

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 747 series airplanes. This proposal would require repetitive inspections for discrepancies of certain areas of the forward and aft sides of the body station 2598 bulkhead, and repair if necessary. This action is necessary to find and fix such discrepancies of the bulkhead structure, which could result in failure of the structure to carry flight loads of the horizontal stabilizer, and consequent loss of controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by June 2, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-324-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-nprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-324-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 the proposed rule 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.

FOR FURTHER INFORMATION CONTACT: Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6434; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed 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 above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

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 proposed 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 proposed 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 summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-324-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-324-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has received several reports of fatigue cracking in the bulkhead inner chords, outer chords, and diagonal brace attachment fittings on certain Boeing Model 747 series airplanes. The cracks ranged from 0.4 inch to 2.0 inches long and have been found on both the left and right sides of the bulkhead structure. These airplanes had accumulated between 5,982 and 18,487 total flight cycles. In addition, elongated fastener holes have been found in the diagonal brace rods on several airplanes. Such discrepancies of the bulkhead structure, if not found and fixed, could result in failure of the structure to carry flight loads of the horizontal stabilizer,

and consequent loss of controllability of the airplane.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-53A2467, including Evaluation Form, dated July 26, 2001, which describes procedures for repetitive detailed inspections of the body station 2598 bulkhead for discrepancies (cracking, elongated fastener holes) of the lower aft inner chords; upper aft outer chords; and diagonal brace attachment fittings, flanges, and rods and repair of any cracking or elongated fastener holes, if necessary. The service bulletin also specifies contacting Boeing for repair procedures for cracking of the outer chord. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

Difference Between This Proposed AD and the Service Information

Although the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, this proposed AD would require the repair of those conditions to be accomplished in accordance with a method approved by the FAA, or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the FAA to make such findings.

Interim Action

This is considered to be interim action. The manufacturer has advised that it currently is developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, the FAA may consider further rulemaking.

Cost Impact

There are approximately 1,147 airplanes of the affected design in the worldwide fleet. The FAA estimates that 280 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 4 work hours