



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2013-0364; Directorate Identifier 2011-NM-114-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede an existing airworthiness directive (AD) that applies to certain The Boeing Company Model 747 series airplanes. The existing AD currently requires inspection of the fuselage skin lap splice between body station (BS) 340 and BS 400 at stringers (S)-6L and S-6R, and repair, if necessary. Since we issued that AD, analysis results indicated that the protruding head fastener modification and related post-modification inspections currently required are not adequate to prevent cracking at the upper row of fasteners in the stringer 6 lap joint before the cracks reach a critical length. This proposed AD would add new repetitive inspections for cracking in the stringer 6 skin lap splice, which would terminate the existing inspections; and eventual modification of the lap splice, which would terminate the repetitive inspections; post-modification inspections; and corrective actions if necessary. This proposed AD would also add airplanes to the applicability. We are proposing this AD to detect and correct cracking at the upper row of fasteners in the stringer(s) 6 lap joint, which could result in a sudden loss of cabin pressurization and the inability of the fuselage to withstand failsafe loads.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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 review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: [bill.ashforth@faa.gov](mailto:bill.ashforth@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0364; Directorate Identifier 2011-NM-114-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

On October 25, 1990, we issued AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), for certain The Boeing Company Model 747 series airplanes. AD 90-23-14 superseded AD 85-17-05, Amendment 39-5123 (Docket No. 85-NM-36-AD; 50 FR 33334, August 19, 1985). AD 90-23-14 requires inspection of the fuselage skin lap splice between BS 340 and BS 400 at S-6L and S-6R, and repair if necessary. AD 90-23-14 resulted from the FAA’s determination to remove the crack repair deferral option permitted in AD 85-17-05. We

issued AD 90-23-14 to prevent a sudden loss of cabin pressurization and the inability of the fuselage to withstand failsafe loads.

**Actions Since Existing AD (AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990)) Was Issued**

Since we issued AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), analysis results have indicated that the post-modification inspections required by that AD for airplanes with an (optional) protruding head fastener modification are not adequate to prevent cracking at the upper row of fasteners in the stringer 6 lap joint before they reach a critical length.

We have also determined that the stretched upper deck (SUD) modified airplanes that were added in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, have a unique configuration at the S-6 lap splice in Section 41. This configuration was determined not to be equivalent to the improved configuration used after line number 603 in terms of fatigue life. This determination was made after the S-6 splice was re-evaluated to remove the protruding head fastener modification option, which was incorporated in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. For the SUD modified airplanes, inspections specified in Boeing Alert Service Bulletin 747-53A2809, dated June 18, 2009, are currently required by other ADs. In addition, the external doubler modification specified in Boeing Service Bulletin 747-53-2272, is currently required by other ADs. Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, therefore added the post-mod inspections for the SUD modified airplanes in lieu of revising the existing service information that is required by other ADs.

**Relevant Service Information**

We reviewed Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. For information on the procedures and compliance times, see

this service information at <http://www.regulations.gov> by searching for Docket No. FAA-2013-0364.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would retain the requirements of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990). This proposed AD would add new repetitive inspections for cracking in the stringer 6 skin lap splice, which would terminate the existing inspections; eventual modification of the lap splice, which would terminate the repetitive inspections; post-modification inspections; and corrective actions if necessary. This proposed AD would also add airplanes to the applicability. This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and the Service Information."

The phrase "related investigative actions" might be used in this proposed AD. "Related investigative actions" are follow-on actions that (1) are related to the primary actions, and (2) further investigate the nature of any condition found. Related investigative actions in an AD could include, for example, inspections.

In addition, the phrase "corrective actions" might be used in this proposed AD. "Corrective actions" are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

### **Differences Between the Proposed AD and the Service Information**

Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, specifies to contact the manufacturer for instructions on how to repair

certain conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been

approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

### **Change to Existing AD**

This proposed AD would retain certain requirements of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990). Since AD 90-23-14 was issued, the AD format has been revised, and certain paragraphs have been rearranged. As a result, the corresponding paragraph identifiers have changed in this proposed AD, as listed in the following table:

#### **Revised paragraph identifiers**

<b>Requirement in AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD;55 FR 46652, November 6, 1990)</b>	<b>Corresponding requirement in this proposed AD</b>
paragraph (A)	paragraph (g)
paragraph (B)	paragraph (h)
paragraph (C)	paragraph (i)
paragraph (D)	paragraph (j)

We have also added new paragraph (o)(3) to this proposed AD to clarify that if any cracking is found during any inspection required by this proposed AD, and Boeing Special Attention Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990, specifies to contact Boeing for appropriate action, this proposed AD would require repairing the crack using a method approved in accordance with the procedures specified in paragraph (q) of this proposed AD.

## Costs of Compliance

We estimate that this proposed AD affects 76 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained inspections from AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990)	8 work-hours X \$85 per hour = \$680 per inspection cycle	\$0	\$680 per inspection cycle	\$51,680 per inspection cycle
New proposed pre-modification inspections	8 work-hours X \$85 per hour = \$680 per inspection cycle	\$0	\$680 per inspection cycle	\$51,680 per inspection cycle
New proposed modification	204 work-hours X \$85 per hour = \$17,340	\$0	\$17,340	\$1,317,840
New proposed post-modification inspections	12 work-hours X \$85 per hour = \$1,020 per inspection cycle	\$0	\$1,020 per inspection cycle	\$77,520

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the 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.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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) 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), and adding the following new AD:

**The Boeing Company:** Docket No. FAA-2013-0364; Directorate Identifier 2011-NM-114-AD.

**(a) Comments Due Date**

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD supersedes AD 90-23-14, Amendment 39-6801 (55 FR 46652, November 6, 1990).

**(c) Applicability**

This AD applies to The Boeing Company Model 747-100, 747-100B, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by analysis results indicating that the protruding head fastener modification and related post-modification inspections currently required are not adequate to prevent cracking at the upper row of fasteners in the stringer (S)-6 lap joint before the cracks reach a critical length. We are issuing this AD to detect and correct

cracking at the upper row of fasteners in the S-6 lap joint, which could result in a sudden loss of cabin pressurization and the inability of the fuselage to withstand failsafe loads.

**(f) Compliance**

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

**(g) Retained Inspection for Unmodified Airplanes with Revised Service Information**

This paragraph restates the requirements of paragraph (A) of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), with revised service information. For airplanes identified in Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990, and that have not been modified as specified in Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990; In accordance with the schedule indicated below, perform a high frequency eddy current (HFEC) inspection of the fuselage lap joint for cracks between body station (BS) 340 and BS 400, or aft as far as the crew door, at stringer S-6L and S-6R, in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990; or Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. As of the effective date of this AD, only Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, may be used to accomplish the actions required by this paragraph.

(1) Inspection Schedule:

(i) Unless previously accomplished within the last 2,750 landings, perform the initial inspection within the next 250 landings after December 11, 1990 (the effective date of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990)), or prior to the accumulation of 10,000 landings after the modification, whichever occurs later.

(ii) Repeat the inspection thereafter at intervals not to exceed 3,000 landings.

(2) If cracks are found, repair prior to further flight, in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990; or Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. As of the effective date of this AD, only Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, may be used to accomplish the actions required by this paragraph.

**(h) Retained Inspection for Modified Airplanes with Revised Service Information**

This paragraph restates the requirements of paragraph (B) of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), with revised service information. For airplanes identified in Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990, and that have been modified as specified in Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990; In accordance with the schedule below, perform an HFEC inspection of the fuselage lap joint for cracks between BS 340 and BS 400, or aft as far as the crew door, at S-6L and S-6R, in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990, or Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. As of the effective date of this AD, use only Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, to accomplish the action required by this paragraph. Accomplishment of the actions required by paragraph (k) of this AD terminates the requirements of this paragraph.

(1) Inspection Schedule:

(i) Unless previously accomplished within the last 2,750 landings, perform the initial inspection within the next 250 landings after December 11, 1990 (the effective date of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990)), or prior to the accumulation of 10,000 landings after the modification, whichever occurs later.

(ii) Repeat the inspection thereafter at intervals not to exceed 3,000 landings.

(2) If cracks are found, repair prior to further flight, in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990; or Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. As of the effective date of this AD, only Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, may be used to accomplish the actions required by this paragraph.

**(i) Retained Landing Determination**

This paragraph restates the provisions of paragraph (C) of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), with compliance time limitation. For purposes of complying with paragraphs (g) and (h) of this AD, the number of landings may be determined to be equal to the number of pressurization cycles where the cabin pressure differential was greater than 1.5 pounds per square inch (psi); After the effective date of this AD, the 1.5 psi cabin pressure differential is not allowed.

**(j) Retained Inspection Adjustment Factor**

This paragraph restates the requirements of paragraph (D) of AD 90-23-14, Amendment 39-6801 (55 FR 46652, November 6, 1990) with compliance time limitation. For Model 747SR airplanes only: Based on a continued mixed operation of lower cabin differentials, the initial inspection thresholds and the repetitive inspection intervals specified in paragraphs (g) and (h) of this AD may be multiplied by a 1.2 adjustment factor; After the effective date of this AD, the 1.2 adjustment factor is not allowed.

**(k) New Inspections: Groups 1 Through 5 Airplanes**

For airplanes in Groups 1 through 5, as identified in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010: At the time specified in Table 1 of paragraph 1.E., “Compliance,” of Boeing Special Attention

Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, except where Table 1 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, refers to a compliance time of 250 flight cycles after December 11, 1990 (the effective date of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990)), the compliance time in this AD is 250 flight cycles after the effective date of this AD; do external detailed and HFEC inspections for cracks in the stringer 6 skin lap splice, and do all applicable corrective actions, as applicable; in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, except as required by paragraph (o) of this AD. Do all applicable corrective actions at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. Accomplishment of the actions required by this paragraph terminates the requirements of paragraphs (g) and (h) of this AD.

**(l) New Repetitive Pre-modification Inspections: Groups 1 Through 5 Airplanes**

For airplanes in Groups 1 through 5, as identified in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010: Repeat the inspections required by paragraph (k) of this AD at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, until accomplishment of the modification required by paragraph (m) of this AD.

**(m) New Modification: Groups 1 Through 5 Airplanes**

(1) For airplanes in Groups 1 through 5, as identified in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, on which the structural repair manual (SRM) repair specified in Part 1 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated

September 9, 2010, has not been done: Before the accumulation of 20,000 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever occurs later, install the doubler modification, and do all applicable related investigative and corrective actions, in accordance with Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. All applicable related investigative and corrective actions must be done before further flight. Compliance with the requirements of this paragraph terminates the requirements of paragraphs (k) and (l) of this AD.

(2) For airplanes in Groups 1 through 5, as identified in Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, on which the SRM repair specified in Part 1 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, has been done: Within 3,000 flight cycles after accomplishing the SRM repair or within 1,000 flight cycles after the effective date of this AD, whichever occurs later, install the doubler modification, and do all applicable related investigative and corrective actions, in accordance with Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. All applicable related investigative and corrective actions must be done before further flight. Compliance with the requirements of this paragraph terminates the requirements of paragraphs (k) and (l) of this AD.

**(n) New Repetitive Post-modification Inspections: Modified Airplanes**

For airplanes modified as specified in Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, at the applicable time specified in Table 3 or 4 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010: Do detailed and eddy current

inspections to detect cracking of the skin, frames, and tear straps, as applicable, in accordance with Part 4 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010. If any crack is found, repair before further flight using a method approved in accordance with the procedures specified in paragraph (q) of this AD. Repeat the applicable inspections thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010.

**(o) Exceptions to Service Information Specifications**

(1) If any cracking is found during any inspection required by this AD, and Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010; specifies to contact Boeing for appropriate action: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (q) of this AD.

(2) Although Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(3) As of the effective date of this AD, if any cracking is found during any inspection required by this AD, and Boeing Special Attention Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990, specifies to contact Boeing for appropriate action: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (q) of this AD.

**(p) Credit for Previous Actions**

This paragraph provides credit for the repairs and doubler modifications required by paragraphs (k) and (m) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraphs (p)(1)

through (p)(4) of this AD. Post-modification inspections must continue, as required by paragraph (n) of this AD.

(1) Boeing Service Bulletin 747-53-2253, dated December 14, 1984, which is not incorporated by reference in this AD.

(2) Boeing Service Bulletin 747-53-2253, Revision 1, dated January 25, 1990, which is not incorporated by reference in this AD.

(3) Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990.

(4) Boeing Service Bulletin 747-53-2253, Revision 3, dated March 24, 1994, which is not incorporated by reference in this AD.

**(q) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to:

[9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously in accordance with AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), are approved as AMOCs for the corresponding provisions of this AD:

(5) AMOCs approved previously for the ADs specified in paragraphs (q)(5)(i) through (q)(5)(vi) of this AD, for repair and doubler modification installations in the area affected by Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010, are approved as AMOCs for the actions specified in paragraphs (g), (h), (k), (l), and (m) of this AD. The post-modification inspections required by paragraph (n) of this AD must be accomplished.

(i) AD 2010-10-05, Amendment 39-16284 (75 FR 27424, May 17, 2010).

(ii) AD 2010-09-03, Amendment 39-16268 (75 FR 22514, April 29, 2010).

(iii) AD 2009-04-16, Amendment 39-15822 (74 FR 8737, February 26, 2009).

(iv) AD 91-11-01, Amendment 39-6997 (56 FR 22306, May 15, 1991).

(v) AD 90-06-06 Amendment 39-6490 (55 FR 8374, March 7, 1990).

(vi) AD 2006-24-02 Amendment 39-14831 (71 FR 67445, November 22, 2006).

**(r) Related Information**

(1) For more information about this AD, contact Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: [bill.ashforth@faa.gov](mailto:bill.ashforth@faa.gov).

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the 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.

Issued in Renton, Washington, on April 24, 2013.

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

[FR Doc. 2013-10481 Filed 05/02/2013 at 8:45 am; Publication Date: 05/03/2013]