, or, alternatively, a magnetic check to identify H-11 steel barrel nuts, and replacement with a new Inconel barrel nut if necessary.

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 38 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
Option 1: Detailed inspections and torque check	4 work-hours X $85 per hour = $340 per inspection cycle	[1]	Up to $482,661 per inspection cycle	Up to $18,341,118
Option 2: Magnetic check	4 work-hours X $85 per hour = $340	$0	$340	$12,920

[1]For the torque check, operators may choose to rent a special tool, with rental costs up to $482,321.

We estimate that replacing any barrel nut would take 1 work-hour, at an average labor rate of $85 per work-hour. We have received no definitive data that would enable us to provide cost estimates for the cost of replacement parts. We have no way of determining the number of aircraft that might need these replacements.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

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):

2015-26-07 The Boeing Company: Amendment 39-18355 ; Docket No. FAA-2015-0683; Directorate Identifier 2014-NM-196-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

(1) This AD applies to The Boeing Company Model 767-200, -300, -300F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014.

(2) Installation of Supplemental Type Certificate (STC) ST01920SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/59027F43B9A7486E86257B1D006591EE) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01920SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/59027F43B9A7486E86257B1D006591EE) is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a finding that certain barrel nuts installed at the vertical fin may be subject to stress corrosion and cracking. We are issuing this AD to detect and correct corroded and loose barrel nuts that attach the vertical fin to body section 48; this condition could result in reduced structural integrity of the vertical fin attachment joint, loss of the vertical fin, and consequent loss of controllability of the airplane.

(f) Compliance

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

(g) Inspection

For airplanes identified in Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014: Do the actions specified in paragraph (g)(1) or (g)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014. Signs of corrosion include, but are not limited to, sealant cracks, sealant bulging, powder residue, and cracked barrel nuts.

(1) At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, except as provided by paragraph (i) of this AD: Do internal and external detailed inspections of the barrel nuts and sealant for signs of corrosion, and do a torque check of the vertical stabilizer attachment bolts for loose barrel nuts.

(i) If corrosion or any loose barrel nut is found at any attachment point location, before further flight, replace the barrel nut with a new Inconel barrel nut.

(ii) If no corrosion or loose barrel nut is found at any attachment point location, do the actions specified in paragraphs (g)(1)(ii)(A) and (g)(1)(ii)(B) of this AD.

(A) Repeat the inspections and torque check thereafter at intervals not to exceed 18 months until the replacement specified in paragraph (g)(1)(ii)(B) of this AD is done at that attachment point location.

(B) Within 36 months after the effective date of this AD, replace all barrel nuts with new Inconel barrel nuts.

(2) At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, except as provided by paragraph (i) of this AD: Do a magnetic check to identify H-11 steel barrel nuts.

(i) If any H-11 steel barrel nut is found at any attachment point location, before further flight, do an internal and external detailed inspection of the barrel nut holes and sealant for signs of corrosion, and do a torque check of the vertical stabilizer attachment bolts for loose barrel nuts.

(A) If corrosion or any loose barrel nut is found, before further flight, replace the barrel nut with a new Inconel barrel nut.

(B) If no corrosion or loose barrel nut is found, do the actions specified in paragraphs (g)(2)(i)(B)(1) and (g)(2)(i)(B)(2) of this AD.

(1) Repeat the inspections and torque check thereafter at intervals not to exceed 18 months until the replacement specified in paragraph (g)(2)(i)(B)(2) of this AD is done at that attachment point location.

(2) Within 36 months after the effective date of this AD, replace all H-11 steel barrel nuts with new Inconel barrel nuts.

(ii) If no H-11 steel barrel nut is found at all attachment point locations, no further work is required by this paragraph.

(h) Terminating Action for Repetitive Inspections and Replacement

(1) Replacing a barrel nut at an attachment point location with a new Inconel barrel nut, in accordance with Part 5 of Boeing Alert Service Bulletin 767-53A0261,

dated August 12, 2014, terminates the inspections and replacement required by paragraph (g) of this AD for that attachment point location only.

(2) If no H-11 steel barrel nut is found installed at an attachment point location, the repetitive inspections and replacement required by paragraph (g) of this AD are terminated for that attachment location only.

(i) Exception to Service Information Specifications

(1) Where Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, specifies a compliance time "after the Original Issue date of this Service Bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, specifies a compliance time after the "last Torque Check Inspection" in accordance with Task 53-734-00, "Internal, Special Detailed, Vertical Stabilizer Attach Bolt, of Section 2, Structural Maintenance Requirements," of the Boeing Model 767 Maintenance Planning Document, that compliance time only applies if the most recent accomplishment of Task 53-734-00 occurred on or before the effective date of this AD.

(j) Parts Installation Prohibition

As of the effective date of this AD, no person may install an H-11 steel barrel nut on the vertical stabilizer of any airplane.

(k) 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 (l)(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 Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, 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) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(4)(i) and (k)(4)(ii) apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(l) Related Information

(1) For more information about this AD, contact Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6447; fax: 425-917-6590; email: wayne.lockett@faa.gov.

(2) 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, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(m) 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 Service Bulletin 767-53A0261, dated August 12, 2014.

(ii) Reserved.

(3) 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.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. 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 December 9, 2015.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-32596 Filed: 12/30/2015 8:45 am; Publication Date: 12/31/2015]