

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

Airworthiness Directive

90-26-10 BOEING: Amendment 39-6836. Docket No. 90-NM-132-AD.

Applicability: Model 747 series airplanes, line numbers 001 through 430, certificated in any category.

Compliance: Required as indicated, unless previously accomplished.

To prevent rapid decompression of the airplane, accomplish the following:

A. Prior to the accumulation of 12,000 flight cycles or within the next 1,000 flight cycles after the effective date of this AD, whichever occurs later, unless previously accomplished within the last 1,000 flight cycles, conduct an external detailed visual and external high frequency eddy current inspection for cracks of the fuselage skin from body station (BS) BS 220 to BS 520, left and right hand side of the airplane between stringers (S) S-6 and S-14, excluding the skin lap joints, in accordance with Boeing Alert Service Bulletin 747-53A2321, dated October 31, 1989. Repeat the inspections thereafter at intervals not to exceed 2,000 flight cycles.

B. If cracks are detected, repair prior to further flight, in accordance with the Boeing Alert Service Bulletin 747-53A2321, dated October 31, 1989.

C. For airplanes line numbers 001 through 200, prior to the accumulation of 20,000 flight cycles, or within the next 4 years after the effective date of this AD, whichever occurs later, perform the terminating modification of the skin panel from BS 340 to BS 520, S-6 to S-14, in accordance with Boeing Alert Service Bulletin 747-53A2321, dated October 31, 1989. (The modification consists of replacing the skin panel with a new skin panel which was manufactured utilizing the improved hot phosphoric anodize bonding process.)

D. Replacement of the skin panel required by paragraph C. of this AD constitutes terminating action for the inspections from BS 340 to BS 520 required by paragraph A. of this AD. The inspections from BS 220 to BS 340 required by paragraph A. of this AD are to be continued.

E. Flight cycles conducted at 2.0 PSI or less cabin differential pressure need not be counted for the purpose of this airworthiness directive.

F. For Model 747SR airplanes only, the threshold and repetitive inspection intervals specified herein may be multiplied by the 1.2 adjustment factor based on continued mixed operation at lower cabin pressure differentials.

G. 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.

H. 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 SW., Renton, Washington.

Airworthiness Directive 90-26-10 supersedes AD 89-23-53, Amendment 39-6524.

This amendment (39-6836, AD 90-26-10) becomes effective on January 22, 1991.