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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-2965; Directorate Identifier 2014-NM-227-AD; Amendment 39-18487; AD 2016-08-11]

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) 2012-17-13, which applied to certain The Boeing Company Model 707 airplanes, and Model 720 and 720B series airplanes. For certain airplanes, AD 2012-17-13 required using redefined flight cycle counts; determining the type of material of the horizontal stabilizer, rear spar, and upper and lower chords on the inboard and outboard ends of the rear spar; repetitively inspecting for cracking of the horizontal stabilizer components; and repairing or replacing the chord, or modifying chord segments made of 7079 aluminum, if necessary. For all airplanes, AD 2012-17-13 required inspecting certain structurally significant items, and repairing discrepancies if necessary. This new AD adds a requirement to replace all chord segments made of 7079 aluminum with new, improved chord segments made of 7075 aluminum. This AD was prompted by a determination that all chord segments made of 7079 aluminum must be replaced with new, improved chord segments made of 7075 aluminum. We are issuing this AD to detect and correct stress corrosion and potential early fatigue cracking in the horizontal stabilizer, which could result in reduced structural integrity of the horizontal stabilizer.

DATES: This AD is effective May 27, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 27, 2016.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of October 16, 2012 (77 FR 55681, September 11, 2012).

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; 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://www.regulations.gov> by searching for and locating Docket No. FAA-2015-2965.

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-2015-2965; 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 to supersede AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012) ("AD 2012-17-13"). AD 2012-17-13 applied to certain The Boeing Company Model 707 airplanes, and Model 720 and 720B series airplanes. The NPRM published in the Federal Register on July 30, 2015 (80 FR 45453) ("the NPRM"). The NPRM was prompted by a determination that all chord segments made of 7079 aluminum must be replaced with new, improved chord segments made of 7075 aluminum. The NPRM proposed to continue to require, for certain airplanes, using redefined flight cycle counts, determining the type of material of the horizontal stabilizer, rear spar, and upper and lower chords on the inboard and outboard ends of the rear spar; repetitively inspecting for cracking of the horizontal stabilizer components; and repairing or replacing the chord, or modifying chord segments made from 7079 aluminum, if necessary. The NPRM also proposed to continue to require, for all airplanes, inspecting certain structurally significant items, and repairing discrepancies if necessary. The NPRM proposed to add a requirement to replace all chord segments made of 7079 aluminum with new, improved chord segments made of 7075 aluminum. We are issuing this AD to detect and correct stress corrosion and potential early fatigue cracking in the horizontal stabilizer, which could compromise the structural integrity of the stabilizer.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Clarify Certain Language in Paragraph (i) of the Proposed AD

Boeing asked that we clarify the description of the affected components specified in paragraph (i) of the proposed AD, which is a restatement of paragraph (i) of AD 2012-17-13. Boeing stated that the intent of paragraph (i) of AD 2012-17-13 was to specify the inspection requirements for rear spar upper inboard chord segments made from 7075 aluminum. Boeing added that the restatement in paragraph (i) of the proposed AD specifies, "For all airplanes with horizontal stabilizer components made from 7075 . . ." and noted that this description could apply to any chord segment, not just the

inboard upper. Boeing asked that the description be clarified to specify "any horizontal stabilizer with a rear spar upper inboard chord segment made from 7075 aluminum, as determined during the inspection required by paragraph (h) of this AD."

We agree to clarify paragraph (i) of this AD. The inspection required by paragraph (i) of this AD must be done on upper chords made from 7075 aluminum that are on the inboard end of the rear spar, as specified in Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; and Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014; which are the appropriate sources of service information for accomplishing the required actions. We have revised paragraph (i) of this AD to clarify the inspection requirements. No additional action is necessary for operators that have already complied with paragraph (i) of this AD.

Request To Clarify Certain Language in Paragraph (j) of the Proposed AD

Boeing also asked that we clarify the language in the restatement of actions specified in paragraph (j) of the proposed AD in order to specify that the inspections in paragraph (i) of the proposed AD can only be deferred for 4,000 flight cycles if the upper inboard chord is replaced with a new chord. Boeing stated that changing paragraph (i) of the proposed AD ensures that it is clear that the inspection can only be deferred for 4,000 flight cycles if the upper inboard chord is replaced.

We agree with the commenter for the reason provided. We have changed paragraph (j) of this AD to specify "For airplanes on which the rear spar upper inner chord is replaced with a new chord:"

Request To Clarify Certain Language in Paragraph (q) of the Proposed AD

Boeing also asked that we clarify the language in the new actions specified in paragraph (q) of the proposed AD. Boeing stated that paragraph (j) of the proposed AD states when to resume the inspections after the chord is replaced. Boeing added that paragraph (i) of the proposed AD states the type of inspection and the repetitive inspection interval. Therefore, Boeing stated that paragraph (q) of the proposed AD should point to paragraph (i) of the proposed AD.

We agree to clarify paragraph (q) of this AD. As noted above, paragraph (j) of the this AD specifies inspecting the new chord within 4,000 flight cycles after the chord replacement, as required by paragraph (i) of this AD, and repeating the inspections thereafter at the times specified in paragraph (i) of this AD. Therefore, we have included similar language in paragraph (q) of this AD.

Request To Clarify Service Information References

In addition, Boeing asked that we include 707 in the title for "Boeing Service Bulletin 3381," as identified in paragraphs (k) and (l) of the proposed AD, to be consistent with all the other service information references in the NPRM.

We agree with the commenter for the reasons provided. We have changed the service information references in paragraphs (k)(3)(i) and (l) of this AD to specify "Boeing 707 Service Bulletin 3381."

Boeing also asked that we change the semi-colon (located between the service information references) in paragraph (k)(3)(ii) of the proposed AD to a comma, because it breaks up the sentence in an unintended way.

We do not agree to change the semi-colon in paragraph (k)(3)(ii) of this AD. In ADs, we use a semi-colon to separate service information references, except in cases where the semi-colon between service information might cause confusion, e.g., a sentence that already uses semi-colons between text other than the service information. The semi-colon in paragraph (k)(3)(ii) of this AD does not change the intent of that paragraph. We have not changed this AD in this regard.

Conclusion

We reviewed the available data 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 for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

We reviewed Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. The service information describes procedures for incorporating a new cycle counting procedure, determining the material for the horizontal stabilizer rear spar chord segment, inspecting for stress corrosion cracking and fatigue cracking, repair, and replacing all chord segments made of 7079 aluminum with new, improved chord segments made of 7075 aluminum. 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 10 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Table—Estimated Costs

Action	Work hours	Parts	Cost per product	Fleet cost
Retained inspections from AD 2012-17-13	Up to 32 work-hours × \$85 per hour = up to \$2,720 per inspection cycle	\$0	Up to \$2,720 per inspection cycle	Up to \$27,200 per inspection cycle.
Replacement [new action]	500 work-hours × \$85 per work-hour = \$42,500 per chord	Up to \$228,000 per chord	Up to \$2,705,000 (up to 10 chords per airplane) ¹	Up to \$27,050,000. ²

¹ The parts for the modification could cost up to \$2.28 million per airplane, depending on whether only one operator is ordering the parts or multiple operators. The parts cost will go down if multiple operators order parts at the same time.

² The number of chords which must be replaced on each specific airplane varies.

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) 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), and adding the following new AD:



2016-08-11 The Boeing Company: Amendment 39-18487; Docket No. FAA-2015-2965; Directorate Identifier 2014-NM-227-AD.

(a) Effective Date

This AD is effective May 27, 2016.

(b) Affected ADs

This AD replaces AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012).

(c) Applicability

This AD applies to The Boeing Company airplanes, certificated in any category; identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model 707 airplanes identified in Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(2) Model 720 and 720B series airplanes identified in Boeing 707 Alert Service Bulletin A3516, dated April 4, 2008.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Unsafe Condition

This AD was prompted by a determination that all chord segments made of 7079 aluminum must be replaced with new, improved chord segments made of 7075 aluminum. We are issuing this AD to detect and correct stress corrosion and potential early fatigue cracking in the horizontal stabilizer, which could result in reduced structural integrity of the horizontal stabilizer.

(f) Compliance

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

(g) Retained Flight Cycle Counting Procedure, With Revised Service Information

This paragraph restates the requirements of paragraph (g) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. Flight cycles, as used in this AD, must be counted as defined in the service information identified in paragraph (g)(1), (g)(2), or (g)(3) of this AD.

(1) Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007 (for Model 707 airplanes).

(2) Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014 (for Model 707 airplanes).

(3) Boeing 707 Alert Service Bulletin A3516, dated April 4, 2008 (for Model 707 airplanes, and Model 720 and 720B series airplanes).

(h) Retained Determination of Material of the Components of the Horizontal Stabilizer, With Revised Service Information

This paragraph restates the actions required by paragraph (h) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. For airplanes identified in Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014: At the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD, determine the type of material of the horizontal stabilizer, rear spar, upper chords, and lower chords on the inboard and outboard ends of the rear spar, in accordance with Part 2 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(1) Within 180 days after October 16, 2012 (the effective date of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012)).

(2) Before further flight after any horizontal stabilizer is replaced after October 16, 2012.

(i) Retained Repetitive Inspections of 7075 Aluminum Components, With Revised Service Information and Affected Component Description

This paragraph restates the actions required by paragraph (i) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information and affected component description. For airplanes with any horizontal stabilizer with a rear spar upper inboard chord segment made from 7075 aluminum, as determined during the inspection required by paragraph (h) of this AD: Within 180 days after October 16, 2012 (the effective date of AD 2012-17-13), and before further flight after any replacement of the horizontal stabilizer, do a special detailed inspection for cracking of the upper chord on the inboard end of the rear spar on both the left and right side horizontal stabilizers, from stabilizer station -13.179 to 92.55, in accordance with Part 3 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Repeat the inspections thereafter at intervals not to exceed 500 flight cycles, and before further flight after any replacement of the horizontal stabilizer, except as provided by paragraph (j) of this AD. If any cracking is found, before further flight, either repair the cracking in accordance with Part 3 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, except as required by paragraph (n) of this AD; or replace the chord with a new chord, in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(j) Retained Repetitive Inspections on Airplanes With Replaced Chord, With Revised Service Information and Revised Language for Affected Airplanes

This paragraph restates the actions required by paragraph (j) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information and revised language for affected airplanes. For airplanes on which the rear spar upper inner chord is replaced with a new chord in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014: Within 4,000 flight cycles after the chord replacement, inspect the new chord, as required by paragraph (i) of this AD, and repeat the inspections thereafter at the times specified in paragraph (i) of this AD.

(k) Retained Repetitive Inspections of 7079 Aluminum Components, With Revised Service Information

This paragraph restates the actions required by paragraph (k) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. For airplanes with horizontal stabilizers that have components of the chords of the rear spar made from 7079 aluminum, as determined during the inspection required by paragraph (h) of this AD: Within 180 days after October 16, 2012 (the effective date of AD 2012-17-13), do the actions required by paragraphs (k)(1), (k)(2), and (k)(3) of this AD, and repeat those actions at the applicable intervals specified in paragraphs (k)(1), (k)(2), and (k)(3) of this AD.

(1) Do a special detailed inspection for cracking of the upper chord of the inboard side of the rear spar of both the left and right side horizontal stabilizers from stabilizer station -13.179 to 92.55, in accordance with Part 3 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Repeat the inspection thereafter at intervals not to exceed 250 flight cycles or 180 days, whichever occurs first. If any cracking is found during any inspection required by this paragraph, before further flight, either repair the cracking, in accordance with Part 3 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, except as required by paragraph (n) of this AD; or replace the chord with a new chord, in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(2) Do a high frequency eddy current inspection for cracking of the web flanges of the upper and lower chords of the rear spar in the left and right side horizontal stabilizers from stabilizer stations 92.55 to 272.55, in accordance with Part 4 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Repeat the inspection thereafter at intervals not to exceed 1,000 flight cycles or 180 days, whichever occurs first. If any cracking is found during any inspection required by this paragraph, before further flight, do the actions specified in paragraph (k)(2)(i) or (k)(2)(ii) of this AD.

(i) Determine whether the cracking meets the limits specified in Part 4 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, and whether a previous repair has been done; determine if all 7079 upper and lower chord segments installed on the horizontal stabilizer have had the Part II, Group 1, Preventative Modification specified in Boeing 707 Service Bulletin 3356 done; and do all applicable repairs and modifications, in accordance with the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007' or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Do the actions required by this paragraph in accordance with Part 4 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, except as required by paragraph (n) of this AD. Do all applicable repairs and modifications before further flight.

(ii) Replace the chord with a new chord, in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(3) Do low frequency eddy current (LFEC) inspections for cracking of the forward skin flanges of the upper and lower chords of the rear spar in the left and right side horizontal stabilizers from stabilizer stations -13.179 to 272.55 (for lower chords) and 92.55 to 272.55 (for upper chords), in accordance with Part 5 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Repeat the inspections thereafter at intervals not to exceed 1,000 flight cycles or 180 days, whichever occurs first. If any cracking is found during any inspection required by this

paragraph, before further flight, do the actions specified in either paragraph (k)(3)(i) or paragraph (k)(3)(ii) of this AD.

(i) Repair any cracking, determine whether all 7079 upper and lower chord segments installed on the horizontal stabilizer have had the Part II—Preventative Modification specified in Boeing 707 Service Bulletin 3381 done, and do all applicable modifications, in accordance with the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Do the actions required by this paragraph in accordance with Part 5 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, except as required by paragraph (n) of this AD. Do all applicable modifications before further flight.

(ii) Replace the chord with a new chord, in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(l) Retained Modification/Chord Replacement, With Revised Service Information

This paragraph restates the actions required by paragraph (l) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. For airplanes identified in Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, with horizontal stabilizers that have rear spar chord components made from 7079 aluminum and have not had embodied the modification of Part II of Boeing 707 Service Bulletin 3381, dated July 25, 1980; or Boeing 707 Service Bulletin 3381, Revision 1, dated July 31, 1981: Before further flight after determining the type of material in accordance with paragraph (h) of this AD, modify all 7079 chord segments installed on the horizontal stabilizer, in accordance with Part 5 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014; or replace the chord, in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014.

(m) Retained Supplemental Structural Inspection Document Inspections

This paragraph restates the actions required by paragraph (m) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012). For all airplanes: Within 180 days or 1,000 flight cycles after October 16, 2012 (the effective date of AD 2012-17-13), whichever occurs first, do the inspections of the applicable structurally significant items specified in and in accordance with the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3516, dated April 4, 2008. If any cracking is found, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (r) of this AD. The inspections required by AD 85-12-01 R1, Amendment 39-5439 (51 FR 36002, October 8, 1986), are still required, except, as of October 16, 2012 (the effective date of AD 2012-17-13), the flight cycle interval for the repetitive inspections specified in paragraph 1.E., "Compliance," of Boeing 707 Alert Service Bulletin A3516, dated April 4, 2008, must be counted in accordance with the requirements of paragraph (g) of this AD.

(n) Retained Exception to Certain Service Information: Contacting FAA for Crack Repair

This paragraph restates the actions required by paragraph (n) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. If any cracking is found during any inspection required by this AD, and Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October

10, 2014, specifies to contact Boeing for appropriate action: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (r) of this AD.

(o) Retained Exception to Certain Service Information: Nondestructive Test Compliance Procedures

This paragraph restates the requirements of paragraph (o) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. Where Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, specifies that operators "refer to" nondestructive test (NDT) procedures, the procedures must be done in accordance with the service information identified in paragraphs (o)(1), (o)(2), and (o)(3) of this AD, as applicable.

(1) Figure 20, "Electrical Conductivity Measurement for Aluminum," of Subject 51-00-00, "Structures-General," of Part 6—Eddy Current, of the Boeing 707/720 Nondestructive Test Manual, Document D6-48023, Revision 118, dated July 15, 2011.

(2) Subject 55-10-07, "Horizontal Stabilizer," of Part 6—Eddy Current, of the Boeing 707/720 Nondestructive Test Manual, Document D6-48023, Revision 118, dated July 15, 2011.

(3) Subject 51-01-00, "Orientation and Preparation for Testing" of Part 1—General, of the Boeing 707/720 Nondestructive Test Manual, Document D6-48023, Revision 118, dated July 15, 2011.

(p) Retained Parts Installation Prohibition With Revised Service Information

This paragraph restates the parts installation prohibition required by paragraph (p) of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), with revised service information. As of October 16, 2012 (the effective date of AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012)), no person may install any horizontal stabilizer assembly with any chord segment having a part number other than that identified in paragraph 2.C.2. of Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007; or Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014, on any airplane.

(q) New Replacement of 7079 Aluminum Components

Within 48 months after the effective date of this AD: Replace all 7079 aluminum chord segments of the upper and lower chords installed on the horizontal stabilizer with 7075 aluminum chord segments, in accordance with Part 6 of the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3515, Revision 1, dated October 10, 2014. Within 4,000 flight cycles after accomplishing the replacements required by this paragraph, inspect the new chord, as required by paragraph (i) of this AD, and repeat the inspections thereafter at the times specified in paragraph (i) of this AD.

(r) 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 (s) 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, 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, Los Angeles 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) AMOCs approved for AD 2012-17-13, Amendment 39-17176 (77 FR 55681, September 11, 2012), are approved as AMOCs for the corresponding provisions of this AD.

(s) 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.

(t) 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 A3515, Revision 1, dated October 10, 2014.

(ii) Reserved.

(3) The following service information was approved for IBR on October 16, 2012 (77 FR 55681, September 11, 2012).

(i) Boeing 707 Alert Service Bulletin A3515, dated December 19, 2007.

(ii) Boeing 707 Alert Service Bulletin A3516, dated April 4, 2008.

(iii) Subject 51-00-00, "Structures-General," Figure 20, "Electrical Conductivity Measurement for Aluminum," of Part 6—Eddy Current, of the Boeing 707/720 Nondestructive Test Manual, Document D6-48023, Revision 118, dated July 15, 2011. The revision level of this document is identified on only the manual revision Transmittal Sheet.

(iv) Subject 51-01-00, "Orientation and Preparation for Testing" of Part 1—General, of the Boeing 707/720 Nondestructive Test Manual, Document D6-48023, Revision 118, dated July 15, 2011. The revision level of this document is identified on only the manual revision Transmittal Sheet.

(v) Subject 55-10-07, "Horizontal Stabilizer," of Part 6—Eddy Current, of the Boeing 707/720 Nondestructive Test Manual, Document D6-48023, Revision 118, dated July 15, 2011. The revision level of this document is identified on only the manual revision Transmittal Sheet.

(4) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>.

(5) 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.

(6) 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>.

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