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 repeals Airworthiness Directive (AD) AD/PHZL/79 Amdt 1 and issues the following AD under subregulation 39.001 (1) of CASR 1998 and subsection 33 (3) of the Acts Interpretation Act 1901. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct an 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.

Propellers - Variable Pitch - Hartzell

AD/PHZL/79 Amdt 2

Propeller Vibration Placard

12/2014

Applicability:

This AD applies to Hartzell ()HC-C2YK-()()()()/()()7666A-() propellers installed on undampered 200 horsepower Lycoming IO-360 engines.

Note 1: These engines can be fitted to but are not limited to Mooney M20E and M20F, Piper PA-28R-200, and Pitts S-1T and S-2A aeroplanes.

Note 2: Engine models of this series incorporate no crankshaft dampers unless the third section of the model designation exhibits a numerical digit in its fourth position, i.e. IO-360-A1B<u>6</u>. The digit "6" in the fourth position, indicates the incorporation of one 6.3 order and one 8th order counterweights.

Requirement: For Normal Category aeroplanes:

- 1. Unless previously accomplished, remove any vibration placard that does not have the following statement and replace it with one that does:
 - "Avoid continuous operation Between 2000 and 2350 rpm"
- 2. Unless previously accomplished, re-mark the tachometer face or bezel with a red arc for the restricted engine speed range, between 2000 and 2350 rpm.
- 3. Include a copy of this AD with the aeroplane flight manual, if an aeroplane flight manual is carried.

For Utility and Aerobatic Category aeroplanes:

- 1. Unless previously accomplished, remove any vibration placard that does not have the following statement and replace it with one that does:
 - "Avoid continuous operation Between 2000 and 2350 rpm. Above 2600 rpm in aerobatic flight".
- 2. Unless previously accomplished re-mark the tachometer face or bezel with a red arc for the restricted engine speed range, between 2000 and 2350 rpm, and between 2600 and 2700 rpm (red line).

Propellers - Variable Pitch - Hartzell

AD/PHZL/79 Amdt 2 (continued)

3. Include a copy of this AD with the aeroplane flight manual, if an aeroplane flight manual is carried.

Note 3: FAA AD 2007-26-09 Amdt 39-15311, paragraph (k) refers.

Compliance:

Unless previously accomplished, the required actions for Normal Category aeroplanes and Utility and Aerobatic Category aeroplanes must be taken from the effective date of this AD.

Note 4: Compliance with AD/PHZL/79 Amdt 1 constitutes compliance with the equivalent requirement(s) of this AD.

The effective date of this AD is 8 June 2014.

Background:

This AD was originally issued to require placards to be fitted to limit operation of the propeller at certain engine speeds. This will prevent failure of the propeller blade due to vibration. Engine speed limitations were previously published in amendments to the Australian Civil MkI an MkII Flight Manuals.

AD/PHZL/79 Amdt 1, which became effective on 7 August 2003, corrected errors relating to the identification of undampered engines.

This AD, AD/PHZL/79 Amdt 2, makes reference to the latest FAA AD which encompasses the equivalent requirement(s) of this AD.



Mike Higgins
Delegate of the Civil Aviation Safety Authority

3 June 2014