


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2014-0051</p> <p>Date: 06 March 2014</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>Design Approval Holder's Name:</p> <p>ROLLS-ROYCE plc</p>	<p>Type/Model designation(s):</p> <p>RB211 Trent 800 engines</p>
TCDS Number:	EASA.E.047
Foreign AD:	Not applicable
Supersedure:	None
ATA 73	Engine Fuel & Control – Engine Electronic Control – Software Update
Manufacturer(s):	Rolls-Royce plc (RR)
Applicability:	<p>RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17 and 895-17 engines, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, Boeing 777 aeroplanes.</p>
Reason:	<p>A Trent engine experienced an engine internal fire, caused by combustion of carbon deposits inside the high/intermediate pressure (HP/IP) oil vent tubes. The consequent chain of events resulted in the failure of the IP turbine disc drive arm. Similar engine architecture exists on Trent 800 series engines.</p> <p>This condition, if not corrected, could lead to uncontained multiple turbine blade failures or an IP turbine disc burst, possibly resulting in damage to, and reduced control of, the aeroplane.</p> <p>Prompted by these findings, an Intermediate Pressure Turbine Overspeed System (IPTOS) protection scheme has been developed for Trent 800 engines installed on Boeing 777 aeroplanes.</p> <p>For the reasons described above, this AD requires introduction of the IPTOS protection function by installation of a new software standard (B7.2) in the engine electronic controller (EEC), which will protect against IP turbine overspeed when IP shaft failure is detected.</p>
Effective Date:	20 March 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 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"> (1) Within 12 months after the effective date of this AD, modify the engine by installing EEC software standard B7.2 in accordance with the instructions of RR Alert Service Bulletin (SB) RB.211-73-AH001. (2) Installation of a later standard of EEC software is acceptable to comply with the requirement of paragraph (1) of this AD. (3) After modification of an engine as required by paragraph (1) of this AD, do not install any EEC unit on that engine, unless the EEC software standard is B7.2 or higher.
<p>Ref. Publications:</p>	<p>Rolls-Royce Alert SB RB.211-73-AH001 dated 17 July 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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 04 February 2014 as PAD 14-029 for consultation until 04 March 2014. The Comment Response Document can be found at http://ad.easa.europa.eu/. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 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 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, The United Kingdom. Telephone: +44 (0) 1332 242424, or email from http://www.rolls-royce.com/contact/civil_team.jsp identifying the correspondence as being related to Airworthiness Directives.</p>