
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 Turbine Engines - RB211 Series**AD/RB211/40****Low Pressure Turbine Casing****7/2009**

Applicability: RB211-524C2-19 and RB211-524C2-B-19 engines, all serial numbers.

Note 1: These engines are known to be installed, but not limited to Boeing 747 series aircraft.

Requirement: 1. Carry out the actions defined in Section 3. Accomplishment Instructions of Rolls-Royce Non-Modification Service Bulletin (NMSB) No. 72-AG076.

2. Repeat the actions detailed in Requirement 1 of this AD.

Note 2: EASA AD 2009-0083 dated 16 April 2009 refers.

Compliance: For Requirement 1:

If at the effective date of this AD the life of the LPT Casing is known and less than 4,500 Cycles Since New (CSN) - Before the life of the LPT casing has reached 4,500 CSN.

If at the effective date of this AD the life of the LPT Casing is known and greater than or equal to 4,500 CSN and the life of the LPT casing since last full Fluorescent Penetrant Inspection (FPI) is either known and greater than 4,500 Cycles or not known - At the next shop visit.

If at the effective date of this AD the life of the LPT Casing is known and greater than or equal to 4,500 CSN and the life of the LPT casing since last full FPI is known and less than 4,500 Cycles - Before the life of the LPT Casing has reached 4,500 Cycles since last full FPI.

If at the effective date of this AD the life of the LPT Casing is not known and the life of the LPT casing since last full FPI is either not known or greater than or equal to 4,500 Cycles - At the next shop visit.

If at the effective date of this Airworthiness Directive the life of the LPT Casing is not known and the life of the LPT casing since last full FPI is known and less than 4,500 Cycles - Before the life of the LPT Casing has reached 4,500 Cycles since last full FPI.

Rolls Royce Turbine Engines - RB211 Series

AD/RB211/40 (continued)

For Requirement 2:

At intervals not exceeding 4,500 Cycles.

This Airworthiness Directive becomes effective on 2 July 2009.

Background: A number of LPT casings have been found cracked during engine shop visit. Cracking of the LPT casing reduces the capability of the casing to contain debris in the event of an LPT stage 1 blade failure. Therefore, blade failure in an engine featuring a cracked LPT casing may result in release of uncontained high energy debris. For the reason described above, this AD requires repetitive inspections and corrective actions, depending on findings.



James Coyne
Delegate of the Civil Aviation Safety Authority

19 May 2009