
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.

Allison Turbine Engines - 250 Series**AD/AL 250/90****Turbine Wheel Event Thresholds and
Maximum Overspeed Transients****12/2006**

Applicability: Rolls-Royce Corporation (RRC) models 250- C30, -C30G, -C30G/2, -C30M, -C30P, -C30R, -C30R/1, -C30R/3, -C30R/ 3M, -C30S, -C30U, -C40B, -C47B, and -C47M turboshaft engines, with a third-stage turbine wheel, part number (P/N) 6898663 or P/N 23065843 installed, or a fourth-stage turbine wheel, P/N 6892764 or P/N 23066744, installed.

Note 1: These engines are installed on, but not limited to, Bell 206L-3, Bell 206L-4, Bell 230, Bell 407, Bell 430, MDHI 369F, MDHI 369FF, MDHI 600N, and Sikorsky S-76A helicopters.

Requirement:

1. Record each time the third- and fourth-stage turbine wheels enter into the speed range between "Event Threshold" and "Maximum Overspeed Transient". Use paragraph 2.A. through 2.A.(5) of the Accomplishment Instructions and the applicable Figures 1 through 5 of RRC Alert Commercial Engine Bulletins (CEBs) No. CEB A-72-3272, No. CEB A-72-5048, and No. CEB A-72-6054 (combined in one document), all Revision 2, dated 27 June 2006 to determine the speed range.

2. Remove and retire any third-stage turbine wheel or fourth- stage turbine wheel.

Note 2: The retirement criteria in this AD are in addition to the existing third- and fourth-stage turbine wheel hour and cycle life limits. Wheels must be retired when they exceed any published life limit (transient speed excursions, hours, or cycles).

Note 3: FAA AD 2006-20-07 Amdt 39-14776 dated 20 September 2006 refers.

Compliance:

1. Within 30 days after the effective date of this AD.
2. Before further flight after the sixth time the wheel enters into the speed range between "Event Threshold" and "Maximum Overspeed Transient".

This Airworthiness Directive becomes effective on 23 November 2006.

Allison Turbine Engines - 250 Series

AD/AL 250/90 (continued)

Background: This AD results from analysis by RRC of failures of third-stage turbine wheels. The issuing of this AD is to prevent loss of power possible engine shutdown, or uncontained failure.

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

13 October 2006