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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-22510; Directorate Identifier 2004-NM-32-AD; Amendment 39-14600; AD 2006-10-16]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747 Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is superseding two existing airworthiness directives (ADs); one AD is applicable to all Boeing Model 747 airplanes and the other AD is applicable to certain Boeing Model 747 airplanes. The first AD currently requires repetitive inspections for cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord, and repair if necessary. The other AD currently requires repetitive inspections for cracking of the upper skin of the outboard and center sections of the horizontal stabilizer and the rear spar structure, hinge fittings, terminal fittings, and splice plates; and repair if necessary. This new AD adds, for certain airplanes, repetitive inspections for cracking of the outboard and center sections of the horizontal stabilizer and repair if necessary. For certain other airplanes, this new AD adds a detailed inspection to determine the type of fasteners, related investigative actions, and repair if necessary. This new AD also revises the compliance times for certain inspections and adds alternative inspections for cracking of the upper skin of the center section and rear spar upper chord. This AD results from reports of cracking in the outboard and center section of the aft upper skin of the horizontal stabilizer, the rear spar chord, rear spar web, terminal fittings, and splice plates; and a report of fractured and cracked steel fasteners. We are issuing this AD to detect and correct this cracking, which could lead to reduced structural capability of the outboard and center sections of the horizontal stabilizer and could result in loss of control of the airplane.

DATES: This AD becomes effective June 21, 2006.

On July 15, 2003 (68 FR 38583, June 30, 2003), the Director of the Federal Register approved the incorporation by reference of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003.

On April 3, 2002 (67 FR 12464, March 19, 2002), the Director of the Federal Register approved the incorporation by reference of Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002.

ADDRESSES: You may examine the AD docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC.

Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Nicholas Kusz, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6432; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the airworthiness directive (AD) docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section.

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2002-06-02, amendment 39-12678 (67 FR 12464, March 19, 2002), and AD 2003-13-09, amendment 39-13209 (68 FR 38583, June 30, 2003). AD 2002-06-02 applies to all Boeing Model 747 airplanes; AD 2003-13-09 applies to certain Boeing Model 747 airplanes. That NPRM was published in the Federal Register on September 26, 2005 (70 FR 56145). That NPRM proposed to supersede AD 2002-06-02 to continue to require repetitive inspections for cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord, and repair, if necessary. That NPRM also proposed to supersede AD 2003-13-09 to continue to require repetitive inspections for cracking of the upper skin of the outboard and center sections of the horizontal stabilizer and the rear spar structure, hinge fittings, terminal fittings, and splice plates; and repair if necessary. That NPRM also proposed, for certain airplanes, to add repetitive inspections for cracking of the horizontal stabilizer center and outboard section, and repair if necessary. For certain other airplanes, that NPRM proposed to add a detailed inspection to determine if fasteners are Maraging or H-11 steel fasteners, related investigative actions, and corrective action if necessary. That NPRM also proposed to revise the compliance times for certain inspections and add alternate high frequency eddy current (HFEC) inspections for cracking of the upper skin of the center section and rear spar upper chord.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments that have been received on the NPRM.

Request To Clarify Instructions in Paragraph (g)

Boeing asks that paragraph (g) of the NPRM be clarified to direct operators to the applicable section of the Work Instructions in Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003 (referenced in the NPRM as the appropriate source of service information for

accomplishing the required actions). We agree with Boeing and have clarified paragraphs (g), (g)(1), and (g)(2) of this AD accordingly.

Request To Change Paragraphs (f)(1) and (f)(2)

Boeing also asks that we change paragraphs (f)(1) and (f)(2) of the NPRM to require accomplishing the inspections in accordance with Part 1 of the Work Instructions of Revision 1 of the alert service bulletin, instead of specifying paragraph (f) of the NPRM. Boeing states that this change will make the inspection methods consistent with the inspection intervals in paragraph (f) and Revision 1 of the alert service bulletin.

We acknowledge Boeing's concern, and we agree that the inspection must be accomplished in accordance with Part 1 of the Work Instructions; however, paragraph (f) of this AD already requires that the inspections be accomplished as of the effective date of this AD in accordance with Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003. Since paragraphs (f)(1) and (f)(2) of this AD require that the repetitive inspections be accomplished per paragraph (f); we have made no change to the AD in this regard.

Request To Change Paragraph (i)

Boeing also asks that we change paragraph (i) of the NPRM to require accomplishing the inspections in accordance with Part 4 of the Work Instructions of Revision 1 of the alert service bulletin. Boeing states that this change will direct operators to the correct paragraph in the service bulletin.

We acknowledge Boeing's concern and we agree that the inspection must be accomplished in accordance with Part 4 of the Work Instructions of Revision 1 of the alert service bulletin. However, paragraph (i) of this AD requires that the inspections be accomplished per paragraph (g)(2) of this AD, which identifies accomplishing the inspections per Part 4 of the Work Instructions of Revision 1 of the alert service bulletin. Therefore, it is not necessary to restate those requirements in paragraph (i). We have made no change to the AD in this regard.

Request To Change Paragraph (k)

In addition, Boeing asks that we change paragraph (k) of the NPRM to add the following: "If any bolt is cracked or fractured, high frequency eddy current (HFEC) inspect the bolt hole and replace the bolt, in accordance with Part 5 of the Work Instructions of Revision 1 of the alert service bulletin." Boeing states that the NPRM contains no instructions for replacing cracked or broken bolts, and reinstallation of those bolts could result in overloaded adjacent bolts.

We do not agree with Boeing that a change is necessary. Paragraph (k) of this AD provides instructions for repetitive inspections for magnetic fasteners that are not cracked or fractured. It would not be appropriate to combine the requirements for bolts that are not cracked or fractured, as specified in paragraph (k), with those for cracked or fractured bolts. Paragraph (j) of this AD provides instructions for inspecting for any cracked or fractured magnetic fastener. Paragraph (j) specifies that "corrective action" must be accomplished by doing all the actions specified in Part 5 of the Work Instructions of Revision 1 of the alert service bulletin. Part 5, Step 1.l., describes procedures for open hole HFEC inspections of the bolt hole, and replacement of the bolt. Therefore, we have made no change to the AD in this regard.

Request To Change Paragraph (n)

Boeing also asks that we change paragraph (n) of the NPRM to allow a grace period for replacing H-11 (magnetic) or Maraging steel bolts. Boeing states that operators accomplishing

magnetic and fluorescent particle inspections of H-11 or Maraging steel bolts would be prohibited from re-installing undamaged H-11 or Maraging steel bolts. Boeing adds that paragraph (n) of the NPRM conflicts with paragraph (k) of the NPRM, which allows repeat inspections of H-11 or Maraging steel bolts. Boeing notes that operators accomplishing magnetic and fluorescent particle inspections of H-11 or Maraging steel bolts, or open hole HFEC inspections of Zone B, would be unable to re-install undamaged H-11 or Maraging steel bolts. Operators would be required to install Inconel bolts within 12 months after the effective date of the AD (for Zone B inspections), or within 18 months after the effective date of the AD (for Zone C inspections). H-11 or Maraging steel bolts were originally installed on 460 airplanes that are currently operating, and Boeing is unable to supply 460 bolt kits within a 12 to 18 month period. Boeing adds that there are currently no bolt kits in stock, and only 3 bolt kits scheduled for delivery; therefore, the requirements in paragraph (n) could ground up to 460 airplanes. In addition, operators accomplishing ultrasonic inspections of H-11 or Maraging steel bolts per the Boeing 747 Nondestructive Test Manual D6-7171, Part 4, Chapter 51-00-00, will require bolt standards with identical diameter and grip lengths as the bolts installed on the airplane. These bolt standards are not readily available.

We acknowledge Boeing's concern, and we agree that there would be a hardship on operators if we required replacement of bolts when they were unable to obtain spare parts. However, we have determined that a shortage of parts is not a concern since this AD does not require removal of H-11 bolts for inspection. The only bolts that this AD requires replacing are those that are found cracked or that an operator elects to replace. Although paragraph (n) of this AD does not allow re-installation of a non-cracked H-11 or Maraging steel bolt, that paragraph does not require removal of the bolt in the first place. Instead, paragraphs (j) and (k) of this AD require inspections of the magnetic bolts in accordance with Part 5 of the Work Instructions of Revision 1 of the alert service bulletin. Step 1.j. of Part 5 provides the option of removing the bolt or leaving the bolt in place and accomplishing an ultrasonic inspection. Therefore, there is no hardship for operators since they may choose to leave the bolt in place and accomplish an ultrasonic inspection. If no cracking is found, operators are allowed to repeat that inspection with the bolt in place as long as no cracking is found during any inspection. Therefore, we have made no change to the AD in this regard.

Request To Change Compliance Time in Paragraph (f)(1)

Boeing also asks that we change paragraph (f)(1) of the NPRM to add a 5,600-flight-hour cap to the compliance time for the initial inspection done after the effective date of the AD. Boeing states that this change will make the inspection methods consistent with the inspection intervals in paragraph (f) and with Revision 1 of the alert service bulletin.

We do not agree with Boeing. We did not add a 5,600-flight-hour cap to the compliance time for the initial inspection so that operators would be allowed to transition to the new interval if they were already accomplishing the repetitive inspections required by AD 2002-06-02. Certain requirements of that AD have been retained in this AD. After the initial inspection, operators will be limited to repeating the inspection within 1,000 flight cycles or 5,600 flight hours, whichever is first, which coincides with Revision 1 of the alert service bulletin. We have made no change to the AD in this regard.

Request To Extend Compliance Time in Paragraph (h)

Northwest Airlines (NWA) asks that we extend the compliance time for the initial inspection, as specified in paragraphs (h)(2)(i)(B) and (h)(2)(ii)(B) of the NPRM, from 12 to 18 months. NWA states that the most significant impact in the NPRM is the requirement to perform the paragraph (g) inspections within the initial inspection threshold specified in paragraphs (h)(2)(i)(B) and (h)(2)(ii)(B). NWA notes that the proposed thresholds differ significantly from those in AD 2003-13-09 (referenced in paragraph (h)(1)(ii) of the NPRM). NWA adds that 6 of its Model 747-200

airplanes may require inspections within 12 months from the effective date of a new adopted rule. NWA states that extending the compliance time to 18 months will allow accomplishment of the inspections during planned heavy maintenance C-check visits.

We do not agree with NWA. The 12-month compliance time in paragraphs (h)(2)(i)(B) and (h)(2)(ii)(B) is in the referenced service bulletin, but was not included in AD 2003-13-09 because it did not meet the criteria necessary to be included in an immediately adopted rule. AD 2003-13-09 included interim action which specified that we were considering a separate rulemaking action to address these inspections at a later date. We have determined that the compliance time, as proposed, represents the maximum interval of time allowable for the affected airplanes to continue to safely operate before the inspections are done. Since maintenance schedules vary among operators, there would be no assurance that the airplane would be inspected during that maximum interval of 18 months. In addition, the 12-month compliance time agrees with the manufacturer's service bulletin referenced in the AD. We have made no change to the AD in this regard.

Conclusion

We have carefully reviewed the available data, including the comments that have been received, and determined that air safety and the public interest require adopting the AD with the changes described previously. These changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

This AD affects about 1,087 Model 747 airplanes worldwide and affects about 227 airplanes of U.S. registry. The following table provides the estimated costs for U.S. operators to comply with this AD. The costs for the inspections are per inspection cycle.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Cost per airplane	Fleet cost
Zone A Detailed Inspection (required by AD 2002–06–02)	8	$65	$520	$118,040.
Zone A NDT Inspection, if done	10	65	650	Unknown.
Zone B NDT Inspection (required by AD 2003–13–09 for Groups 1, 2, and 3 airplanes)	8	65	520	Unknown.
Zone B Open-hole NDT Inspection (new proposed action for Groups 3, 4, and 5 airplanes; and for Groups 1, 2, and 3 airplanes, if done).	30	65	1,950	Unknown.
Zone C Maraging or H–11 Steel Fastener Inspection (new proposed action for Groups 1,2, and 3 airplanes).	8	65	520	Unknown.

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); and

(3) 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

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 Federal Aviation Administration (FAA) amends § 39.13 by removing amendment 39-12678 (67 FR 12464, March 19, 2002), and amendment 39-13209 (68 FR 38583, June 30, 2003), and by adding the following new airworthiness directive (AD):

2006-10-16 Boeing: Amendment 39-14600. Docket No. FAA-2005-22510; Directorate Identifier 2004-NM-32-AD.

Effective Date

(a) This AD becomes effective June 21, 2006.

Affected ADs

(b) This AD supersedes AD 2002-06-02 and AD 2003-13-09.

Applicability

(c) This AD applies to all Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes; certificated in any category.

Unsafe Condition

(d) This AD was prompted by reports of cracking in the outboard and center section of the aft upper skin of the horizontal stabilizer, the rear spar chord, rear spar web, terminal fittings, and splice plates; and a report of fractured and cracked steel fasteners. We are issuing this AD to detect and correct this cracking, which could lead to reduced structural capability of the outboard and center sections of the horizontal stabilizer and could result in loss of control of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Certain Requirements of AD 2002-06-02: To Be Done in Accordance With New Revision of the Service Bulletin

Repetitive Inspections for Zone A

(f) Before the accumulation of 24,000 total flight cycles, or within 90 days after April 3, 2002 (the effective date of AD 2002-06-02), whichever occurs later: Except as provided by paragraph (l) of this AD, "Optional High Frequency Eddy Current (HFEC) Inspections for Zone A," do a detailed inspection for cracking of the upper skin of the horizontal stabilizer center section and the rear spar

upper chord, in accordance with the Work Instructions and Figure 1 of Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002; or in accordance with Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003. (The inspection procedures include a detailed inspection for cracking of the upper horizontal skin and of the vertical and horizontal flanges of the rear spar upper chord.) As of the effective date of this AD, do the detailed inspection in accordance with Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003. Repeat the detailed inspection thereafter at the times specified in paragraphs (f)(1) and (f)(2) of this AD, as applicable.

Note 1: For the purposes of this AD, a detailed inspection is "an intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids, such as mirrors, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

(1) For airplanes on which the detailed inspection required by paragraph (a) of AD 2002-06-02 has been done before the effective date of this AD: Within 1,000 flight cycles after the last detailed inspection, do the detailed inspection specified in paragraph (f) of this AD and repeat the detailed inspection specified in paragraph (f) of this AD thereafter at intervals not to exceed 1,000 flight cycles or 5,600 flight hours, whichever comes first.

(2) For airplanes on which the detailed inspection required by paragraph (a) of AD 2002-06-02 has not been done before the effective date of this AD: After accomplishing the initial inspection, repeat the detailed inspection specified in paragraph (f) of this AD thereafter at intervals not to exceed 1,000 flight cycles or 5,600 flight hours, whichever comes first.

Requirements of AD 2003-13-09, With New Compliance Times Required by This AD

Repetitive Inspections for Zone B: Groups 1 Through 3

(g) For Groups 1, 2, and 3 airplanes identified in paragraph 1.A. Effectivity of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003: At the time specified in paragraph (h) of this AD, do the Zone B inspections, as required by either paragraph (g)(1) or (g)(2) of this AD, in accordance with Part 3 of the Work Instructions of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003, except as provided by paragraph (n) of this AD. Repeat the applicable inspection at the applicable time specified in Sheet 2 of Figure 1 of the service bulletin.

(1) Do nondestructive test (NDT) inspections for cracking of the upper skin of the outboard and center sections of the horizontal stabilizer and the rear spar structure, hinge fittings, terminal fittings, and splice plates, in accordance with Part 3 of the Work Instructions of the service bulletin. The inspections include an ultrasonic inspection of the outboard and center sections, rear spar upper chords under the hinge fitting halves, upper skins under the splice plates, and the rear spar webs behind the terminal fittings; a HFEC inspection of the terminal fitting around the fasteners; a low frequency eddy current inspection of the splice plates around the fasteners; a surface HFEC inspection of the rear spar upper chords in the radius area above the terminal fitting and the lower surface of the horizontal flange; and an HFEC inspection of the rear spar webs in the exposed area above the terminal fitting.

(2) In lieu of the inspections specified in paragraph (g)(1) of this AD: Do an alternate open hole HFEC inspection for cracking of the splice plates, terminal fittings, hinge fitting halves, rear spar upper chords, rear spar webs, and upper skins; and replace H-11 bolts with Inconel bolts; in accordance with Part 4 of the Work Instructions of the service bulletin, except as provided by paragraph (n) of this AD.

(h) For Groups 1, 2, and 3 airplanes identified in paragraph 1.A. Effectivity of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003: Do the inspections required by paragraph (g) of this AD at the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) At the later of the times specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD.

(i) Before the accumulation of 27,000 total flight cycles or 117,000 total flight hours, whichever is first.

(ii) Within 90 days after July 15, 2003 (the effective date of AD 2003-13-09).

(2) At the applicable times specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD.

(i) For Groups 1 and 3 airplanes identified in paragraph 1.A. Effectivity of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003: At the latest of the times specified in paragraphs (h)(2)(i)(A) and (h)(2)(i)(B) of this AD.

(A) Before the accumulation of 20,000 total flight cycles or 85,000 total flight hours, whichever is first.

(B) Within 12 months after the effective date of this AD.

(ii) For Group 2 airplanes identified in paragraph 1.A. Effectivity of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003: At the latest of the times specified in paragraphs (h)(2)(ii)(A) and (h)(2)(ii)(B) of this AD.

(A) Before the accumulation of 22,000 total flight cycles or 95,000 total flight hours, whichever is first.

(B) Within 12 months after the effective date of this AD.

Additional Requirements of This AD

Repetitive Inspections for Zone B: Groups 4 Through 6

(i) For Groups 4, 5, and 6 airplanes identified in paragraph 1.A. Effectivity of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003: At the later of the times specified in paragraphs (i)(1) and (i)(2) of this AD, do the Zone B inspections as specified in paragraph (g)(2) of this AD. Repeat the applicable inspection at the applicable time specified in Sheet 3 of Figure 1 of the service bulletin.

(1) Before the accumulation of 20,000 total flight cycles or 85,000 total flight hours, whichever is first.

(2) Within 12 months after the effective date of this AD.

Repetitive Inspections for Zone C: Groups 1 Through 3

(j) For Groups 1, 2, and 3 airplanes identified in paragraph 1.A. Effectivity of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003: Within 18 months after the effective date of this AD, do a detailed inspection to determine if fasteners common to the horizontal stabilizer outboard and center section upper chords at the hinge fitting halves and the splice plates are magnetic, related investigative actions (includes ultrasonic, magnetic particle, or fluorescent particle inspections for any cracked or fractured Maraging or H-11 steel fastener), and corrective actions by accomplishing all the actions specified in Part 5 of the Work Instructions of the service bulletin, except as provided by paragraph (n) of this AD.

(k) If, during the actions required by paragraph (j) of this AD, any fastener is found to be magnetic and is not cracked or fractured, repeat the related investigative actions and corrective actions specified in paragraph (j) of this AD at the time specified in Sheet 4 of Figure 1 of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003.

Optional High Frequency Eddy Current (HFEC) Inspections for Zone A

(l) In lieu of the detailed inspection specified in paragraph (f) of this AD: Do an HFEC inspection for cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord, in accordance with Part 2 of the Work Instructions of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003. Repeat the HFEC inspection thereafter at intervals not to exceed 2,700 flight cycles or 15,000 flight hours, whichever comes first.

Repair

(m) If any discrepancy (cracking or damage) is found during any inspection or related investigative action required by paragraphs (f), (g), (i), or (l) of this AD: Before further flight, repair in accordance with the Work Instructions of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003, except as provided by paragraph (n) of this AD. Where the service bulletin specifies to contact the manufacturer for appropriate action: Before further flight, repair according to a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or according to data meeting the certification basis of the airplane approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who 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.

Parts Installation

(n) As of the effective date of this AD, no person may install any Maraging or H-11 steel fasteners in the locations specified in this AD. Where Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003, specifies to install H-11 bolts (kept fasteners), this AD requires installation of Inconel bolts.

Alternative Methods of Compliance (AMOCs)

(o)(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.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

(3) AMOCs, approved previously per AD 2002-06-02 or AD 2003-13-09, are approved as AMOCs for the corresponding provisions of this AD, for the repaired area only.

Material Incorporated by Reference

(p) You must use Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002; or Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003; as applicable; to perform the actions that are required by this AD, unless the AD specifies otherwise.

(1) On July 15, 2003 (68 FR 38583, June 30, 2003), the Director of the Federal Register approved the incorporation by reference of Boeing Alert Service Bulletin 747-55A2050, Revision 1, dated May 1, 2003.

(2) On April 3, 2002 (67 FR 12464, March 19, 2002), the Director of the Federal Register approved the incorporation by reference of Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002.

(3) Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information. You may review copies at the Docket Management Facility, U.S.

Department of Transportation, 400 Seventh Street, SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at *http://dms.dot.gov*; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

Issued in Renton, Washington, on May 8, 2006.
Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 06-4541 Filed 5-16-06; 8:45 am]
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