

Proposed Rules

Federal Register

Vol. 74, No. 99

Tuesday, May 26, 2009

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0477; Directorate Identifier 2008-NM-191-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-100, -100B, -100B SUD, -200B, and -300 Series Airplanes; and Model 747SP and 747SR Series Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede an existing airworthiness directive (AD) that applies to certain Boeing Model 747 series airplanes. The existing AD currently requires repetitive inspections to detect cracks in various areas of the fuselage internal structure, and related investigative/corrective actions if necessary. This proposed AD would require additional repetitive inspections for cracking of certain fuselage structure, and related investigative/corrective actions if necessary. This proposed AD results from fatigue tests and analysis by Boeing that identified areas of the fuselage where fatigue cracks can occur. We are proposing this AD to prevent the loss of the structural integrity of the fuselage, which could result in rapid depressurization of the airplane.

DATES: We must receive comments on this proposed AD by July 10, 2009.

ADDRESSES: You may send comments 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:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, 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, Washington 98124-2207; telephone 206-544-5000, extension 1, fax 206-766-5680; e-mail me.boecom@boeing.com; 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, Washington. For information on the availability of this material at the FAA, call 425-227-1221 or 425-227-1152.

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 (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6437; fax (425) 917-6590.

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-2009-0477; Directorate Identifier 2008-NM-191-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 September 26, 2005, we issued AD 2005-20-30, amendment 39-14327 (70 FR 59252, October 12, 2005), for certain Boeing Model 747 series airplanes. That AD requires repetitive inspections to detect cracks in various areas of the fuselage internal structure, and related investigative/corrective actions if necessary. That AD resulted from fatigue tests and analysis by Boeing that identified areas of the fuselage where fatigue cracks can occur. We issued that AD to prevent the loss of the structural integrity of the fuselage, which could result in rapid depressurization of the airplane.

Actions Since Existing AD Was Issued

Since we issued AD 2005-20-30, Boeing has conducted an additional analysis that shows that Section 41 fuselage frames in the areas attached to the upper deck floor beams are also prone to fatigue cracking. Cracking of the frames was found on the fatigue test airplane at about 40,000 total pressure cycles. As a result, we have determined that additional inspections are necessary, as specified in the service information described below.

Relevant Service Information

We have reviewed Boeing Alert Service Bulletin 747-53A2349, Revision 3, dated October 2, 2008 ("the service bulletin"). In AD 2005-20-30, we referred to Boeing Alert Service Bulletin 747-53A2349, Revision 1, dated October 12, 2000; and Boeing Service Bulletin 747-53A2349, Revision 2, dated April 3, 2003; as the appropriate sources of service information for doing the actions required by that AD. Revision 3 of the service bulletin retains the procedures from Revision 2, revises some airplane groups, and adds the repetitive inspections listed in the table titled "New Service Bulletin Procedures."

NEW SERVICE BULLETIN PROCEDURES

Revision 3 of the service bulletin adds procedures for repetitive detailed inspections for cracking of these areas specified in the service bulletin—	For airplanes identified as these groups in Revision 3 of the service bulletin—
Additional inspections in Area 1: Fuselage frames at body stations 260–520 in areas where the upper deck floor beams are attached (Figure 11 of the Accomplishments Instructions of the service bulletin).	1 through 7 inclusive.
Additional inspections in Area 6: Fuselage frames at body stations 400–500 in areas above the Main Entry Door 1 cutouts, from the upper chord of the upper deck floor beams to Stringer 8 (Figure 12 of the Accomplishment Instructions of the service bulletin).	6 and 7.

The service bulletin specifies that the compliance time for the inspections of additional areas is before 22,000 total flight cycles or within 1,000 flight cycles after the date on the service bulletin, whichever occurs later. The service bulletin also specifies repeating the inspections at intervals not to exceed 3,000 flight cycles. The service bulletin specifies to repair any crack or to contact Boeing for repair instructions. Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA’s Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to develop on other airplanes of the same type design.

For this reason, we are proposing this AD, which would supersede AD 2005–20–30 and would retain the requirements of the existing AD. This proposed AD would also require accomplishing the additional actions specified in Boeing Alert Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008, described previously.

Change to Existing AD

This proposed AD would retain all requirements of AD 2005–20–30. Since AD 2005–20–30 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

Requirement in AD 2005–20–30	Corresponding requirement in this proposed AD
paragraph (f)	paragraph (g).
paragraph (g)	paragraph (h).
paragraph (h)	paragraph (i).
paragraph (i)	paragraph (j).
paragraph (j)	paragraph (k).
paragraph (k)	paragraph (l).

Costs of Compliance

There are about 209 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for U.S. operators to comply with this proposed AD. The average labor rate is \$80 per work hour.

ESTIMATED COSTS

Action	Work hours	Cost per airplane, per inspection cycle	Number of U.S.-registered airplanes	Fleet cost
Inspections (required by AD 2005–20–30)	130	\$10,400	69	\$717,600
Additional inspections in Area 1 (new proposed action)	6	480	69	33,120
Additional inspections in Area 6 (new proposed action)	1	80	69	5,520

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); 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 proposed 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.

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 amendment 39–14327 (70 FR 59252, October 12, 2005) and adding the following new AD:

Boeing: Docket No. FAA–2009–0477; Directorate Identifier 2008–NM–191–AD.

Comments Due Date

(a) The FAA must receive comments on this AD action by July 10, 2009.

Affected ADs

(b) This AD supersedes AD 2005–20–30.

Applicability

(c) This AD applies to Boeing Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–300, 747SP, and 747SR series airplanes; certificated in any category; identified in Boeing Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008.

Subject

(d) Air Transport Association (ATA) of America Code 53: Fuselage.

Unsafe Condition

(e) This AD results from fatigue tests and analysis by Boeing that identified areas of the fuselage where fatigue cracks can occur. We are issuing this AD to prevent the loss of the structural integrity of the fuselage, which could result in rapid depressurization of the airplane.

Compliance

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

Restatement of Requirements of AD 2002–10–10

(Excluding Upper Deck Floor Beams)

Repetitive Inspections

(g) Prior to the accumulation of 22,000 total flight cycles, or within 1,000 flight cycles after June 11, 1993 (the effective date of AD 93–08–12, amendment 39–8559, which was superseded by AD 2002–10–10), whichever occurs later, unless accomplished previously within the last 2,000 flight cycles; and thereafter at intervals not to exceed 3,000 flight cycles: Perform an internal detailed inspection to detect cracks in the areas of the fuselage internal structure specified in paragraphs (g)(1) through (g)(6) of this AD; in accordance with Boeing Service Bulletin 747–53–2349, dated June 27, 1991; Boeing Alert Service Bulletin 747–53A2349, Revision 1, dated October 12, 2000; Boeing Service Bulletin 747–53A2349, Revision 2, dated April 3, 2003; or Boeing Alert Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008. After the effective date of this AD, only Revision 3 of Boeing Alert

Service Bulletin 747–53A2349 may be used. Continue doing the inspections until the inspections required by paragraph (j) of this AD are done.

- (1) Section 42 upper lobe frames.
- (2) Section 46 lower lobe frames.
- (3) Section 42 lower lobe frames.
- (4) Main entry door cutouts.
- (5) Section 41 body station 260, 340, and 400 bulkheads.
- (6) Main entry doors.

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 mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.”

(h) Prior to the accumulation of 25,000 total flight cycles, or within 1,000 flight cycles after June 11, 1993, whichever is later, unless already done within the last 2,000 flight cycles; and thereafter at intervals not to exceed 3,000 flight cycles: Do an internal detailed inspection to detect cracks in the Section 46 upper lobe frames, in accordance with Boeing Service Bulletin 747–53–2349, dated June 27, 1991; Boeing Alert Service Bulletin 747–53A2349, Revision 1, dated October 12, 2000; Boeing Service Bulletin 747–53A2349, Revision 2, dated April 3, 2003; or Boeing Alert Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008. After the effective date of this AD, only Revision 3 of Boeing Alert Service Bulletin 747–53A2349 may be used.

Repair of Cracks Detected During Paragraph (g) or (h) Inspections

(i) Before further flight, repair any cracks detected during the inspections done per paragraph (g) or (h) of this AD by doing the actions specified in paragraph (i)(1) or (i)(2) of this AD, as applicable.

(1) Repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or using a method approved in accordance with paragraph (p) of this AD.

(2) Repair in accordance with Boeing Service Bulletin 747–53A2349, Revision 2, dated April 3, 2003; or Boeing Alert Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008. After the effective date of this AD, only Revision 3 of Boeing Alert Service Bulletin 747–53A2349 may be used. Where either revision of the service bulletin specifies to contact Boeing for repair instructions, repair in accordance with a method approved by the Manager, Seattle ACO; or using a method approved in accordance with paragraph (p) of this AD.

Restatement of Requirements of AD 2005–20–30

Repetitive Inspections

(j) Do an internal detailed inspection to detect cracking in the areas of the fuselage internal structure specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, and internal and external detailed inspections of the areas

specified in paragraphs (j)(4), (j)(5), (j)(6), and (j)(7) of this AD. Do the inspections in accordance with Boeing Service Bulletin 747–53A2349, Revision 2, dated April 3, 2003; or Boeing Alert Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008. After the effective date of this AD, only Revision 3 of Boeing Alert Service Bulletin 747–53A2349 may be used. Do the inspections at the applicable time specified in paragraph (k) of this AD. Accomplishment of these inspections terminates the requirements of paragraph (g) of this AD.

- (1) Section 42 upper lobe frames.
- (2) Section 46 lower lobe frames.
- (3) Section 42 lower lobe frames.
- (4) Main entry door cutouts.
- (5) Nose wheel well bulkheads, sidewall panels, and Station (STA) 360 and 380 floor beams. These areas include Section 41 body station 260, 340, and 400 bulkheads.
- (6) Main entry doors.
- (7) Main electronics bay access door cutout.

(k) Do the inspections required by paragraph (j) of this AD at the applicable time specified in paragraph (k)(1), (k)(2), or (k)(3) of this AD. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles.

(1) For airplanes on which the inspections required by paragraphs (g)(1), (g)(2), (g)(3), (g)(4), and (g)(6) of this AD have been done before November 16, 2005 (the effective date of AD 2005–20–30), but the inspections required by paragraphs (j)(5) and (j)(7) of this AD have not been done: Within 3,000 flight cycles since accomplishment of the most recent inspection required by paragraphs (g)(1), (g)(2), (g)(3), (g)(4), and (g)(6) of this AD, except that the inspections specified in paragraphs (j)(5) and (j)(7) of this AD may be done within 3,000 flight cycles since accomplishment of the most recent inspection required by paragraphs (g)(1), (g)(2), (g)(3), (g)(4), and (g)(6) of this AD, or within 1,000 flight cycles after November 16, 2005, whichever is later.

(2) For airplanes on which the inspections required by paragraphs (j)(5) and (j)(7) have been done before November 16, 2005: Within 3,000 flight cycles since accomplishment of the most recent inspection required by paragraphs (j)(5) and (j)(7) of this AD, or within 1,000 flight cycles after November 16, 2005, whichever is later.

(3) For airplanes on which the inspections required by paragraph (g) of this AD have not been done before November 16, 2005: Prior to the accumulation of 22,000 total flight cycles, or within 1,000 flight cycles after November 16, 2005, whichever is later.

Repair of Cracks Detected During Paragraph (j) Inspection

(l) Before further flight, repair any cracking found during any inspection required by paragraph (j) of this AD in accordance with Boeing Service Bulletin 747–53A2349, Revision 2, dated April 3, 2003; or Boeing Alert Service Bulletin 747–53A2349, Revision 3, dated October 2, 2008. After the effective date of this AD, only Revision 3 of Boeing Alert Service Bulletin 747–53A2349 may be used. Where any revision of the service bulletin specifies to contact Boeing for repair instructions, repair in accordance

with a method approved by the Manager, Seattle ACO; or using a method approved in accordance with paragraph (p) of this AD.

New Requirements of This AD

Inspections and Repair

(m) Do initial and repetitive detailed inspections for cracking in the areas specified

in Table 1 of this AD using applicable internal and external detailed inspection methods; and repair all cracks, by doing all the applicable actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2349, Revision 3, dated October 2, 2008, except as required by paragraph (n) of this AD. Do the initial and

repetitive inspections at the times specified in paragraph 1.E., "Compliance," of the service bulletin, except as required by paragraph (o) of this AD. Repair all cracks before further flight after detection.

TABLE 1—ADDITIONAL INSPECTIONS

Inspect the addition portion of area 1 and area 6 as specified in Boeing Alert Service Bulletin 747-53A2349, Revision 3, dated October 2, 2008 ("the service bulletin")—	For airplanes identified as these groups in the service bulletin—
In Area 1: Fuselage frames at body stations 260–520 in areas where the upper deck floor beams are attached (Figure 11 of the Accomplishments Instructions of the service bulletin).	1 through 7 inclusive.
In Area 6: Fuselage frames at body stations 400–500 in areas above the Main Entry Door 1 cutouts, from the upper chord of the upper deck floor beams to Stringer 8 (Figure 12 of the Accomplishment Instructions of the service bulletin).	6 and 7.

Exceptions to Certain Procedures

(n) If any crack is found during any inspection required by paragraph (m) of this AD, and Boeing Alert Service Bulletin 747-53A2349, Revision 3, dated October 2, 2008, 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 (p) of this AD.

(o) Where Boeing Alert Service Bulletin 747-53A2349, Revision 3, dated October 2, 2008, specifies a compliance time after the date on Boeing Alert Service Bulletin 747-53A2349, Revision 3, dated October 2, 2008, this AD requires compliance within the specified compliance time after the effective date of this AD.

Alternative Methods of Compliance (AMOCs)

(p)(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. Send information to *Attn:* Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6437; fax (425) 917-6590. Or, e-mail information to *9-ANM-Seattle-ACO-AMOC-Requests@faa.gov*.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(3) AMOCs approved previously in accordance with AD 2005-20-30 are approved as AMOCs with the corresponding provisions of this AD.

(4) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Commercial Airplanes 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.

Issued in Renton, Washington, on May 15, 2009.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-12111 Filed 5-22-09; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0476; Directorate Identifier 2008-NM-188-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 707 Airplanes, and Model 720 and 720B Series Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede an existing airworthiness directive (AD) that applies to certain Boeing Model 707 airplanes, and Model 720 and 720B series airplanes. The existing AD currently requires repetitive detailed inspections to detect cracks and corrosion on any existing repairs and at certain body stations (STA) of the visible surfaces of the wing to body terminal fittings including the web, flanges, and ribs; and applicable related investigative and corrective actions. This proposed AD would retain the requirements of the existing AD and

would require repetitive ultrasonic inspections to detect any stress corrosion cracks within the outboard flange of the left and right body terminal fittings at STA 820, and related investigative and corrective actions if necessary. This proposed AD would also provide for an optional terminating action for the repetitive inspections. This proposed AD also adds two airplanes to the applicability. This proposed AD results from reports of cracks found in the wing to body terminal fittings during routine inspections. We are proposing this AD to detect and correct cracks and corrosion in the body terminal fittings above and below the floor, which could cause loss of support for the wing and could adversely affect the structural integrity of the airplane.

DATES: We must receive comments on this proposed AD by July 10, 2009.

ADDRESSES: You may send comments 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:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail,