AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Thielert Piston Engines

AD/THIELERT/8 Piston Cooling Nozzles 4/2008

Applicability: Thielert Aircraft Engines (TAE) TAE125-01 engines, except those engines that have been modified in accordance with TAE Design Modification No. 2007-001.

Note 1: These engines are known to be installed on, but not limited to, Cessna 172 and (Reims-built) F172 series, Piper PA-28 series, APEX (Robin) DR 400 series, Diamond DA40 and DA42 aircraft.

Requirement:

1. Inspect the piston cooling nozzle in accordance with TAE TM TAE125-0017 dated 14 December 2007 or later approved revision.
2. Repeat the inspection detailed in Requirement 1 of this AD.
3. When a broken piston cooling nozzle is found during any inspection as detailed in Requirement 1 or 2 of this AD, contact TAE, do not operate the engine anymore and send it back to TAE.

Note 2: EASA AD 2008-016R1 dated 22 February 2008 refers.

Compliance:

1. Within the next 110 Flight Hours (FH) or 6 months or during the next scheduled maintenance, whichever occurs first after the effective date of this AD.
2. Thereafter, at intervals not to exceed 100 flight hours (FH) (+/- 10 FH).
3. Before further flight after the effective date of this AD.

This Airworthiness Directive becomes effective on 10 April 2008.

Thielert Piston Engines

AD/THIELERT/8 (continued)

Background: In-flight engine shutdown incidents were reported on aircraft equipped with TAE125-01 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. Consequently, the German Federal Bureau for the investigation of transportation accidents (BFU) issued Safety Recommendation no. 10/2007. For the reasons stated above, this Airworthiness Directive (AD) requires the inspection of all affected TAE125-01. This AD excludes those engines that have been modified in accordance with TAE Design Modification No. 2007-001.

David Punshon
Delegate of the Civil Aviation Safety Authority

27 February 2008