EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0116 **Date: 03 July 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 :	**Type/Model designation(s) :**
Thielert Aircraft Engines GmbH	TAE 125 engines

TCDS Number:	EASA.E.055
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2010-0137 dated 30 June 2010.

ATA 73	**Engine Fuel & Control – Full-Authority Digital Engine Control (FADEC) Software – Modification**
Manufacturer(s):	Thielert Aircraft Engines GmbH (TAE)
Applicability:	TAE 125-01 (commercial designation Centurion 1.7), TAE 125-02-99 (commercial designation Centurion 2.0) and TAE 125-02-114 (commercial designation Centurion 2.0S) engines, all serial numbers. These engines are known to be installed on, but not limited to, the following aeroplane types, mostly through application of a Supplemental Type Certificate (STC): - Cessna 172 and (Reims-built) F172 series (STC EASA.A.S.01527), - Piper PA-28 series (STC EASA.A.S.01632), - CEAPR (APEX, Robin) DR 400 series (STC EASA.A.S.01380), and - Diamond DA 40 and DA 42 series.
Reason:	EASA have received reports of possible power loss on aeroplanes equipped with TAE 125 engines. The preliminary investigation results have shown that an undetected engine overspeed, due to a slipping clutch, may have contributed to these occurrences, in combination with other circumstances. To prevent flights with a deteriorating clutch, TAE have improved the software mapping to detect overspeed events and trigger the indication of a permanent electronic control unit (ECU) caution at an earlier stage when significant engine power is still available. For the reasons described above, this AD requires the installation of the improved software mapping version, as applicable to engine Model.
Effective Date:	10 July 2012

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Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: Within 55 flight hours, or within 3 months, or during the next scheduled engine maintenance, whichever occurs first after the effective date of this AD, modify the engine FADEC installation by installing the improved software version 292 (TAE 125-01), version 301 (TAE 125-02-99), or version 302 (TAE 125-02-114), as applicable to engine model: - For TAE 125-01 engines: in accordance with the instructions of Annex 13 »FADEC Software Update« of the Operation & Maintenance Manual OM-02-01 Issue 3 Revision 16. - For TAE 125-02-99 and TAE 125-02-114 engines: in accordance with the instructions of Annex 17 »FADEC Software Update« of the Operation & Maintenance Manual OM-02-02 Issue 2 Revision 8.
Ref. Publications:	TAE SB TM TAE 000-0007 Revision 18 dated 18 June 2012. Operation & Maintenance Manual OM-02-01 Issue 3 Revision 16 dated 05 May 2012. Operation & Maintenance Manual OM-02-02 Issue 2 Revision 8 dated 04 May 2012. 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until 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: Thielert Aircraft Engines GmbH Platanenstraße 14 D-09350 Lichtenstein, Germany Telephone +49-37204-696-0; Fax +49-37204-696-55; E-mail info@centurion-engines.com.

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