EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	EAD No.: 2006 – 0268-E **Date: 31 August 2006**
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 : Rolls-Royce Deutschland Ltd & Co. KG	**Type/Model designation(s) :** TAY 620/Tay 611-8C
TCDS Number : LBA Germany No. 6327	
Foreign AD : Not applicable.	
Supersedure : Not applicable.	
ATA 73	**Engine Fuel and Control - Engine Electronic Controller (EEC) – Inspection/Replacement**
Manufacturer(s):	Rolls-Royce PLC; Rolls-Royce Deutschland Ltd & Co. KG
Applicability:	All TAY611-8C engines, all serial numbers, if equipped with Engine Electronic Controller (EEC), P/N TEEC200004AE. These engines are known to be installed on Gulfstream GIV-X aircraft.
Reason:	Some Engine Electronic Controllers (EEC), returned from in-service to the manufacturer, had damaged transorbs. A transorb is a diode type device in the EEC connect module that protects the EEC from the effects of lightning strikes by conducting the current to the ground. A damaged transorb may compromise the EEC's ability to protect circuits from damage during a lightning strike event. Investigation has shown that the transorbs could be damaged due to an inadequate bonding between the aircraft and the engine. As the EEC aircraft power supply 0 Volt return line is clamped to the engine through a transorb while it is bonded to the aircraft, a difference in potential between the engine and the aircraft could result in a transorb damage. To prevent this, an additional bonding lead must be installed between the aircraft and the engine. In addition, all EEC units need to be electrically checked to find out if any transorb is damaged.

	The purpose of this Airworthiness Directive is to establish that at least one engine installed on an aircraft has an EEC installed with undamaged transorbs. Rolls-Royce Deutschland Alert Service Bulletin TAY-73-A1703 describes the electrical check of two transorbs of the EEC on one engine of the aircraft.
Effective Date:	01 September 2006
Compliance:	1. Within 300 flight hours after the effective date of this directive, electrically check the two transorbs of the EEC on at least one engine of the aircraft in accordance with the instructions of the referenced Rolls-Royce Deutschland Alert Service Bulletin; 2. If an EEC is found to be damaged, before next flight, replace the EEC with an undamaged unit in accordance with the instructions of the referenced Rolls-Royce Deutschland Alert Service Bulletin; (a) If no replacement EEC is available, electrically check the two transorbs of the EEC installed on the other engine of the aircraft in accordance with the instructions of the referenced Rolls-Royce Deutschland Alert Service Bulletin; (b) If this EEC is also found to be damaged, before next flight, at least one damaged EEC must be replaced in accordance with the instructions of the referenced Rolls-Royce Deutschland Alert Service Bulletin; 3. Thereafter, at intervals not to exceed 500 flight hours, repeat the inspection as required by paragraph 2. of this directive, in accordance with the instructions of the referenced Rolls-Royce Deutschland Alert Service Bulletin. **Note:** When the aircraft has been modified in accordance with Gulfstream Aircraft Service Change 036, only one single (repeat) inspection is required to establish that at least one EEC is undamaged. If so, the periodic inspections are not required, or may be discontinued, as applicable.
Ref. Publications:	Rolls-Royce Deutschland Non-Modification Alert Service Bulletin TAY-73-A1703, dated August 11, 2006 or a later approved revision.
Remarks :	1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Method of Compliance (AMOCs) for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 3. Enquiries regarding this Airworthiness Directive should be referred to Mr. M. Capaccio, Airworthiness Directive Focal Point – Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any questions concerning the technical content of the requirements in this AD, please contact: Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, 15827 Dahlewitz, GERMANY, Facsimile +49 (0) 33 7086 3356; Telephone +49 (0) 33 7086 1768.