
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CAR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Boeing B747 Series Aeroplanes

AD/B747/266

**Flight Engineer's Panel
Wire Bundle Clamping**

2/2002

Applicability: Model 747-100, 747-200B, 747-200C, 747-200F, 747SP, and 747SR series aeroplanes; line numbers 001 through 310 inclusive.

Requirement:

1. Perform a one-time detailed visual inspection for chafing of wire bundles in the area of the forward upper corner of the P4 flight engineer's panel, outboard of the drip shield, paying particular attention to wire bundles W528 and W530.

Note 1: For the purposes of this Directive, a detailed visual 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."

2. If, as a result of the Requirement 1 inspection, any chafing is found, repair the chafed wire bundles in accordance with Section 20-10-13 of the Boeing Standard Wiring Practices Manual.
3. Modify the aeroplane by rerouting electrical wire bundle W530 to ensure sufficient clearance between that wire bundle and an adjacent flood light support bracket and installing a caterpillar grommet on the flood light supports, in accordance with Boeing Alert Service Bulletin (ASB) 747-25A2407, Revision 1, dated 23 September 1999.

Modifications accomplished prior to the effective date of this Directive in accordance with ASB 747-25-2407, dated 18 November 1977, are acceptable for compliance with Requirement 3. However, the detailed visual inspection required by Requirement 1 and any applicable corrective actions required by Requirement 2 must still be accomplished.

Where ASB 747-25A2407, Revision 1, specifies that installation of a caterpillar grommet may be accomplished per "your equivalent procedure," the procedures must be accomplished per the applicable chapter of the Boeing 747 Overhaul Manual specified in the service bulletin.

Note 2: FAA AD 2001-24-32 Amdt 39-12549 refers.

Boeing B747 Series Aeroplanes

AD/B747/266 (continued)

Compliance: For Requirement 1 - Before 16 January 2003.

For Requirement 2 - Before further flight, following the Requirement 1 inspection.

For Requirement 3 - Before further flight, following the Requirement 1 inspection or Requirement 2 repair, as applicable.

This Airworthiness Directive becomes effective on 21 February 2002.

Background: This Directive requires a one-time inspection for chafing of certain wire bundles behind the flight engineer's panel, together with any necessary repairs. The Directive also requires a modification to reroute a certain electrical wire bundle to ensure sufficient clearance between that wire bundle and an adjacent flood light support bracket.

These actions are necessary to prevent chafing of certain electrical wire bundles, which could result in smoke in the cockpit and an uncommanded discharge of fire extinguishing bottles for the No. 4 engine, with the consequent reduction in the ability to fight a fire in the No. 4 engine.



Eugene Paul Holzapfel
Delegate of the Civil Aviation Safety Authority

14 January 2002