SERVICE INFORMATION NO. SI 42-143

NOTE: SI's are used only:
1) To distribute information from DAI to our customers.
2) To distribute applicable information/documents from our suppliers to our customers with additional information.
Typically there is no revision service for SI's. Each new information or change of that will be sent along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

All DA 42 airplanes

1.2 Subject:

FAA Airworthiness Directive 2010-18-02
ATA-Code: 72-10

1.3 Reason:

TAE has identified a batch of spring discs in clutches which received a non-conforming heat treatment process. This could result in engine in-flight shutdown and consequent loss of control of the aeroplane.
For the reason described above FAA Airworthiness Directive 2010-18-02 requires the identification of the affected P/N clutch assemblies on TAE engines and replacement with new clutch assemblies.

1.4 Information:

For detailed technical information refer to FAA Airworthiness Directive 2010-18-02, which is applicable without any further additions or restrictions.

II. OTHERS

FAA Airworthiness Directive 2010-18-02 is attached to this Service Information.

In case of doubt contact Thielert Aircraft Engines GmbH.

Airworthiness Directive 2010-18-02 Summary

Subject:	To prevent engine in-flight shutdown leading to loss of control of the airplane		
Manufacturer:	Thielert Aircraft Engines GmbH	Category:	Engine
Effective Date:	09/09/2010	Recurring:	No
Supersedes:	N/A	Superseded By:	N/A

For complete information on this AD, please see:
AD 2010-18-02 FAA Copy
AD 2010-18-02 Preamble
AD 2010-18-02 CFR Copy

Model Applicability:
Thielert Aircraft Engines Models TAE 125-01 and TAE 125-02-99 reciprocating engines

Applicable Manufacturers Service Information:
Thielert Aircraft Engines GmbH Service Bulletin No. TM TAE 125-0021, dated June 9, 2010
Thielert Aircraft Engines GmbH SB No. TM TAE 125-1011 P1, also dated June 9, 2010

Summary:
We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as: In-flight shutdown incidents have been reported on airplanes equipped with TAE 125 engines. Preliminary investigations showed that it was mainly the result of nonconforming disc springs (improper heat treatment) used in a certain production batch of the clutch. We are issuing this AD to prevent engine in-flight shutdown leading to loss of control of the airplane.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2010–0683; Directorate Identifier 2010–NE–25–AD; Amendment 39–16415; AD 2010–18–02]

RIN 2120–AA64

Airworthiness Directives; Thielert Aircraft Engines GmbH (TAE) Models TAE 125–01 and TAE 125–02–99 Reciprocating Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

In-flight shutdown incidents have been reported on airplanes equipped with TAE 125 engines. Preliminary investigations showed that it was mainly the result of nonconforming disc springs (improper heat treatment) used in a certain production batch of the clutch.

We are issuing this AD to prevent engine in-flight shutdown leading to loss of control of the airplane.

DATES: This AD becomes effective September 9, 2010.

We must receive comments on this AD by September 24, 2010.

The Director of the Federal Register approved the incorporation by reference of Thielert Aircraft Engines GmbH Service Bulletin (SB) No. TM TAE 125–0021, dated June 9, 2010, and SB No. TM TAE 125–1011 P1, dated June 9, 2010, listed in the AD as of September 9, 2010.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- *Mail:* U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Fax:* (202) 493–2251.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov;* or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647–5527) is the same as the Mail address provided in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: *alan.strom@faa.gov;* telephone (781) 238–7143; fax (781) 238–7199.

SUPPLEMENTARY INFORMATION:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2010–0111–E, dated June 10, 2010 (corrected June 11, 2010) (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

In-flight shutdown incidents have been reported on airplanes equipped with TAE 125 engines. Preliminary investigations showed that it was mainly the result of nonconforming disc springs (improper heat treatment) used in a certain production batch of the clutch.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

TAE has issued SB No. TM TAE 125–0021, dated June 9, 2010, and SB No. TM TAE 125–1011 P1, dated June 9, 2010. The actions described in these SBs are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This AD

This product has been approved by the aviation authority of Germany, and is approved for operation in the United States. Pursuant to our bilateral agreement with Germany, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This AD requires replacement of affected clutch assemblies.

Differences Between the AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of the need for operators to comply with some of the AD actions before further flight. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA–2010–0683; Directorate Identifier 2010–NE–25–AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78).

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new AD:

2010–18–02 Thielert Aircraft Engines GmbH: Amendment 39–16415.; Docket No. FAA–2010–0683; Directorate Identifier 2010–NE–25–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 9, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Thielert Aircraft Engines GmbH (TAE):

(1) TAE 125–01 reciprocating engines (commercial designation Centurion 1.7), all serial numbers, if a clutch assembly part number (P/N) 02–7210–11001R13 is installed; and

(2) TAE 125–02–99 reciprocating engines (commercial designation Centurion 2.0), all serial numbers, if a clutch assembly P/N 05–7211–K006001 or P/N 05–7211–K006002 is installed.

(3) These engines are installed on, but not limited to, Cessna 172 and (Reims-built) F172 series (European Aviation Safety Agency (EASA) STC No. EASA.A.S.01527); Piper PA–28 series (EASA STC No. EASA.A.S. 01632); APEX (Robin) DR 400 series (EASA STC No. A.S.01380); and Diamond Aircraft Industries Models DA40 and DA42 airplanes.

Reason

(d) In-flight shutdown incidents have been reported on airplanes equipped with TAE 125 engines. Preliminary investigations showed that it was mainly the result of nonconforming disc springs (improper heat treatment) used in a certain production batch of the clutch.

We are issuing this AD to prevent engine in-flight shutdown leading to loss of control of the airplane.

Actions and Compliance

(e) Unless already done, do the following actions.

(1) Before next flight after the effective date of this AD, identify the serial number (S/N) of each P/N 02–7210–11001R13, P/N 05–7211–K006001, and P/N 05–7211–K006002 clutch assembly installed on the airplane. If the S/N matches one of those listed in Thielert Aircraft Engines GmbH Service Bulletin (SB) No. TM TAE 125–0021, dated June 9, 2010, or SB No. TM TAE 125–1011 P1, dated June 9, 2010, as applicable to engine model, replace the clutch assembly within the following compliance times:

(i) For engines with affected clutch assemblies that have accumulated 100 flight hours or more on the effective date of this AD, replace the clutch assembly before further flight.

(ii) For engines with affected clutch assemblies that have accumulated less than 100 flight hours on the effective date of this AD, replace the clutch assembly before accumulating 100 flight hours.

Clutch Assembly Prohibition

(2) After the effective date of this AD:

(i) Do not install an engine having a clutch assembly that is listed by S/N in Thielert Aircraft Engines GmbH Service Bulletin (SB) No. TM TAE 125–0021, dated June 9, 2010, or SB No. TM TAE 125–1011 P1, dated June 9, 2010; and

(ii) Do not install any clutch assembly listed by S/N in Thielert Aircraft Engines GmbH Service Bulletin (SB) No. TM TAE 125–0021, dated June 9, 2010, or SB No. TM TAE 125–1011 P1, dated June 9, 2010, into any engine.

FAA AD Differences

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and/or service information as follows:

(1) EASA AD 2010–0111–E, dated June 10, 2010 (corrected June 11, 2010) has separate compliance times for engines installed on twin-engine airplanes. This AD does not.

(2) EASA AD 2010–0111–E, dated June 10, 2010 (corrected June 11, 2010) allows a single ferry flight with conditions. This AD does not.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to MCAI EASA AD 2010–0111–E, dated June 10, 2010 (corrected June 11, 2010), for related information.

(i) Contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: *alan.strom@faa.gov;* telephone (781) 238–7143; fax (781) 238–7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Thielert Aircraft Engines GmbH Service Bulletin No. TM TAE 125–0021, dated June 9, 2010, or SB No. TM TAE 125–1011 P1, also dated June 9, 2010, to identify the affected clutch assemblies requiring replacement by this AD.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, 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.*

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030, or go to: *http://www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued in Burlington, Massachusetts, on August 16, 2010.

Peter A. White,

Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2010–21058 Filed 8–24–10; 8:45 am]

BILLING CODE 4910–13–P