

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0364; Directorate Identifier 2011-NM-114-AD; Amendment 39-17562; AD 2013-16-24]

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) 90-23-14 for certain The Boeing Company Model 747 series airplanes. AD 90-23-14 required inspections 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. This new AD adds new repetitive inspections for cracking in the S-6 skin lap splice, which terminates the inspections required by AD 90-23-14; eventual modification of the lap splice, which terminates the repetitive inspections; post-modification inspections; and corrective actions if necessary. This AD also adds airplanes to the applicability. This AD was prompted by a report of cracks up to 18.5 inches that were found at S-6L and S-6R on several airplanes, and subsequent analysis results that indicated that the protruding head fastener modification and related post-modification inspections required by AD 90-23-14 are not adequate to prevent cracking at the upper row of fasteners in the 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.

DATES: This AD is effective October 9, 2013.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of October 9, 2013.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may 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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document 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: 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.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), ("AD 90-23-14"). AD 90-23-14 applied to the specified products. The NPRM published in the Federal Register on May 3, 2013 (78 FR 25898). The NPRM proposed to continue to require inspections of the fuselage skin lap splice between BS 340 and BS 400 at S-6L and S-6R, and repair if necessary. The NPRM also proposed to add new repetitive inspections for cracking in the stringer 6 skin lap splice, which would terminate the inspections required by AD 90-23-14; eventual modification of the lap splice, which would terminate the new repetitive inspections; post-modification inspections; and corrective actions if necessary. The NPRM also proposed to add airplanes to the applicability.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 25898, May 3, 2013) or on the determination of the cost to the public.

Clarification

We have revised the wording of paragraphs (i) and (j) of this AD to clarify that certain compliance time adjustment factors were allowed in AD 90-23-14 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), but are no longer allowed in this new AD.

Conclusion

We reviewed the relevant 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 (78 FR 25898, May 3, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 25898, May 3, 2013).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 76 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

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



2013-16-24 The Boeing Company: Amendment 39-17562; Docket No. FAA-2013-0364; Directorate Identifier 2011-NM-114-AD.

(a) Effective Date

This AD is effective October 9, 2013.

(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 a report of cracks up to 18.5 inches that were found at stringer (S)-6L and S-6R on several airplanes, and subsequent analysis results that indicated that the protruding head fastener modification and related post-modification inspections required by AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990) are not adequate to prevent cracking at the upper row of fasteners in the 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, including Addendum, Revision 2, dated March 29, 1990, and that have not been modified as specified in Boeing Service Bulletin 747-53-2253, including Addendum, Revision 2, dated March 29, 1990; in accordance with the schedule indicated in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD, 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, including Addendum, 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) The inspection schedule is specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD.

(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, including Addendum, 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, including Addendum, Revision 2, dated March 29, 1990, and that have been modified as specified in Boeing Service Bulletin 747-53-2253, including Addendum, Revision 2, dated March 29, 1990: In accordance with the schedule specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD, 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, including Addendum, 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) The inspection schedule is specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD.

(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, including Addendum, 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 a compliance time limitation. On or before the effective date of this AD: 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, every landing must be used for compliance with paragraphs (g) and (h) of this AD, regardless of cabin pressure differential cycles.

(j) Retained Inspection Adjustment Factor

This paragraph restates the requirements of paragraph (D) of AD 90-23-14, Amendment 39-6801 (Docket No. 90-NM-110-AD; 55 FR 46652, November 6, 1990), with a compliance time limitation. For Model 747SR airplanes only: On or before the effective date of this AD, 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 that 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 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 Service Bulletin 747-53-2253, including Addendum, 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, including Addendum, 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 emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes 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 ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: bill.ashforth@faa.gov.

(2) Service information that is referenced in this AD that is not incorporated by reference may be obtained at the addresses specified in paragraphs (s)(4) and (s)(5) of this AD.

(s) 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.

(3) The following service information was approved for IBR on October 9, 2013.

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

(ii) Boeing Special Attention Service Bulletin 747-53-2253, Revision 4, dated September 9, 2010.

(4) For Boeing 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>.

(5) You may view this service information at 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>.

Issued in Renton, Washington, on August 2, 2013.

Ross Landes,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.