

149-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. 2002-NM-149-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 or 2000 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.

**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 2002-NM-149-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. 2002-NM-149-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

##### **Discussion**

The FAA has received a report indicating rapid in-flight decompression of a Boeing Model 737 series airplane. Investigation revealed that the skin above the forward entry door was separated at the stringer S-4R lap joint, with a 28-inch tear running along the lap joint. The skin was bent back at the upper edge of the stringer at S-5R and formed a rectangular opening that progressed from body station (BS) 328 to BS 300. Further investigation revealed that numerous scratches on the skin of the lap joint had initiated fatigue cracks and subsequent tearing of the skin. We also have received reports of similar damage (corrosion and fatigue cracking) to certain lap joints on other Model 737 series airplanes. These discrepancies have been attributed to the manufacturing process, which includes a cold-bonded adhesive of the lap joint configuration. Such conditions, if not corrected, could result in sudden fracture and failure of a lap joint and rapid in-flight decompression of the airplane fuselage.

The subject area on certain Model 747-100, -200B, and -200F series airplanes is manufactured using a process similar to that used on the affected Model 737 series airplanes. Therefore, those Model 747-100, -200B, and -200F series airplanes may be subject to the same unsafe condition revealed on the Model 737 series airplanes.

##### **Related AD**

This AD is related to AD 2000-17-04, amendment 39-11878, (65 FR 51750, August 25, 2000), applicable to certain Boeing Model 737-100, -200, and -200C series airplanes. That AD requires repetitive inspections to detect

discrepancies in the upper and lower skins of the fuselage lap joint, and repair if necessary.

##### **Explanation of Relevant Service Information**

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-53A2463, including Appendices A, B, and C, and the Evaluation Form, dated March 7, 2002, which describes procedures for repetitive medium and low frequency eddy current inspections for discrepancies (cracking and/or corrosion), and repair of any discrepancies found. 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 Alert Service Bulletin and This Proposed AD**

Although the alert service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions or inspection procedures, this proposed AD requires the repair and inspection procedures 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.

##### **Changes to 14 CFR Part 39/Effect on the Proposed AD**

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. Because we have now included this material in part 39, we no longer need to include it in each individual AD; however, this AD identifies the office authorized to approve alternative methods of compliance.

##### **Cost Impact**

There are approximately 86 airplanes of the affected design in the worldwide fleet. The FAA estimates that 55