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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2014–0756; Directorate Identifier 2014–NM–103–AD; Amendment 39–18167; AD 2015–11–04]

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 707 airplanes, and Model 720 and 720B series airplanes. This AD was prompted by reports of cracked midspar fittings on the inboard and outboard nacelle struts. This AD requires repetitive inspections for cracking of the inboard and outboard midspar fittings of the nacelle struts and of the torque bulkhead, midspar chords, drag fitting, and front spar support, and doing applicable related investigative and corrective actions; replacing the midspar fittings; and doing other specified actions. We are issuing this AD to detect and correct cracking in the midspar fittings of the inboard and outboard nacelle struts, which could result in the loss of the structural integrity of the midspar fitting. This condition could cause an unsafe separation of the engine and consequent wing fire.

DATES: This AD is effective July 6, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 6, 2015.

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. It is also available on the Internet at *http://regulations.gov* by searching for and locating Docket No. FAA–2014–0756.

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–2014–0756; 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: Chandra Ramdoss, Aerospace Engineer, Airframe Branch, ANM–120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712–4137; phone: 562–627–5239; fax: 562–627–5210; email: *chandraduth.ramdoss@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 707 airplanes, and Model 720 and 720B series airplanes. The NPRM published in the **Federal Register** on November 13, 2014 (79 FR 67379). The NPRM was prompted by reports of cracked midspar fittings on the inboard and outboard nacelle struts. The NPRM proposed to require repetitive inspections for cracking of the inboard and outboard midspar fittings of the nacelle struts and of the torque bulkhead, midspar chords, drag fitting, and front spar support, and doing applicable related investigative and corrective actions; replacing the midspar fittings; and doing other specified actions. We are issuing this AD to detect and correct cracking in the midspar fittings of the inboard and outboard nacelle struts, which could result in the loss of the structural integrity of the midspar fitting. This condition could cause an unsafe separation of the engine and consequent wing fire.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 67379, November 13, 2014) and the FAA's response to each comment.

Request To Extend the Compliance Time

The Air Force Life Cycle Management Center (AFLCMC) at Robins Air Force Base, and the Massachusetts Institute of Technology Lincoln Laboratory Flight Facility (LLFF), requested that the compliance time proposed in the NPRM (79 FR 67379, November 13, 2014) be extended. AFLCMC asked that the grace period be extended from 18 months after the effective date of the AD to 24 months after the effective date of the AD. This commenter explained that its airplanes are scheduled for heavy maintenance visits every 24 months, and the 18-month grace period for the initial actions proposed in the NPRM would negatively impact airplane availability.

In addition, the AFLCMC stated that there is a low quantity of kits available to replace the inboard and outboard midspar fittings with new parts, as proposed in paragraphs (g) and (h) of the NPRM (79 FR 67379, November 13, 2014). This commenter also noted that the kits are expensive and have long lead times, which could impact operators' schedules. We infer that the commenter is requesting that the compliance time proposed in the NPRM be lengthened to accommodate parts availability.

LLFF's interpretation of the compliance time was that the compliance time was related to the date of the service bulletin. LLFF commented that operators would have a difficult time complying with the requirements proposed in the NPRM (79 FR 67379, November 13, 2014).

We do not agree with the commenters' requests to extend the compliance time.

In developing an appropriate compliance time for this action, we considered not only the degree of urgency associated with addressing the subject unsafe condition, but the manufacturer's recommendation for an appropriate compliance time, the availability of required parts, and the practical aspect of installing the required modification within an interval of time that corresponds to the typical scheduled maintenance for the majority of affected operators. The supplier of the parts kits reports that the lead time for kit delivery is 12 months from the date an operator places an order. This final rule provides operators with a grace period of 18 months from the effective date of this AD, which we deem adequate for acquiring the midspar fitting kits, performing the inspection, accomplishing any necessary corrective actions, and replacing the midspar fittings. However, under the provisions of paragraph (k) of this AD, we may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety. We have not changed this final rule regarding this issue.

Request To Clarify the Unsafe Condition

Boeing requested that the unsafe condition statement in the NPRM (79 FR 67379, November 13, 2014) be revised. The NPRM stated ''This condition could cause an unsafe separation of the engine and consequent wing fire.'' Boeing commented that the word ''consequent'' implied that the end result would always be a wing fire. Boeing suggested that the wording be changed to ''This condition could cause an unsafe separation of the engine and potential fire.''

We do not agree to revise the unsafe condition statement in this final rule. Where the unsafe condition states ''could result'' it is recognized that the loss of structural integrity, unsafe separation of the engine, and wing fire are possible outcomes in a chain of events. Furthermore, we frequently use ''consequent'' in unsafe condition statements when we state the end-level effect of the unsafe condition on an airplane. We have not changed this AD regarding this issue.

Request To Revise the Discussion Section of the NPRM (79 FR 67379, November 13, 2014)

Boeing requested that the term limit of validity (LOV) in the first paragraph of the Discussion section of the preamble of the NPRM (79 FR 67379, November 13, 2014) be removed because it is misleading. Boeing commented that the term LOV has implications associated with it which may not be intended. Boeing suggested that the term ''service objective'' be used instead of LOV.

We agree that the unsafe condition addressed by this final rule is not related to an airplane reaching its LOV. The actions in this final rule are necessary to prevent loss of the structural integrity of the midspar fitting as the result of stress corrosion and fatigue at the lug and fatigue at the tangs. These actions do not directly support an airplane reaching its LOV. The Discussion section from the preamble of an NPRM is not repeated in a final rule so no change is necessary. We have revised paragraph (e) of this AD by removing the statement ''This AD was prompted by certain mandated programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program.'' We replaced that statement with ''This AD was prompted by reports of cracked midspar fittings on the inboard and outboard nacelle struts.''

Request To Clarify Replacement Requirements

Rafael Veas stated that two midspar fittings had already been replaced on an airplane at his facility. This commenter asked if all four midspar fittings have to be replaced, or only the two remaining midspar fittings that have not yet been replaced.

We agree to clarify the replacement requirements of this final rule. Paragraph (f) of this AD states ''Comply with this AD within the compliance times specified, unless already done.'' The two midspar fittings that have already been replaced do not have to be replaced again if they have been replaced in accordance with the procedures mandated by this AD. For these two midspar fittings the repetitive inspection and replacement intervals should be calculated from the most recent midspar fitting replacement. We have not changed this final rule regarding this issue.

Request To Revise the Cost Estimate

The AFLCMC mentioned that the cost and labor estimates presented in the preamble of the NPRM (79 FR 67379, November 13, 2014) are significantly lower than the actual costs. The commenter stated that accomplishment of the actions proposed in the NPRM would require a set of ready-for-installation engine pylons, removal of all four engines, inspections, and reassembly, and the estimated cost would be over $1,000,000 per airplane. We infer that the commenter requested that the estimated costs be revised.

After considering the data presented by the commenter, we agree that the cost and labor estimates referenced in the NPRM (79 FR 67379, November 13, 2014) are significantly lower than the actual costs. The cost estimate in the NPRM was for replacement of the midspar fitting for one engine, and the proposed requirement in the NPRM was for replacement of the midspar fitting for all four engines. The estimated cost information in this final rule has been revised to indicate this higher amount. We disagree, however, with the commenter's estimate that the cost will be over $1,000,000 per airplane. Our cost estimate includes the work hours and parts cost for the required midspar fitting replacements, but does not include costs associated with maintenance scheduling or a set of ready-for-installation engine pylons.

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 (79 FR 67379, November 13, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 67379, November 13, 2014).

Related Service Information Under 1 CFR Part 51

We reviewed Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014. The service information describes procedures for repetitive inspections for cracking of the inboard and outboard midspar fittings of the nacelle struts and of the torque bulkhead, midspar chords, drag fitting, and front spar support, and related investigative and corrective actions; replacing the midspar fittings; and doing other specified actions. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section of this AD.

Costs of Compliance

We estimate that this AD affects 12 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
Inspections	214 work-hours × $85 per hour = $18,190 per pylon per inspection cycle.	$0	$72,760 (4 pylons per inspection cycle)	$873,120 per inspection cycle.
Replacement of midspar fitting.	18 work-hours × $85 per hour = $1,530 per pylon.	Up to $7,867	Up to $37,588 (1 fitting per pylon, 4 pylons total).	Up to $451,056.
Mid-interval inspections.	107 work-hours × $85 per hour = $9,095 per pylon per inspection cycle.	$0	$36,380 (4 pylons per inspection cycle)	$436,560 per inspection cycle.

We estimate the following costs to do any additional inspections that would be required based on the results of the inspections. We have no way of determining the number of aircraft that might need these inspections:

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Inspections	Up to 21 work-hours × $85 per hour = $1,785	$0	$1,785

We have received no definitive data that would enable us to provide cost estimates for the on-condition corrective 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

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):

2015–11–04 The Boeing Company: Amendment 39–18167; Docket No. FAA–2014–0756; Directorate Identifier 2014–NM–103–AD.

(a) Effective Date

This AD is effective July 6, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 707–100 long body, –200, –100B long body, and –100B short body series airplanes; Model 707–300, –300B, –300C, and –400 series airplanes; and Model 720 and 720B series airplanes; certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/Pylons.

(e) Unsafe Condition

This AD was prompted by reports of cracked midspar fittings on the inboard and outboard nacelle struts. We are issuing this AD to detect and correct cracking in the midspar fittings of the inboard and outboard nacelle struts, which could result in the loss of the structural integrity of the midspar fitting. This condition could cause an unsafe separation of the engine and consequent wing fire.

(f) Compliance

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

(g) Inspections of Nacelle Struts and Surrounding Structure and Replacement of Inboard and Outboard Midspar Fittings

At the applicable time specified in table 2 or table 3 of paragraph 1.E., ''Compliance,'' of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, except as required by paragraph (i)(1) of this AD: Do the inspections required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD, in accordance with part 2 or part 3, as applicable, of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, except as required by

paragraph (i)(2) of this AD. Before further flight, do all applicable related investigative and corrective actions, replace the inboard and outboard midspar fittings with new parts, and do other specified actions (including installing new bushings and oversize fasteners), in accordance with part 2 or part 3, as applicable, of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, except as required by paragraph (i)(2) of this AD. Repeat the inspections required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD thereafter at the applicable intervals specified in table 2 or table 3 of paragraph 1.E., ''Compliance,'' of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, except as required by paragraph (i)(1) of this AD.

(1) A detailed inspection and a high frequency eddy current inspection (HFEC) for cracks in the inboard and outboard midspar fittings of the nacelle struts.

(2) Open hole HFEC inspections for cracks in the torque bulkhead, midspar chords, drag fitting, and front spar support.

(3) A surface HFEC inspection of the front spar support for cracks.

(h) Mid-Interval Inspections and Replacement of Nacelle Strut Midspar Fittings

At the applicable time specified in table 4 or 5 of paragraph 1.E., ''Compliance,'' of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014: Do the inspections required by paragraphs (h)(1), (h)(2), and (h)(3) of this AD, in accordance with part 4 or part 5, as applicable, of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, except as required by paragraph (i)(2) of this AD. Do all applicable related investigative, corrective, and other specified actions (including installing new bushings and oversize fasteners) before further flight. Repeat the inspections required by paragraphs (h)(1), (h)(2), and (h)(3) of this AD thereafter at the applicable intervals specified in table 4 or 5 of paragraph 1.E., ''Compliance,'' of Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014. The threshold for the repetitive inspections required by paragraphs (h)(1), (h)(2), and (h)(3) of this AD is 1,500 flight cycles or 48 months, whichever occurs first, since the most recent midspar fitting replacement.

(1) A detailed inspection and a surface HFEC inspection for cracks in the inboard and outboard midspar fittings of the nacelle struts.

(2) An open hole HFEC inspection for cracks in the drag fitting and front spar support.

(3) A surface HFEC inspection for cracks in the front spar support.

(i) Exceptions to Service Information Specifications

(1) Where Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, specifies a compliance time ''after the Revision 6 date of this service bulletin,'' this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 2014, specifies to contact Boeing for appropriate action: Do corrective actions before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(j) Special Flight Permit

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles 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) of this AD. Information may be emailed to: *9-ANM-LAACO-AMOC-Requests@faa.gov.*

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, 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.

(l) Related Information

For more information about this AD, contact Chandra Ramdoss, Aerospace Engineer, Airframe Branch, ANM–120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712–4137; phone: 562–627–5239; fax: 562–627–5210; email: *chandraduth.ramdoss@faa.gov.*

(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 707 Alert Service Bulletin A3183, Revision 6, dated February 7, 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.* 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.

(4) 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.

(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 May 20, 2015.

John P. Piccola, Jr.,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2015–12858 Filed 5–28–15; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2014–0584; Directorate Identifier 2014–NM–092–AD; Amendment 39–18158; AD 2015–10–03]

RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2014–09–05, for certain Airbus Model A330–200 and –300 series airplanes, and Model A340–200 and –300 series airplanes. AD 2014–09–05 required repetitive inspections of certain sidestay upper cardan pins of the main landing gear (MLG) and associated nuts and retainer assemblies, and pin replacement if necessary. This AD was prompted by a determination that a previously optional measurement is necessary to address the identified unsafe condition. This new AD continues to require a detailed inspection for visible chrome of each affected MLG sidestay upper cardan pin, associated nuts, and retainer assembly, and pin replacement if needed, and adds new requirements for measuring cardan pin clearance dimensions (gap check), doing corrective actions, and reporting all findings. We are issuing this AD to detect and correct migration of the sidestay upper cardan pin, which could result in disconnection of the sidestay upper arm from the airplane structure, and could result in a landing