


EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0260 Date: 11 December 2012 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.
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].	
Design Approval Holder's Name : ROLLS-ROYCE plc	Type/Model designation(s) : RB211 Trent 900 engines
TCDS Number :	EASA.E.012
Foreign AD :	Not applicable
Supersedure:	None
ATA 79	Engine Oil System – Fuel-to-Oil Heat Exchanger – Replacement [Time Between Overhaul]
Manufacturer(s):	Rolls-Royce plc
Applicability:	RB211 Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84 and 980-84 engines, all serial numbers. These engines are known to be installed on, but not limited to, Airbus A380 aeroplanes.
Reason:	<p>During a revenue service flight, a Trent 900 engine experienced increased N2 intermediate pressure (IP) vibrations, followed by an engine surge. The pilot shut down the engine, the aeroplane carried out an air turn-back, and a 3-engine landing was successfully performed. Subsequent investigation results revealed the presence of oil by-pass seal material from the Fuel-to-Oil Heat Exchanger (FOHE) in the restrictor hole of the Tail Bearing Housing (TBH) cover plate. The blocked restrictor hole caused oil starvation to the low pressure (LP) and IP location bearings.</p> <p>This condition, if not detected and corrected, could lead to LP location bearing damage, possibly resulting in uncontained engine failure and consequent damage to the aeroplane.</p> <p>For the reasons described above, this AD requires implementation of a time between overhaul (TBO), i.e. repetitive replacement of the affected FOHE with a new or overhauled FOHE unit.</p>
Effective Date:	25 December 2012

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within the compliance time as indicated in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 5 000 engine hours (EH), replace the FOHE with a new or overhauled unit in accordance with the instructions of Rolls-Royce Non-Modification Service Bulletin (NMSB) RB.211-79-AH031.</p> <p style="text-align: center;">Table 1 – Initial FOHE Replacement</p> <table border="1" data-bbox="571 432 1442 790"> <tr> <th>Engine condition, on the effective date of this AD:</th><th>Compliance Time:</th></tr> <tr> <td>On-wing</td><td>Before exceeding 5 000 EH time since new (TSN) or time since overhaul (TSO), or within 500 EH after the effective date of this AD, whichever occurs later</td></tr> <tr> <td>In-shop</td><td>Before release to service of the engine, if the FOHE has reached or exceeded 5 000 EH TSN or TSO</td></tr> </table> <p>(2) From the effective date of this AD, do not install a FOHE on an engine, or an engine on an aeroplane, unless the FOHE has accumulated less than 5 000 EH TSN or TSO.</p>	Engine condition, on the effective date of this AD:	Compliance Time:	On-wing	Before exceeding 5 000 EH time since new (TSN) or time since overhaul (TSO), or within 500 EH after the effective date of this AD, whichever occurs later	In-shop	Before release to service of the engine, if the FOHE has reached or exceeded 5 000 EH TSN or TSO
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On-wing	Before exceeding 5 000 EH time since new (TSN) or time since overhaul (TSO), or within 500 EH after the effective date of this AD, whichever occurs later						
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<p>Ref. Publications:</p>	<p>Rolls-Royce Alert NMSB RB.211-79-AH031 dated 25 October 2012.</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 07 November 2012 as PAD 12-140 for consultation until 05 December 2012. 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 send an e-mail from http://www.rolls-royce.com/contact/civil_team.jsp identifying the correspondence as being related to Airworthiness Directives.</p>						