EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0051 **Date: 26 March 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 EC 1702/2003, Part 21A.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].

Type Approval Holder's Name :	**Type/Model designation(s) :**
ROLLS-ROYCE plc	RB211 Trent 800 Engines

TCDS Number:	UK CAA 1051
Foreign AD:	Not applicable
Supersedure:	None

ATA 72	**Engine – Critical Parts – Life Limit Reduction**
Manufacturer(s):	Rolls-Royce plc
Applicability:	RB211 Trent 895-17, 892-17, 892B-17, 884-17, 884B-17, 877-17 and 875-17 engines, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 777 series aircraft.
Reason:	Flight Profiles (FP) define the limits of engine operation within which the engine will qualify for use of an associated set of Critical Parts life limits. The Rolls-Royce (RR) RB211 Trent 800 engine previously had seven such FPs and associated sets of life limits published in the RR Time Limits Manual. However, the results of a recent review of operational flight data determined that the existing FPs do not encompass the full range of Trent 800 operations. To account for the consequent increased rate of fatigue life usage on the life limited Critical Parts, a new FP and associated set of reduced life limits for Critical Parts have been developed, defined as FP 'MAX', that defines a new level of operation which is outside the 'HEAVY' FP, previously the most arduous. Failure to account for the increased rate of fatigue life usage associated with FP 'MAX' may result in Critical Part failure, consequent release of high energy debris, damage to the aeroplane and/or injury to occupants. For the reasons described above, this AD requires the implementation of the FP 'MAX' into the life usage monitoring/recording processes for engines that are, or have been, operated outside the 'HEAVY' FP limits.
Effective Date:	09 April 2012

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 30 calendar days after the effective date of this AD, determine whether the engine is currently operating, or has previously been operated, beyond the 'HEAVY' FP. (2) If, as a result of the action required by paragraph (1) of this AD, it is established that the engine has been or is currently operated beyond the 'HEAVY' FP, within 30 calendar days after the effective date of this AD, re-calculate the current life of each life limited Critical Part for the engine, assign the appropriate life limit to each part in accordance with the instructions of Section 3 of Rolls-Royce Alert Non Modification Service Bulletin (NMSB) 72-AG801 and thereafter, before each affected part exceeds its life limit, replace it with a serviceable part. (3) From the effective date of this AD, do not operate an engine beyond the 'HEAVY' FP, unless in compliance with the requirements of paragraph (2) of this AD.
Ref. Publications:	Rolls-Royce Alert NMSB RB211-72-AG801 dated 8 December 2011. The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
Remarks :	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The required actions and the risk assessment have granted the issuance of a Final AD with Requests for Comments, postponing the public consultation process after publication. 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: Rolls-Royce plc. P.O. Box 31, Derby, DE24 8BJ, The United Kingdom. Telephone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936. Email: tech.help@rolls-royce.com or download the publication from https://www.aeromanager.com.