


EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE	
	PAD No.: 13-062 Date: 30 April 2013 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.	
	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.	
Design Approval Holder's Name: ROLLS-ROYCE plc		Type/Model designation(s): RB211 Trent 500 engines
TCDS Number: EASA.E.060		
Foreign AD: Not applicable		
Supersedure: None		
ATA 72	Engine – Low Pressure Compressor Blade Leading Edge Profile – Rework / Restoration	
Manufacturer(s):	Rolls-Royce plc	
Applicability:	Models RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61 and 560A2-61 engines, all serial numbers. These engines are known to be installed on, but not limited to, Airbus A340-500 and A340-600 series aeroplanes.	
Reason:	Erosion of the leading edge profile of Trent 500 engines' low pressure (LP) compressor blades is proven to contribute to fan flutter, a risk that is mitigated by regular restoration of the leading edge of these blades. Recently, Rolls-Royce have conducted a review regarding the in-service restoration of the leading edge profile of LP compressor blades. The results of this review concluded that not all LP compressor blades have been restored as intended. This condition, if not corrected, could lead to fan flutter, LP compressor blade cracking and uncontained LP compressor blade failures, possibly resulting in damage to, and reduced control of, the aeroplane. For the reasons described above, this AD requires initial and repetitive leading edge restoration of the LP compressor blades.	
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) Initially, within the compliance time as specified in Appendix 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 4 000 flight cycles (FC), restore the leading edge profile of the engine's LP compressor blades in accordance with the instructions of Section 3 of Rolls-Royce Non-Modification Service Bulletin (NMSB) RB.211-71-AH149. (2) From the effective date of this AD, installation of LP compressor blades on an engine is allowed, provided that, prior to or following installation, as applicable, the leading edge profile of the blades is restored, within the compliance times as required by this AD.
<p>Ref. Publications:</p>	<p>Rolls-Royce NMSB RB.211-71-AH149 original issue, dated 1 March 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 28 May 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. <p>If you do not have a designated representative or Aeromanager account, please contact Corporate Communications at Rolls-Royce plc., 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.</p>

Appendix 1 – Initial LP Compressor Blade (LPCB) Leading Edge Profile Restoration

Definitions used in the Table below:

L: accumulated FC of the LPCB since new, on the effective date of this AD

Lr: accumulated FC of the LPCB since the last leading edge profile restoration, on the effective date of this AD

NK: not known

NO: the leading edge profile of the LPCB has never been restored before

L (FC)	Lr (FC)	Compliance time
< 3 750	NK	Before exceeding 4 000 FC since new
	NO	
	< 3 750	Before exceeding 4 000 FC since last restoration
≥ 3 750 and < 4 400	NK	Within 250 FC after the effective date of this AD
	NO	
	≥ 3 750	
	< 3 750	Before exceeding 4 000 FC since last restoration
≥ 4 400	NK	Within 100 FC after the effective date of this AD
	NO	
	< 3 750	Before exceeding 4 000 FC since last restoration
	≥ 3 750 and < 4 400	Within 250 FC after the effective date of this AD
	≥ 4 400	Within 100 FC after the effective date of this AD
NK	NK or NO	Within 100 FC after the effective date of this AD