


EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0223 Date: 19 September 2013 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 800 engines
TCDS Number:	EASA.E.047
Foreign AD:	Not applicable
Supersedure:	None
ATA 72	Engine – Low Pressure Turbine Bearing Support and Exhaust Case Assembly – Inspection / Replacement
Manufacturer(s):	Rolls-Royce plc
Applicability:	RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17 and 895-17 engines, all serial numbers, except those that have been reworked in accordance with Rolls-Royce Service Bulletin (SB) RB.211-72-G604. These engines are known to be installed on, but not limited to, Boeing 777 series aeroplanes.
Reason:	Rolls-Royce has identified that limitations in the drawing definition for the Trent 800 low pressure (LP) Turbine Bearing Support and Exhaust Case assembly (EIPC 72-52-51, 03-300, also known as the Tail Bearing Housing or TBH) may have resulted in thin wall section parts being delivered into service. Further analysis has concluded that under certain circumstances, the structural integrity of a thin walled part may be insufficient to withstand a fan blade failure event. This condition, if not detected and corrected, could, in case of fan blade failure, lead to a loss of integrity of the TBH and leave the engine unsupported at the rear mount, possibly resulting in damage to, or reduced control of, the aeroplane. For the reasons described above, this AD requires identification and replacement or rework of certain known thin walled TBHs and inspection of the TBHs of all other engines.
Effective Date:	03 October 2013

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>(1) At the next engine shop visit (for Serviceability, Check and Repair, Refurbishment or Overhaul), but not later than 30 June 2017, whichever occurs first after the effective date of this AD, identify the Part Number (P/N) and serial number (s/n) of the TBH installed on the engine and, if the P/N and s/n of the TBH are as listed in Appendix 1 of this AD, before release to service of the engine, replace the TBH with a serviceable part in accordance with the instructions of Rolls-Royce Non-Modification Service Bulletin (NMSB) RB.211-72-AG644.</p> <p>Note 1: Rolls-Royce NMSB RB.211-72-AG644 identifies the s/n of Modules and engines in which the affected TBH are likely installed; see Figure 7 in that document.</p> <p>(2) For engines that do not have a TBH installed as identified in Appendix 1 of this AD, within the compliance time specified in Table 1 of this AD, as applicable, inspect the TBH in accordance with the instructions of Section 3, Part B, of Rolls-Royce NMSB RB.211-72-AG644.</p> <p style="text-align: center;">Table 1 – TBH Inspection</p> <table border="1" data-bbox="550 768 1369 1084"> <thead> <tr> <th colspan="2">Compliance Time, whichever occurs first, A, B or C</th></tr> </thead> <tbody> <tr> <td>A</td><td>During shop visit for those engines currently (on the effective date of this AD) in the shop where the affected part is exposed and substantial rebuild has not yet started</td></tr> <tr> <td>B</td><td>At the next Refurbishment or Overhaul engine shop visit, or during any other shop visit where the module is sufficiently exposed to accomplish the inspection</td></tr> <tr> <td>C</td><td>Not later than 31 December 2020</td></tr> </tbody> </table> <p>(3) If, during the inspection as required by paragraph (2) of this AD, the TBH fails the inspection, before release to service of the engine, replace the TBH with a serviceable part.</p> <p>Note 2: A TBH that has been reworked in accordance with the instructions of Rolls-Royce Service Bulletin (SB) RB.211-72-G604 is considered a serviceable part for the purpose of the AD.</p>	Compliance Time, whichever occurs first, A, B or C		A	During shop visit for those engines currently (on the effective date of this AD) in the shop where the affected part is exposed and substantial rebuild has not yet started	B	At the next Refurbishment or Overhaul engine shop visit, or during any other shop visit where the module is sufficiently exposed to accomplish the inspection	C	Not later than 31 December 2020
Compliance Time, whichever occurs first, A, B or C									
A	During shop visit for those engines currently (on the effective date of this AD) in the shop where the affected part is exposed and substantial rebuild has not yet started								
B	At the next Refurbishment or Overhaul engine shop visit, or during any other shop visit where the module is sufficiently exposed to accomplish the inspection								
C	Not later than 31 December 2020								
<p>Ref. Publications:</p>	<p>Rolls-Royce NMSB RB.211-72-AG644 original issue dated 30 April 2013.</p> <p>Rolls-Royce SB RB.211-72-G604 original issue dated 18 March 2013.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>								
<p>Remarks:</p>	<ol style="list-style-type: none"> If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. This AD was posted on 19 June 2013 as PAD 13-084 and republished on 23 August 2013 as PAD 13-084R1 for consultation until 06 September 2013. The Comment Response Document can be found at http://ad.easa.europa.eu. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 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, 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 – Part- and Serial Numbers of TBH affected by paragraph (1) of this AD

PART NUMBER	PART SERIAL NUMBER
FK31446	118-01
FK31446	209-01
FK31446	216-01
FK31446	232-01
FK32232	113-01
FK32085	268-01
FK32085	269-01
FK31446	022-01
FK31446	028-01