


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<b>AD No.: 2006 – 0181</b>  <b>Date: 26 June 2006</b>	
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.		
<b>Type Approval Holder's Name:</b>		<b>Type/Model designation(s):</b>
ROLLS-ROYCE PLC		RB211-22B series engines (all marks)
TCDS No: UK-CAA Engine No. 1039		
Foreign AD : N/A		
Supersedure: N/A		
<b>ATA 72; 41; 51</b>	<b>High Pressure Turbine (HPT) – Inspection of Disc Rim Cooling Air Holes for Cracks from Scoring Damage</b>	
<b>Manufacturer(s):</b>	Rolls-Royce plc	
<b>Applicability:</b>	RB211-22B series engines (all marks) installed on, but not limited to, Lockheed L-1011 aircraft	
<b>Reason:</b>	<p>HPT Discs recently inspected in accordance with the Engine Manual have exhibited cracks in the disc rim. The discs have failed to meet the inspection acceptance criteria and have been returned to Rolls-Royce for engineering investigation.</p> <p>This investigation has concluded that the cracks have resulted from scores within the cooling air holes in the disc rim that could have been introduced during new part manufacture or during overhaul of the disc. The engineering investigation has also concluded that if this cracking was undetected then it could result in uncontained disc failure.</p>	
<b>Effective Date:</b>	10 July 2006	
<b>Compliance:</b>	<p>Carry out an Eddy Current Inspection (ECI), as defined in Section 3., Accomplishment Instructions of Rolls-Royce NMSB 72-AE969 or later EASA approved revision on the HP turbine discs identified in Section 1.A.(4) of Rolls-Royce NMSB 72-AE969 or later EASA approved revision in accordance with the following schedule:</p> <p>1. Initial Inspection Requirements- inspect the HP Turbine disc by whichever is the soonest of the following conditions:</p>	

1A. If HP turbine disc cycles since new is greater than 9500 cycles on the effective date of this Airworthiness Directive, then inspect the disc by whichever is the soonest of the following conditions:

- (a) Within 500 cycles from the effective date of this Airworthiness Directive
- (b) At next shop visit where the HP turbine rotor is removed from the Combustor Outer Case

1B. If

-the HP turbine disc cycles since new is greater than 9500 cycles on the effective date of this Airworthiness Directive

and

-the HP turbine rotor is currently undergoing a shop visit

and

has been removed from the Combustion Outer Case and it has not yet been reinstalled into the Combustion Outer Case,

then the HP turbine disc must be inspected in accordance with the requirements of this Airworthiness Directive.

1C. If HP turbine disc cycles since new is less than 9500 cycles on the effective date of this Airworthiness Directive, then inspect the disc by whichever is the soonest of the following conditions:

- (a) Prior to reaching 10000 cycles since new.
- (b) At next shop visit where the HP turbine rotor is removed from the Combustor Outer Case and the HP turbine disc cycles since new is greater than 2750 cycles.

1D. If

-the HP turbine disc cycles since new is greater than 2750 cycles and less than 9500 cycles on the effective date of this Airworthiness Directive

and

-the HP turbine rotor is currently undergoing a shop visit

and

,has been removed from the Combustion Outer Case and it has not yet been reinstalled into the Combustion Outer Case,

then the HP turbine disc must be inspected in accordance with the requirements of this Airworthiness Directive.

2. Further Inspection Requirements- repeat the inspection detailed above at every subsequent shop visit where the HP turbine blades have been removed from the HP turbine disc.

3. If a HP turbine disc has previously passed inspection to the Eddy Current Inspection procedure as defined in Rolls-Royce TSD594-J Overhaul Process Manual Task 70-00-00-200-223 and at a disc life above 2750 cycles since new that meets the criteria of section 1. above, then that inspection satisfies the requirements stated in section 1. of this Airworthiness Directive.

Ref. Publications:	Rolls-Royce RB211 Propulsion System Non-Modification Service Bulletin Mod No: 72-AE969 or later approved revisions.
Remarks:	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Method of Compliance (AMOCs) for this AD.</li> <li>2. This AD was posted as PAD 06-131 for consultation on 24 May 2006 with a comment period until 16 June 2006. The comment Response Document can be found at <a href="http://ad.easa.eu.int/">http://ad.easa.eu.int/</a> .</li> <li>3. Enquiries regarding this Airworthiness Directive should be referred to Mr. M. Capaccio, Airworthiness Directive Focal Point - Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a></li> <li>4. For any questions concerning the technical content of the requirements in this AD, please contact Rolls-Royce plc. PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.</li> </ol>