AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/THIELERT/9 and issues the following 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/9 Engine - Clutch Assembly 8/2008
Amdt 1 TX

Applicability: All Thielert Aircraft Engines GmbH TAE125-02-99 (commercial designation Centurion 2.0) engines having clutch assembly P/N 05-7211-K000304 installed.

Note 1: These engines are known to be installed on, but not limited to, Cessna 172 and (Reims-built) F172 series (EASA STC Nr. EASA.A.S.01527), Piper PA-28 series (EASA STC Nr. EASA.A.S.01632), APEX (Robin) DR 400 series (EASA STC Nr. EASA.A.S.01380) and Diamond DA40 and DA42 aircraft.

Requirement: Replace the clutch in accordance with Thielert Aircraft Engines Service Bulletin TM TAE 125-1006 P1, Revision 1 or later NAA approved revision.

Note 2: EASA Emergency AD 2008-0106-E dated 30 May 2008 refers. This AD supersedes EASA AD 2008-0100-E.

Compliance: For engines that have accumulated, on the effective date of this AD, less than 50 Flight Hours (FH) since the last clutch inspection - Before the accumulation of 50 FH since last clutch inspection.

For engines that have accumulated, on the effective date of this AD, between 50 FH and 300 FH since the last clutch inspection - Before further flight.

Ferry Flight

For the purpose of this AD, one Ferry Flight with pilot only to a Maintenance Station is allowed, for engines that have accumulated more than 50 FH, to accomplish the engine clutch replacement required by this AD. The flight shall be limited to VFR conditions.

This Amendment becomes effective on 16 June 2008.

Background: In-flight engine shutdown incidents have been reported on aircraft equipped with TAE125-02-99 engines. Preliminary investigations showed that it was mainly the result of cracked disc springs in the clutch. This condition, if not corrected, could result in further cases of engine in-flight shutdown and the consequent loss of control of the aircraft.

Thielert Piston Engines

AD/THIELERT/9 Amdt 1 (continued)

To address this unsafe condition, the original issue of this AD was published to mandate repetitive inspections until a new clutch P/N 05-7211-K006001 is installed.

Since that publication, data collected from the performed inspections revealed that the sole clutch assembly P/N 05-7211-K000304 was subject to failure. For those reasons this amendment supersedes the previous requirements and requires the removal of the affected clutch assemblies P/N 05-7211-K000304 on all TAE125-02-99 engines and their replacement by new clutches of an improved design.

The original issue of this AD became effective on 30 May 2008.

James Coyne
Delegate of the Civil Aviation Safety Authority

11 June 2008