

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0163 Date: 28 August 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].	
Design Approval Holder's Name: Rolls-Royce Deutschland Ltd & Co KG	Type/Model designation(s): Tay 611-8 engines
TCDS Number:	EASA.E.063
Foreign AD:	Not applicable
Supersedure:	None
ATA 72	Engine – Low Pressure Turbine Stage 1 Air Seal and High Pressure Turbine Stage 1 Air Seal / Bolts – Inspection / Replacement
Manufacturer(s):	Rolls-Royce Deutschland Ltd & Co KG (RRD), formerly Rolls-Royce plc
Applicability:	Tay 611-8 engines, serial numbers 16245, 16256, 16417, 16418, 16584, 16585, 16639, 16640, 16701, 16702, 16813, 16814, 16853, 16854, 16879, 16880, 16898, 16905, 16906, 16911, 16923, 16935 and 16936. These engines are known to be installed on, but not limited to, Gulfstream IV aeroplanes.
Reason:	The results of a recent quality review of low pressure turbine (LPT) stage 1 static air seal and high pressure turbine (HPT) stage 1 air seal support bolts identified that, before installation, these bolts may have not been inspected. As a consequence, bolts with reduced material properties may have been installed in some engines. This condition, if not detected and corrected, could lead to failure of a bolt, potentially causing turbine disc fracture and release of high-energy debris, possibly resulting in damage to the aeroplane and/or injury to the occupants. To address this potential unsafe condition, RRD issued Alert Service Bulletin (ASB) TAY-72-A1696 providing instructions to inspect bolts installed in the LPT stage 1 static air seal and HPT stage 1 air seal support on a number of engines. For the reasons described above, this AD requires inspection of the affected bolts and, depending on findings, replacement with serviceable ones and reporting of findings.

Effective Date:	11 September 2012
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 30 days after the effective date of this AD, review the engine maintenance records and identify the date of the engine last shop visit. (2) For engines with a date of the last shop visit before 08 December 2006, within 5 500 engine cycles accumulated since that engine last shop visit, inspect bolts installed in the LPT stage 1 static seal and HPT stage 1 air seal support in accordance with the accomplishment instructions of RRD ASB TAY-72-A1696. (3) If, during the inspection as required by paragraph (2) of this AD, any brown bolt or bolt with a rough oxidized surface is identified, before release to service of the engine, replace the applicable bolt sets in accordance with accomplishment instructions of RRD ASB TAY-72-A1696. (4) If, during the inspection as required by paragraph (2) of this AD, any bolt heads and visible threads discoloration and oxidation are identified, within 30 days after the inspection, complete the Accomplishment Form of the ASB TAY-72-A1696 and send it to RRD Service Engineering, and accomplish RRD instructions accordingly, if applicable. (5) From the effective date of this AD, do not install an HPT and/or LPT module on an engine, or an engine on aeroplane, unless in compliance with requirements of this AD.
Ref. Publications:	Rolls-Royce Deutschland ASB TAY-72-A1696 at Revision 1. 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. This AD was posted on 20 July 2012 as PAD 12-083 for consultation until 17 August 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: Rolls-Royce Deutschland Ltd & Co KG Eschenweg 11 – 15827 Dahlewitz – Germany Tel: + 49 (0) 33 708 6 1200 (direct 1016) Fax: + 49 33 708 6 1212.