

## SERVICE INFORMATION NO. SI 42-164

**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 equipped with TAE engines

#### 1.2 Subject:

FAA Airworthiness Directive No. 2010-06-12R1  
ATA-Code: 72-00

#### 1.3 Reason:

FAA has issued the Airworthiness Directive No. 2010-06-12R1 which revise FAA Airworthiness Directive No. 2010-06-12. The AD requires the replacement the existing rail pressure control valve with an improved rail pressure control valve. This new AD requires the same actions but relaxes the initial compliance time. This AD was prompted by the determination that the FAA AD 2010-06-12 was inadvertently more restrictive than the EASA AD 2008-0128.

#### 1.4 Information:

For detailed technical information refer to FAA Airworthiness Directive No. 2010-06-12R1, which is applicable without any further additions or restrictions.

### II. OTHERS

FAA Airworthiness Directive No. 2010-06-12R1 is attached to this Service Information.

In case of doubt contact Thielert Aircraft Engines GmbH or Diamond Aircraft Industries GmbH.

[Federal Register Volume 76, Number 251 (Friday, December 30, 2011)]  
[Rules and Regulations]  
[Pages 82110-82111]  
From the Federal Register Online via the Government Printing Office [www.gpo.gov]  
[FR Doc No: 2011-33514]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2009-0948; Directorate Identifier 2009-NE-30-AD; Amendment 39-16906; AD 2010-06-12R1]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Thielert Aircraft Engines GmbH Reciprocating Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

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**SUMMARY:** We are revising an existing airworthiness directive (AD) for Thielert Aircraft Engines GmbH models TAE 125-02-99 and TAE 125-01 reciprocating engines. That AD currently requires replacing the existing rail pressure control valve with an improved rail pressure control valve. This new AD requires the same actions but relaxes the initial compliance time from within 100 flight hours to within 600 flight hours for TAE 125-01 reciprocating engines. This AD was prompted by the determination that our AD was inadvertently more restrictive than European Aviation Safety Agency AD 2008-0128. We are issuing this AD to prevent engine in-flight shutdown, possibly resulting in reduced control of the aircraft.

**DATES:** This AD is effective February 3, 2012.

**ADDRESSES:** For service information identified in this AD, contact Thielert Aircraft Engines GmbH, Platanenstrasse 14 D-09350, Lichtenstein, Germany; phone: 37204-696-0; fax: 37204-696-55; email: engines.com">info@centurion-engines.com. You may review copies of the referenced service information at the FAA, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238-7125.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility 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 address for the Docket Office (phone: (800) 647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

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

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to revise AD 2010-06-12, Amendment 39-16236 (75 FR 12439, March 16, 2010). That AD applies to the specified products. The NPRM published in the Federal Register on October 18, 2011 (76 FR 64285). That NPRM proposed to require relaxing the initial compliance time from within 100 flight hours to within 600 flight hours for TAE 125-01 reciprocating engines.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM.

### **Clarification of the VRail Plug Modification**

Since we issued the NPRM, we determined that the compliance paragraph describing the Vrail plug modification needed clarification. We changed paragraph (e)(1)(i) in the AD to describe what existing parts need to be removed and what part number needs to be installed.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD with the change described previously.

### **Costs of Compliance**

Based on the service information, we estimate that this AD will affect about 370 TAE 125-01 and TAE 125-02-99 reciprocating engines installed on products of U.S. registry. We also estimate that it will take about 1.5 work-hours per engine to comply with this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$500 per engine. Based on these figures, we estimate the cost of the AD for initial replacement on U.S. operators to be \$232,175.

### **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 have 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 that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

## **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 removing airworthiness directive (AD) 2010-06-12, Amendment 39-16236, (75 FR 12439, March 16, 2010), and adding the following new AD:



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**2010-06-12R1 Thielert Aircraft Engines GmbH:** Amendment 39-16906 ; Docket No. FAA-2009-0948; Directorate Identifier 2009-NE-30-AD.

**(a) Effective Date**

This airworthiness directive (AD) is effective February 3, 2012.

**(b) Affected ADs**

This AD revises AD 2010-06-12, Amendment 39-16236 (75 FR 12439, March 16, 2010).

**(c) Applicability**

This AD applies to Thielert Aircraft Engines GmbH (TAE) models TAE 125-01 and TAE 125-02-99 reciprocating engines.

**(d) Reason**

This AD was prompted by the determination that our AD was inadvertently more restrictive than European Aviation Safety Agency AD 2008-0128. We are issuing this AD to prevent engine in-flight shutdown, possibly resulting in reduced control of the aircraft.

**(e) Actions and Compliance**

Unless already done, do the following actions.

**(1) TAE 125-02-99 Reciprocating Engines**

(i) For TAE 125-02-99 reciprocating engines, within 100 flight hours after the effective date of this AD, replace the existing rail pressure control valve with a rail pressure control valve P/N 05-7320-E000702. Modify the Vrail plug by removing the two existing single wire sealings and installing three new single wire sealings, P/N AMP-828904-1.

(ii) Guidance on the rail pressure control valve replacement and Vrail plug modification specified in paragraph (e)(1)(i) of this AD can be found in Thielert Repair Manual RM-02-02, Chapter 73-10.08, and Chapter 39-40.08, respectively.

**(2) TAE 125-01 Reciprocating Engines**

(i) For TAE 125-01 reciprocating engines, before 600 flight hours time-since-new, or within 100 flight hours after the effective date of this AD, whichever occurs later, replace the existing rail pressure control valve with a rail pressure control valve, P/N 02-7320-04100R3.

(ii) Guidance on the rail pressure control valve replacement specified in paragraph (e)(2)(i) of this AD can be found in Thielert Repair Manual RM-02-01, Chapter 29.0.

**(3) TAE 125-02-99 and TAE 125-01 Engines, Repetitive Replacements of Rail Pressure Control Valves**

Thereafter, for affected TAE 125-02-99 and TAE 125-01 engines, replace the rail pressure control valve with the same P/N valve within every 600 flight hours.

**(f) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(g) Related Information**

(1) For related information, refer to MCAI EASA AD 2008-0128, dated July 9, 2008, EASA AD 2008-0215, dated December 5, 2008, Thielert Service Bulletin No. TAE 125-1008 P1, Revision 1, dated September 29, 2008, and Thielert Repair Manual RM-02-02. For a copy of the service information referenced in this AD, contact Thielert Aircraft Engines GmbH, Platanenstrasse 14 D-09350, Lichtenstein, Germany; phone: 37204-696-0; fax: 37204-696-55; email: [engines.com](mailto:engines.com)">info@centurion-engines.com.

(2) For more information about this AD, contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7143; fax: (781) 238-7199; email: [alan.strom@faa.gov](mailto:alan.strom@faa.gov).

**(h) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on December 23, 2011.  
Peter A. White,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.