
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.

Rolls Royce (Allison) Turbine Engines - AL501 Series

AD/AL501/7

Third Stage Turbine Blade Failures

8/2006

Applicability: Allison Models 501-D13, 501-D13A, 501-D13D and 501-D13E Engines not modified in accordance with Allison Commercial Engine Bulletin No. 72-77.

Note 1: Allison Commercial Engine Bulletin requires the installation of third stage turbine blades P/N 6794773 identified by a stripe of heat and corrosion resistant aluminium polytherm paint 1/2-inch wide and 4 inches long around contour of the inlet casing clockwise.

Requirement: Action in accordance with FAA AD 59-18-01 for 501-D13 and 501-D13A engines.
Action in accordance with FAA AD 60-07-01 for 501-D13D and 501-D13E engines.

Note 2: FAA AD 59-18-01 and 60-07-01 Amdt 124 refer.

Compliance: As detailed in FAA AD 59-18-01 or AD 60-07-01, as applicable, with a revised effective date of 3 August 2006.

This Airworthiness Directive becomes effective on 3 August 2006.

Background: Third stage turbine blade failures have occurred due to a resonance condition at low speed ground idle. All of these failures to date have resulted in visible damage to fourth stage blades as well as fourth stage vanes. In one case continued operation of an engine with a failed blade resulted in failure of the turbine inlet case-vane case split line bolts. This AD requires limits be placed on engine ground operations for unmodified engines.



James Coyne
Delegate of the Civil Aviation Safety Authority

21 June 2006