


EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE
	<p>PAD No.: 13-050</p> <p>Date: 22 March 2013</p> <p>Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.</p>	
<p>Design Approval Holder's Name:</p> <p>ROLLS-ROYCE plc</p>	<p>Type/Model designation(s):</p> <p>RB211-535 and Trent 700 engines</p>
<p>TCDS Numbers: United Kingdom No. 1044 and EASA.E.042</p>	
<p>Foreign AD: Not applicable</p>	
<p>Supersedure: None</p>	
ATA 72	Engine – High Pressure / Intermediate Pressure Turbine Discs – Identification / Replacement
Manufacturer(s):	Rolls-Royce plc
Applicability:	<p>RB211-535E4-37, E4-B-37 and E4-C-37 engines, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 757 series aeroplanes.</p> <p>RB211 Trent 768-60, 772-60, 772B-60 and 772C-60 engines, all serial numbers. These engines are known to be installed on, but not limited to, Airbus A330 series aeroplanes.</p>
Reason:	<p>During a recent inspection of a high pressure (HP) turbine disc forged by a specific supplier, it was found to be contaminated with a steel inclusion, due to an inadequate cleaning procedure in the operation of the melt furnace, following a steel melt. Analysis of melt and inspection data concluded that all discs manufactured from the batch of material in which this steel inclusion was found, had a significant risk of containing steel inclusions. Rolls-Royce has carried out an analysis of the effect of the steel inclusions on the Declared Safe Cyclic Lives (DSCL) of the affected HP and intermediate pressure (IP) turbine discs. This analysis concluded that the currently published DSCL cannot be supported for several discs containing the subject inclusions.</p> <p>This condition, if not corrected, could lead to an uncontained HP or IP turbine disc failure, possibly resulting in damage to, and reduced control of, the aeroplane.</p> <p>For the reasons described above, this AD requires removal from service of certain HP and IP turbine discs before their accumulated cyclic lives have reached the revised limits.</p>
Effective Date:	[TBD: 14 days after final AD issue date]

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 30 days after the effective date of this AD, determine whether a HP or IP turbine disc, as identified by Part Number (P/N) and serial number (s/n) in Appendix 1 of this AD, is installed on the engine and, if so, determine the accumulated flight cycles (FC) since new for each affected HP or IP turbine disc as applicable. (2) If, as a result of the determination as required by paragraph (1) of this AD, the accumulated cyclic life since new of an affected HP or IP turbine disc is equal to or exceeds the applicable reduced cyclic life limit as specified in Appendix 1 of this AD, before next flight, replace the affected HP or IP turbine disc with a serviceable part in accordance with the instructions of Rolls-Royce Non-Modification Service Bulletin (NMSB) RB.211-72-AH215 or NMSB RB.211-72-AH152, as applicable. (3) If, as a result of the determination as required by paragraph (1) of this AD, the accumulated cyclic life since new of an affected HP or IP turbine disc is less than the applicable reduced cyclic life limit as specified in Table 1 of this AD, before exceeding the applicable reduced cyclic life limit as specified in Appendix 1 of this AD, replace the affected HP or IP turbine disc with a serviceable disc in accordance with the instructions of Rolls-Royce NMSB RB.211-72-AH215 or NMSB RB.211-72-AH152, as applicable. (4) From the effective date of this AD, do not install a HP or IP turbine disc having a P/N and s/n as listed in Appendix 1 of this AD, unless it has been determined that the total accumulated cyclic life since new of the component is less than the applicable reduced cyclic life limit as specified in Appendix 1 of this AD.
<p>Ref. Publications:</p>	<p>Rolls-Royce NMSB RB.211-72-AH215 dated 6 December 2012.</p> <p>Rolls-Royce NMSB RB.211-72-AH152 dated 28 February 2013</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
<p>Remarks:</p>	<ol style="list-style-type: none"> 1. This Proposed AD will be closed for consultation on 19 April 2013. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact your designated Rolls-Royce representative, or download the publication from your Aeromanager account at www.aeromanager.com, or contact at Rolls-Royce plc. Corporate Communications, P.O. Box 31, Derby, DE24 8BJ, United Kingdom, telephone: +44 (0) 1332 242424, or send an e-mail through http://www.rolls-royce.com/contact/civil_team.jsp identifying the correspondence as being related to Airworthiness Directives.

Appendix 1: Reduced cyclic lives for HP / IP Turbine Discs

Engine	P/N	s/n	Reduced Cyclic Life Limit
RB211-535	UL39767	LDRCZ19900	11 400 FC
	UL39767	LDRCZ19903	
	UL39767	LDRCZ19904	
Trent 700	FK26893	LDRCZ19901	8 687 FC
	FK26893	LDRCZ20081	
	FK26893	LDRCZ20082	
	FK26893	LDRCZ20084	
	FK26893	LDRCZ20088	
	FK26893	LDRCZ20089	
	FK26893	LDRCZ20090	
	FK26893	LDRCZ20093	
	FK26893	LDRCZ20094	
	FK26893	LDRCZ20097	
	FK26893	LDRCZ20099	
	FK26893	LDRCZ20100	
	FK20795 or FW53118	LDREB12176	9 270 FC
	FK20795 or FW53118	LDREB12177	
	FK20795 or FW53118	LDREB12178	
	FK20795 or FW53118	LDREB12179	
	FK20795 or FW53118	LDREB12180	