

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-32-AD; Amendment 39-12678; AD 2002-06-02]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all Boeing Model 747 series airplanes. This action 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. This action is necessary to find and fix such cracking, which could lead to reduced structural capability of the horizontal stabilizer center section, and result in loss of controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective April 3, 2002.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 3, 2002.

Comments for inclusion in the Rules Docket must be received on or before May 20, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-32-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2002-NM-32-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tamara Anderson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2771; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: The FAA has received a report that a 3.5-inch crack was found in the upper skin of the horizontal stabilizer center section on a Boeing Model 747SR series airplane. The crack ran forward from the rear spar at left buttock line (LBL) 37.8. While the area where the crack was found is subject to inspections per a certain Supplemental Structural Inspection Document (SSID), the airplane on which the crack was found was not an SSID candidate. Such cracking, if not fixed, could lead to reduced structural capability of the horizontal stabilizer center section, which could result in loss of controllability of the airplane.

The subject area on all Model 747 series airplanes is similar to that on the affected Model 747SR series airplane. Therefore, all of these airplanes may be subject to the same unsafe condition.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002, which describes procedures for repetitive detailed and high frequency eddy current (HFEC) inspections for cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord. The procedures include a detailed visual inspection for cracking of the upper horizontal skin and of the vertical and horizontal flanges of the rear spar upper chord, and an HFEC inspection for cracking of the vertical flange of the upper chord where a detailed visual inspection is impeded by stiffeners, brackets, or sealant. The service bulletin specifies to contact Boeing for repair of any crack that is found. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to find and fix cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord, which could lead to reduced structural capability of the horizontal stabilizer center section, and result in loss of controllability of the airplane. This AD requires accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

Differences Between This AD and the Service Bulletin

Operators should note that, although the service bulletin specifies that the manufacturer may be contacted for disposition of repair conditions, this AD requires the repair of those conditions to be accomplished per a method approved by the FAA, or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle Aircraft Certification Office, to make such findings.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2002-NM-32-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

SUPERSEDED

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-06-02 Boeing: Amendment 39-12678. Docket 2002-NM-32-AD.

Applicability: All Model 747 series airplanes; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To find and fix cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord, which could lead to reduced structural capability of the horizontal stabilizer center section, and result in loss of controllability of the airplane, accomplish the following:

Repetitive Inspections

(a) Before the accumulation of 24,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later: Do detailed and high frequency eddy current (HFEC) inspections, as applicable, for cracking of the upper skin of the horizontal stabilizer center section and the rear spar upper chord, according to the Work Instructions and Figure 1 of Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002. (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, and an HFEC inspection for cracking of the vertical flange of the upper chord where a detailed inspection is impeded by the presence of stiffeners, brackets, or sealant.) After doing the initial inspections, repeat the inspections every 1,000 flight cycles.

Note 2: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Repair

(b) If any cracking is found during any inspection per paragraph (a) of this AD: Before further flight, repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Boeing Alert Service Bulletin 747-55A2050, dated February 28, 2002. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(f) This amendment becomes effective on April 3, 2002.

Issued in Renton, Washington, on March 11, 2002.

Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02-6329 Filed 3-18-02; 8:45 am]

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