

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

Airworthiness Directive

90-23-14 BOEING: Amendment 39-6801. Docket No. 90-NM-110-AD.

Applicability: Model 747 series airplanes, identified in Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990, certificated in any category.

Compliance: Required as indicated, unless previously accomplished.

To prevent sudden loss of cabin pressurization and the inability to withstand fail-safe loads, accomplish the following:

A. For airplanes that have not been modified in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990: In accordance with the schedule indicated below, perform a high frequency eddy current 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, Revision 2, dated March 29, 1990.

1. Inspection schedule:

a. Unless previously accomplished within the last 2,750 landings, perform the initial inspection within the next 250 landings after the effective date of this AD, or prior to the accumulation of 10,000 landings, whichever occurs later.

b. 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, Revision 2, dated March 29, 1990.

B. For airplanes that have been modified in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990: In accordance with the schedule below, perform a high frequency eddy current inspection of the fuselage lap joint for cracks between BS 340 and BS 400, or aft as far as the crew door, at stringers (S)-6L and S-6R, in accordance with Boeing Service Bulletin 747-53-2253, Revision 2, dated March 29, 1990.

1. Inspection schedule:

a. Unless previously accomplished within the last 2,750 landings, perform the initial inspection within the next 250 landings after the effective date of this AD, or prior to the accumulation of 10,000 landings after the modification, whichever occurs later.

b. 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, Revision 2, dated March 29, 1990.

C. For purposes of complying with 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 psi.

D. For Model 747SR airplanes only: Based on a continued mixed operation of lower cabin differentials, the initial inspection thresholds and the repetitive inspection intervals specified in this AD may be multiplied by a 1.2 adjustment factor.

E. An alternate means of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

NOTE: The request should be submitted directly to the Manager, Seattle ACO, and a copy sent to the cognizant FAA Principal Inspector (PI). The PI will then forward comments or concurrence to the Seattle ACO.

F. Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

All persons affected by this directive who have not already received the appropriate service documents from the manufacturer may obtain copies upon request to Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. These documents may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue S.W., Renton, Washington.

Airworthiness Directive 90-23-14 supersedes AD 85-17-05, Amendment 39-5123. This amendment (39-6801, AD 90-23-14) becomes effective on December 11, 1990.