
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 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.

Allison Turbine Engines - 250 Series**AD/AL 250/84****HMU PLA Potentiometer****2/2005**

Applicability: Rolls-Royce Corporation (formerly Allison Engine Company, Allison Gas Turbine Division, and Detroit Diesel Allison) (RRC) models 250-C30R/3, -C30R/3M, -C47B, and -C47M turboshaft engines that have a hydromechanical unit (HMU) with a part number (P/N) listed in paragraph 1.A. Group A of RRC Alert Commercial Engine Bulletins (ACEB) CEB A-73-3103, Revision 4, dated 2 December 2003 and CEB A-73-6030, Revision 4, dated 2 December 2003.

Note 1: These engines are known to be installed on, but not limited to, Bell OH-58D, Bell Helicopter Textron 407, Boeing AH/MH-6M and MD Helicopters Inc. 600N helicopters.

Requirement:

1. Perform an electrical signal inspection of the HMU Power Lever Angle (PLA) potentiometer in accordance with paragraphs 2.B. through 2.B.(8) and 2.B.(10) of the Accomplishment Instructions of ACEB CEB A-73-3103, Revision 4, or CEB A-73-6030, Revision 4.
2. If the electrical signal result is found to be unacceptable during the Requirement 1 inspection replace the HMU.
3. Replace the HMU with a redesigned HMU (ie one with a dual element potentiometer) that has a P/N that is not listed in paragraph 1.A. Group A of ACEB CEB A-73-3103, Revision 4 and CEB A-73-6030, Revision 4. Replacing the HMU with an HMU that has a P/N not specified in the referenced ACEBs terminates the Requirement 1 repetitive inspection.

Note 2: FAA AD 2004-24-04 Amdt 39-13880 refers.

Compliance: For Requirements 1 - Within 300 time in service (TIS) after the effective date of this Directive or within 300 hours TIS after completing the inspection in accordance with Requirement 1 of AD/AL 502, whichever occurs earlier, and thereafter at intervals of 300 hours TIS until Requirement 3 is accomplished.

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

For Requirement 3 - Within 600 hours TIS after the effective date of this Directive, or by 17 March 2005, whichever occurs earlier.

Allison Turbine Engines - 250 Series

AD/AL 250/84 (continued)

This Airworthiness Directive becomes effective on 17 February 2005.

Background: This Directive supersedes AD/AL 250/82, which required initial and repetitive electrical signal inspections of the HMU power lever angle (PLA) potentiometer.

This Directive continues to require those inspections in accordance with a revised ACEB and, following the manufacturer releasing a redesigned HMU that has a dual-element potentiometer, adds replacement of the existing HMU with a new design HMU as a mandatory terminating action to the repetitive inspection requirements. These actions are intended to prevent uncommanded and sudden changes in engine power.



James Coyne
Delegate of the Civil Aviation Safety Authority

23 December 2004