EASA AIRWORTHINESS DIRECTIVE AD No : 2007-0258 Date: 25 September 2007

No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.			
Type Approval Holder's Name :		Type/Model designation(s):	
Rolls-Royce Deutschland Ltd & Co KG		TAY series engines	
TCDS Number: Germany (LBA) 6327, 6328			
Foreign AD: Not applicable			
Supersedure: This AD supersedes LBA Germany AD D-2004-313R5, EASA Approval No. 2005-6399.			
ATA 72	Engine – Low Pressure Compressor Case Assembly Ice Impact Panels – Inspection / Rework / Replacement		
Manufacturer(s):	Rolls-Royce Deutschland Ltd & Co KG; Rolls-Royce plc		
Applicability:	Tay 611-8, Tay 611-8C, Tay 620-15, Tay 650-15 and Tay 651-54 series engines with Low Pressure (LP) compressor ice impact panels of Service Bulletin TAY-72-1326 standard. These engines are known to be installed on, but not limited to, Boeing 727 series, Fokker F28 Mark 0070 and Mark 0100, and Gulfstream G-IV and GIV-X aircraft.		
Reason:	An event occurred on a Tay 620-15 powered aircraft, where all the LP compressor case ice impact panels of Rolls-Royce Service Bulletin TAY-72-1326 standard on both engines were released in flight during icing conditions. The released LP compressor case ice impact panels were caught in front of the fan outlet guide vanes, resulting in bypass duct blockage and significant thrust loss. Consequently, LBA Germany issued Airworthiness Directive (AD) D-2004-055 (EASA approval number 2004-2093) to require the inspection and rework, as necessary, of the affected ice impact panels to make sure that the bonding of these LP compressor ice impact panels complies with the design intent. LBA Germany AD D-2004-055 R2 was subsequently superseded by LBA AD D-2004-313 R1, which introduced repeat inspection requirements. That AD is now at Revision 5 (EASA approval number 2005-6399) and in addition required the installation of modified ice impact panels with additional retention features. Rolls-Royce Deutschland (RRD) has revised Alert Non-Modification Service Bulletin (NMSB) TAY-72-A1650 Revision 1 to introduce new production LP compressor cases for the Tay 611-8 engines to allow replacement of the complete LP compressor case instead of the ice impact panels only. For this reason, the present EASA AD retains the requirements of LBA Germany AD D-2004-313 R5, which is superseded, and adds a reference to the latest RRD Service Bulletin (SB) revision.		

Effective Date:	09 October 2007	
Compliance:	Required as indicated, unless accomplished previously:	
	(1) After 15 November 2005 (the effective date of LBA AD D-2004-313R5), repetitively inspect the low pressure compressor ice impact panels within the compliance times indicated in, and in accordance with the instructions of, RRD NMSB TAY-72-1638 Revision 3 or later approved revisions, or NMSB TAY-72-1639 Revision 2 or later approved revisions, as applicable to engine Model;	
	(2) If more than one engine on an aircraft is equipped with epoxy bonded ice impact panels, before further flight, rework the epoxy bonded ice impact panels on one engine using polysulphide bonding in accordance with RRD NMSB TAY-72-1638 Revision 3 or later approved revisions, or NMSB TAY- 72-1639 Revision 2 or later approved revisions, as applicable to engine Model;	
	(3) Not later than 31 December 2011, install modified ice impact panels with additional retention features and rework the LP Compressor case assembly in accordance with RRD SB TAY-72-A1643 Revision 1 or later approved revisions, or SB TAY-72-A1650 Revision 1 or later approved revisions, as applicable to engine Model.	
	Note 1: The instructions for the repetitive inspection requirements for the Tay 611-8C engines are included in the Time Limits Manual Chapter 05-20-02.	
	Note 2: After accomplishment of the modification as required by paragraph (3) of this directive, the repetitive inspections of paragraph (1) and the rework of paragraph (2) are no longer required.	
Ref. Publications:	Rolls-Royce Deutschland NMSB TAY-72-1638 Revision 3; Rolls-Royce Deutschland NMSB TAY-72-1639 Revision 2; Rolls-Royce Deutschland Alert Service Bulletin TAY-72-A1643 Revision 1; and Rolls-Royce Deutschland Alert NMSB TAY-72-A1650 Revision 1; or later approved revisions of these documents.	
Remarks :	If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance for this AD.	
	 This AD was posted on 10 September 2007 as PAD 07-167 for consultation until 24 September 2007. The Comment Response Document can be found at http://ad.easa.europa.eu/. 	
	 Enquiries regarding this AD should be referred to the AD Focal Point - Certification 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 Service Engineering, Eschenweg 11, Dahlewitz, D-15827 Blankenfelde-Mahlow, Germany Telephone +49 (0) 1712310248; Facsimile +49 (0) 33 7086 3613; Email: tech.help@rolls-royce.com	