


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2014-0192</b></p> <p><b>Date: 01 September 2014</b></p> <p>Note: This Airworthiness Directive (AD) 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>This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<p><b>Design Approval Holder's Name:</b> ROLLS-ROYCE plc</p>	<p><b>Type/Model designation(s):</b> Trent 1000 engines</p>	
TCDS Number:	EASA.E.036	
Foreign AD:	Not applicable	
Supersedure:	None	
<b>ATA 73</b>	<b>Engine Fuel and Control – Engine Electronic Controller – Modification / Replacement</b>	
Manufacturer(s):	Rolls-Royce plc (RR)	
Applicability:	<p>Trent 1000-A, Trent 1000-C, Trent 1000-D, Trent 1000-E, Trent 1000-G and Trent 1000-H engines, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, Boeing 787 series aeroplanes.</p>	
Reason:	<p>An investigation carried out by RR has identified the risk of Intermediate Pressure (IP) shaft failure that may not be detected and accommodated by the engine control system. An IP shaft failure that is not detected may result in IP turbine overspeed.</p> <p>This condition, if not corrected, could lead to IP turbine burst and consequent release of high energy debris, possibly resulting in damage to, and reduced control of, the aeroplane.</p> <p>To address this potentially unsafe condition, RR has developed improved Engine Electronic Controller (EEC) software that ensures detection of IP shaft failure and prevents IP turbine overspeed.</p> <p>For the reasons described above, this AD requires the introduction of the improved EEC software, either by modification (software upload) of the current EEC, or replacement with an EEC that contains the improved software.</p>	
Effective Date:	03 September 2014	

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>Note: Where, in this AD, reference is made to an RR Mod, SB or NMSB with an 'A' (Alert) in the number, it should be recognised that an earlier or later revision may not have that 'A'. This kind of change does not effectively alter the publication references for the purpose of this AD.</p> <ol style="list-style-type: none"> <li>(1) Within 30 days or 180 flight cycles, whichever occurs first after the effective date of this AD, modify the engine by installing software standard MB6.15 in the EEC, or by replacing the EEC with a unit that contains software standard MB6.15, in accordance with the instructions of RR Service Bulletin (SB) TRENT 1000 73-AH914.</li> <li>(2) After expiry of the compliance time as required by paragraph (1) of this AD, it is allowed to install an unmodified engine on an aeroplane, or an unmodified EEC on an engine, provided that, before first operation of that engine, the engine is modified by installing software standard MB6.15 in the EEC, or by replacing the EEC with a unit that contains software standard MB6.15, in accordance with the instructions of RR SB TRENT 1000 73-AH914, or a later standard approved by EASA, or approved under RR DOA, in accordance with approved instructions.</li> </ol>
<p>Ref. Publications:</p>	<p>RR SB TRENT 1000 73-AH914 original issue, dated 23 July 2014.</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"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>4. For any question concerning the technical content of the requirements in this AD, please contact your designated Rolls-Royce representative, or download the publication from your Aeromanager account at <a href="http://www.aeromanager.com">www.aeromanager.com</a>.</li> </ol> <p>If you do not have a designated representative or Aeromanager account, please contact <b>Corporate Communications</b> at <b>Rolls-Royce plc</b>, P.O. Box 31, Derby, DE24 8BJ, United Kingdom. Telephone: +44 (0)1332 242424, or email from <a href="http://www.rolls-royce.com/contact/civil_team.jsp">http://www.rolls-royce.com/contact/civil_team.jsp</a> identifying the correspondence as being related to <b>Airworthiness Directives</b>.</p>