

2009-24-10 Thielert Aircraft Engines GmbH: Amendment 39-16102. Docket No. FAA-2009-0753; Directorate Identifier 2009-NE-31-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective January 4, 2010.

Affected Airworthiness Directives (ADs)

(b) None.

Applicability

(c) This AD applies to Thielert Aircraft Engines GmbH (TAE) model TAE 125-01 reciprocating engines, excluding engines that have been modified to TAE Design Modification No. 2007-001. These engines are installed in, but not limited to, Diamond Aircraft Industries Model DA42, Piper PA-28-61 (Supplemental Type Certificate (STC) No. SA03303AT), Cessna 172F, 172G, 172H, 172I, 172K, 172L, 172M, 172N, 172P, 172R, 172S, F172F, F172G, F172H, F172K, F172L, F172M, F172N, and F172P (STC No. SA01303WI) airplanes.

Reason

(d) 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 engine shutdown incidents were reported on aircraft equipped with TAE-125-01 engines. This was found to be mainly the result of operation over a long time period with broken piston cooling oil nozzles which caused thermal overload of the piston.

We are issuing this AD to prevent engine in-flight shutdown, possibly resulting in reduced control of the aircraft.

Actions and Compliance

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

(1) Within the next 110 flight hours, or during the next scheduled maintenance, whichever occurs first after the effective date of this AD, inspect the engine and engine oil for any evidence or pieces of broken piston cooling nozzles.

(2) Use the inspection instructions in Thielert Service Bulletin No. TM TAE 125-0017, Revision 2, dated February 22, 2008, to perform the inspection.

(3) Thereafter, repetitively inspect the engine and engine oil for any evidence or pieces of broken piston cooling nozzles, within every additional 100 flight hours.

(4) If any evidence of a failed cooling nozzle is found, replace the failed cooling nozzle before further flight.

Alternative Methods of Compliance (AMOCs)

(f) 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

(g) Refer to European Aviation Safety Agency AD 2008-0016 R1, dated February 22, 2008, and 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, for related information.

(h) Contact Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: jason.yang@faa.gov; telephone (781) 238-7747; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(i) You must use Thielert Service Bulletin No. TM TAE 125-0017, Revision 2, dated February 22, 2008 to do the actions required by this AD, unless the AD specifies otherwise.

(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>.