
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 39.001(1) of CASR 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 767 Series Aeroplanes

AD/B767/207 **APU and Engine Fire Shutoff Switches** **3/2005**

Applicability: Model 767-300 series aeroplanes; as listed in Boeing Alert Service Bulletin (ASB) 767-26A0127 dated 17 July 2003.

- Requirement:
1. Carry out a functional test of the Auxiliary Power Unit (APU) and engine fire shutoff switches, in accordance with ASB 767-26A0127.
 2. If any APU or engine fire shutoff switch fails during any functional test required by Requirement 1 or 5.a. replace the switch with a new or serviceable switch, in accordance with ASB 767-26A0127.
 3. Replace all APU and engine fire shutoff switches, that have not been previously replaced in accordance with Requirement 2, with new or serviceable switches in accordance with ASB 767-26A0127.

Note 1: The Requirement 1 repetitive functional tests and the Requirement 2 and 3 repetitive switch replacements may be optionally terminated if the Lucas (also known as TRW Systemes Aeronautiques) humidifier, part number (P/N) M01AA0101, M01AB0101, M01AB0102 or M01AB0103 are deactivated.

4. For any aeroplane on which Lucas humidifier, P/N M01AA0101, M01AB0101, M01AB0102 or M01AB0103 is deactivated - Replace all APU and engine fire shutoff switches with new or serviceable switches in accordance with ASB 767-26A0127.
5. For any aeroplane on which Lucas humidifier, P/N M01AA0101, M01AB0101, M01AB0102 or M01AB0103 is reactivated after the effective date of this Directive accomplish the following:
 - a. Carry out the Requirement 1 functional tests.
 - b. Replace all APU and engine fire shutoff switches that have not been previously replaced in accordance with Requirement 2.

Note 2: FAA AD 2005-01-13 Amdt 39-13938 refers.

Boeing 767 Series Aeroplanes

AD/B767/207 (continued)

Compliance: For Requirement 1 - Initially, within 18 months since the date of issue of the original Certificate of Airworthiness or the original Export Certificate of Airworthiness or within 90 days after the effective date of this Directive, whichever occurs later and thereafter at intervals not to exceed 18 months unless Lucas (also known as TRW Systemes Aeronautiques) humidifier, P/N M01AA0101, M01AB0101, M01AB0102 or M01AB0103 is optionally deactivated.

For Requirement 2 - Before further flight after the functional check and thereafter at intervals not to exceed 36 months unless Lucas (also known as TRW Systemes Aeronautiques) humidifier, P/N M01AA0101, M01AB0101, M01AB0102 or M01AB0103 is optionally deactivated.

For Requirement 3 - Within 18 months after the effective date of this Directive and thereafter at intervals not to exceed 36 months unless Lucas (also known as TRW Systemes Aeronautiques) humidifier, P/N M01AA0101, M01AB0101, M01AB0102 or M01AB0103 is optionally deactivated.

For Requirement 4 - Before further flight following the optional deactivation specified in Note 1.

For Requirement 5.a. - Within 18 months after reactivating the humidifier and thereafter at intervals not to exceed 18 months.

For Requirement 5.b. - Within 36 months after reactivating the humidifier and thereafter at intervals not to exceed 36 months.

This Airworthiness Directive becomes effective on 17 March 2005.

Background: Boeing advised that during routine maintenance checks some engine fire control circuits were found to be faulty due to switch internal continuity failures. The humidified air being provided by the humidifier was identified as the source of mineral build up on APU and engine fire control switch contacts leading to failure of the switches to discharge fire suppressant in the affected area. This could result in an uncontrolled fire that could spread to the strut, wing, or aft body of the aeroplane.

This Directive requires repetitive functional tests and repetitive replacements of the APU and engine fire shutoff switches. The Directive also provides an optional terminating action for the repetitive functional tests and replacements.

Boeing 767 Series Aeroplanes

AD/B767/207 (continued)

This action is intended to address the identified unsafe condition by preventing the possibility of mineral build-up on the APU and engine fire shutoff switches.

A handwritten signature in black ink, appearing to read 'James Coyne', with a stylized flourish at the end.

James Coyne
Delegate of the Civil Aviation Safety Authority

4 February 2005