
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 Germany Turbine Engines - BR700 Series**AD/BR700/5****High Pressure Compressor Front Drum****3/2005**

Applicability: Rolls Royce Model BR700-710 Engine Serial Number 11141.

- Requirement:**
1. Remove from service and discard High Pressure Compressor (HPC) front drum Part Number (P/N) BRR20378 Serial Number (S/N) 119.
 2. Do not install the HPC drum removed per requirement 1.

Note 1: The life limit of the affected HPC front drum, P/N BRR20378, S/N 119 is lower than the life limit for all other HPC front drums P/N BRR20378 as declared in the Time Limits Manual, Chapter 05-10-01. Rolls Royce Service Bulletin SB-BR700-72-900347 dated 03 November 2004 refers.

Note 2: German LBA Airworthiness Directive D-2004-494 approved under EASA reference 2004-12661 dated 31 December 2004 refers.

- Compliance:**
1. On or before HPC front drum P/N BRR20378 S/N 119 reaching a total of 7800 flight cycles since new.
 2. After the effective date of this Directive.

This Airworthiness Directive becomes effective on 17 March 2005.

Background: During rework, HPC front drum P/N BRR20378, S/N 119 was inadvertently heat treated after cold expansion of the stage 6 boltholes. It therefore lost some of the protective compressive stresses from the cold expansion. As a result of this, it is necessary to reduce the life of the affected HPC front drum, to 7800 flight cycles instead of the previously declared 10000 flight cycles. The affected HP compressor front drum is currently installed to the engine with S/N 11141.

This AD addresses the identified unsafe condition associated with HPC front drum cracking and resultant uncontained engine failure.



James Coyne
Delegate of the Civil Aviation Safety Authority

4 February 2005