

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2010-0077 Date: 20 April 2010 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 Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive 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 : Rolls-Royce Deutschland Ltd & Co KG	Type/Model designation(s) : BR700-710 engines
TCDS Number : EASA.E.018	
Foreign AD : Not applicable	
Supersedure : Not applicable	
ATA 72	Engine - General – Change of Life Cycle Counting Method for Touch-and-Go and Overshoot
Manufacturer(s):	Rolls-Royce Deutschland Ltd & Co KG
Applicability:	All BR700-710A1-10 model engines. All BR700-710A2-20 model engines. All BR700-710C4-11 model engines which have hardware configuration standard 710C4-11 engraved on the engine data plate (Service Bulletin SB-BR700-72-101466 standard not incorporated). All BR700-710C4-11 model engines which have hardware configuration standard 710C4-11/10 engraved on the engine data plate (Service Bulletin SB-BR700-72-101466 standard incorporated). These engines are known to be installed on, but not limited to Gulfstream GV, GV-SP (G500, G550) and Bombardier BD-700-1A10, BD-700-1A11 series aeroplanes.
Reason:	Analysis of service data carried out by Rolls-Royce Deutschland has shown that the effect of touch-and-go and overshoot on life cycle counting is higher than anticipated. Therefore, the life cycle counting method for touch-and-go and overshoot as defined by the Time Limits Manual needs to be changed to reflect this higher effect on life. This AD requires a change of the life cycle counting method for touch-and-go and overshoot for all critical parts and the Low Pressure (LP) compressor blades as specified in the Rolls-Royce Deutschland Alert NMSB-BR700-72-A900504 Revision 1. The chapter 05-00-01 and 05-00-

	02 of the applicable Time Limits Manuals will be revised accordingly. Note: An overshoot is the phase of a flight wherein a landing approach of an aircraft is not continued to the touch-down point.
Effective Date:	04 May 2010
Required action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 4 months after the effective date of this AD, the calculation of lives for every touch-and-go and overshoot of all critical parts and LP compressor blades must be done in accordance with Rolls-Royce Deutschland Alert NMSB-BR700-72-A900504 Revision 1, paragraph 3.A. (2) Within 4 months after the effective date of this AD, determine the number of touch-and-go's and overshoots that each individual critical part (except the fan shaft and LP turbine rotor shaft) has experienced since entry into service in accordance with Rolls-Royce Deutschland Alert NMSB-BR700-72-A900504 Revision 1, paragraph 3.B. (2.1) If the number of touch-and-go's and overshoots on an individual critical part is less than one percent of the total number of flight cycles (FC), no further action is required by this AD, in accordance with Rolls-Royce Deutschland Alert NMSB-BR700-72-A900504 Revision 1, paragraph 3.B. (2.2) If the number of touch-and-go's and overshoots on an individual critical part is more than one percent of the total number of FC, disregard the previous calculations of life on that individual critical part and retrospectively re-calculate the accumulated FC of that individual critical part by addition of one FC for every touch-and-go and overshoot to the total number of FC, in accordance with Rolls-Royce Deutschland Alert NMSB-BR700-72-A900504 Revision 1, paragraph 3.B.
Ref. Publications:	Time Limits Manual (TLM) T-710-1BR (BR700-710A1-10). Time Limits Manual (TLM) T-710-2BR (BR700-710A2-20). Time Limits Manual (TLM) T-710-4BR (BR700-710C4-11). Supplementary Time Limits Manual (TLM) T-710-5BR (710C4-11/10 only) Rolls-Royce Deutschland Alert NMSB-BR700-72-A900504 Rev. 1. The use of later approved revisions of these documents 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 allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, 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 Eschenweg 11 - 15827 Dahlewitz – Germany Phone: +49 (0) 33 7086 1768 ; Fax: +49 (0) 33 7086 3356 E-mail: rrd.aog@rolls-royce.com.