

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0690; Directorate Identifier 2013-NM-088-AD; Amendment 39-17835; AD 2014-08-11]

RIN 2120-AA64

Airworthiness Directives; the Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2009-24-07 for certain the Boeing Company Model 737-600, -700, -700C, and -800 series airplanes. AD 2009-24-07 required repetitive lubrications of the right and left main landing gear (MLG) forward trunnion pins. AD 2009-24-07 also required an inspection for discrepancies of the transition radius of the MLG forward trunnion pins, and corrective actions if necessary. For certain airplanes, AD 2009-24-07 required repetitive detailed inspections for discrepancies (including finish damage, corrosion, pitting, and base metal scratches) of the transition radius of the left and right MLG trunnion pins, and corrective action if necessary. Replacing or overhauling the trunnion pins terminates the actions required by AD 2009-24-07. This new AD adds airplanes to the applicability of AD 2009-24-07. This AD was prompted by reports of corrosion protection damage to the forward trunnion pin on additional airplanes. We are issuing this AD to prevent stress corrosion cracking of the forward trunnion pins, which could result in fracture of the pins and consequent collapse of the MLG.

DATES: This AD is effective June 3, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of June 3, 2014.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, 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-2013-0690; 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: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2009-24-07, Amendment 39-16095 (74 FR 62231, November 27, 2009). AD 2009-24-07 applied to certain The Boeing Company Model 737-600, -700, -700C, and -800 series airplanes. The NPRM published in the Federal Register on August 13, 2013 (78 FR 49229). The NPRM was prompted by reports of corrosion protection damage to the forward trunnion pin on additional airplanes. The NPRM proposed to continue to require repetitive lubrications of the right and left main landing gear (MLG) forward trunnion pins. The NPRM also proposed to continue to require an inspection for discrepancies of the transition radius of the MLG forward trunnion pins, and corrective actions if necessary. For certain airplanes, the NPRM proposed to continue to require repetitive detailed inspections for discrepancies (including finish damage, corrosion, pitting, and base metal scratches) of the transition radius of the left and right MLG trunnion pins, and corrective action if necessary. Replacing or overhauling the trunnion pins would terminate the actions required by AD 2009-24-07. The NPRM proposed to add airplanes to the applicability of AD 2009-24-07. We are issuing this AD to prevent stress corrosion cracking of the forward trunnion pins, which could result in fracture of the pins and consequent collapse of the MLG.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (78 FR 49229, August 13, 2013) and the FAA's response to each comment.

Concurrence With the NPRM (78 FR 49229, August 13, 2013)

Boeing stated that it concurs with the content of the NPRM (78 FR 49229, August 13, 2013).

Supplemental Type Certificate (STC) Winglet 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?OpenDocument&Highlight=st00830se) does not affect the accomplishment of the manufacturer's service instructions.

We have redesignated paragraph (c) of the NPRM (78 FR 49229, August 13, 2013) as paragraph (c)(1) of this AD, and added paragraph (c)(2) to this AD to state that installation of STC ST00830SE

(http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408E012E008616A7862578880060456C?OpenDocument&Highlight=st00830se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE 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. For all other AMOC requests, the operator must request approval of an AMOC in accordance with the procedures specified in paragraph (l) of this AD.

Request for Clarification of Location of Trunnion Pins

Delta asked for clarification of the term "trunnion pins" as specified in the NPRM (78 FR 49229, August 13, 2013). Delta stated that throughout the preamble of the NPRM, the subject pins are referred to as "forward trunnion pins;" however, in paragraphs (h) and (i) of the NPRM, the location is omitted and the term "trunnion pins" is used. Delta noted that since forward and aft trunnion pins are installed, failing to identify the affected pin as a "forward trunnion pin" adds a potential for errors.

We agree that the term "trunnion pins" should be clarified to include the pin location. We have changed paragraphs (h) and (i) of this final rule to specify "forward trunnion pins."

Request To Use Alternate Grease for Lubrication of the Forward Trunnion Pins

Delta asked that paragraph (g) of the NPRM (78 FR 49229, August 13, 2013) be changed to allow the use of Royco-11MS grease as an alternate to the BMS 3-33 grease specified in Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013. Delta stated that Royco-11MS is the standard grease used on Delta aircraft landing gear applications, and it would like to continue using this grease when lubricating the forward trunnion pins.

We do not agree to allow the use of an alternative type of grease. Approval of an operator's unique maintenance actions is dependent on its ability to provide acceptable data supporting the request. We would not provide such an approval to all operators via a change to the NPRM (78 FR 49229, August 13, 2013). However, we would consider this request for approval of unique maintenance practices in accordance with the procedures identified in paragraph (l) of this AD. We have made no change to this final rule in this regard.

Request To Further Clarify Certain Language

Ryanair (RYR) asked that clarification be provided to reflect new information it received from Boeing. RYR stated that the intent of paragraphs (g) and (h) of the NPRM (78 FR 49229, August 13, 2013) appears to be to require that the 30-day repetitive lubrication task continue until all repetitive inspections are completed, as stated in Notes (a) and (b) of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013. RYR received correspondence from Boeing stating that the 30-day lubrication task is terminated after accomplishing the first in-situ detailed inspection. RYR recommends the information from Boeing be included in the NPRM.

RYR has correctly interpreted the requirements in paragraphs (g) and (h) of this AD. However, we find that further clarification is necessary. If certain discrepancies are found during the detailed inspection of the forward trunnion pins, replacing the affected trunnion pins terminates the repetitive requirements in this AD. If no discrepancies are found during the detailed inspection of the forward trunnion pins, an additional lubrication of the left and right MLG forward trunnion is required, which terminates the repetitive requirements in this AD. If certain other discrepancies are found during the detailed inspection of the forward trunnion pins, the lubrications and detailed inspections must be repeated until overhaul or replacement of the affected trunnion pins.

Additionally, Boeing did not provide any new information or data to the FAA, nor are we aware of any intention to revise its service information. However, under the provisions of paragraph (l) of this AD, we may consider requests for approval of an alternative method of compliance (AMOC) if

sufficient data are submitted to substantiate that terminating the repetitive lubrications after doing the first detailed inspection would provide an acceptable level of safety. In light of these factors, we have made no change to this final rule.

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. 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 431 airplanes of U.S. registry.

Estimated Costs

Action	Work hours	Average labor rate per hour	Parts	Cost per product	Number of U.S.-registered airplanes	Fleet cost
Repetitive lubrications	1	\$85	\$0	\$85 per lubrication	431	\$36,635 per lubrication.
Repetitive inspections	8	85	0	\$680 per inspection cycle	431	\$293,080 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.

Regulatory Findings

We have determined that 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 removing Airworthiness Directive (AD) 2009-24-07, Amendment 39-16095 (74 FR 62231, November 27, 2009), and adding the following new AD:



2014-08-11 Boeing: Amendment 39-17835; Docket No. FAA-2013-0690; Directorate Identifier 2013-NM-088-AD.

(a) Effective Date

This AD is effective June 3, 2014.

(b) Affected ADs

This AD supersedes AD 2009-24-07, Amendment 39-16095 (74 FR 62231, November 27, 2009).

(c) Applicability

(1) This AD applies to The Boeing Company Model 737-600, -700, -700C, -800 and -900 series airplanes, certificated in any category; as identified in Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013.

(2) Installation of Supplemental Type Certificate (STC) ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408E012E008616A7862578880060456C?OpenDocument&Highlight=st00830se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE 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 32, Landing gear.

(e) Unsafe Condition

This AD was prompted by a report that the protective finishes on the forward trunnion pins for the left and right MLG might have been damaged during final assembly. We are issuing this AD to prevent stress corrosion cracking of the forward trunnion pins, which could result in fracture of the pins and consequent collapse of the MLG.

(f) Compliance

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

(g) Repetitive Lubrications

At the applicable compliance time specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013, except as required by paragraph (j) of this AD: Lubricate the left and right MLG forward trunnion pins, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1402,

Revision 1, dated February 7, 2013. Repeat the lubrication thereafter at the applicable time specified in paragraph 1.E., "Compliance," until all applicable requirements of paragraph (h) of this AD have been accomplished.

(h) Inspection

At the applicable compliance time specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013, except as required by paragraph (j) of this AD: Except as provided by paragraph (i) of this AD, do a detailed inspection for discrepancies (including finish damage, corrosion, pitting, and base metal scratches) of the transition radius of the left and right MLG forward trunnion pins, and do all applicable repetitive inspections and related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013. Accomplishing the detailed inspections (initial and repetitive) and all applicable corrective actions specified in this paragraph terminates the repetitive lubrication requirements of paragraph (g) of this AD.

(i) Optional Terminating Action

Overhauling or replacing a forward trunnion pin, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013, ends the repetitive lubrication requirements of paragraph (g) of this AD, and the actions required by paragraph (h) of this AD, for that forward trunnion pin only.

(j) Exception to Service Information Specifications

Where Boeing Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013, specifies a compliance time "from the date of Revision 1 of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(k) Credit for Previous Actions

This paragraph provides credit for the actions required by this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008, which was incorporated by reference in AD 2009-24-07, Amendment 39-16095 (74 FR 62231, November 27, 2009).

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle 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 (m)(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 required by this AD if it is approved by the Boeing Commercial Airplanes 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.

(4) AMOCs approved previously for AD 2009-24-07, Amendment 39-16095 (74 FR 62231, November 27, 2009), are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) of this AD.

(m) Related Information

(1) For more information about this AD, contact Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference in this AD may be obtained at the addresses specified in paragraphs (n)(3) and (n)(4) of this AD.

(n) 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 Special Attention Service Bulletin 737-32-1402, Revision 1, dated February 7, 2013.

(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 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.

(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 April 14, 2014.

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