

---

## 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.

---

### Propellers - Variable Pitch - Hartzell

**AD/PHZL/90**
**Hub Mounting Bolt Holes**
**8/2008**

**Applicability:** Hartzell Propeller Inc. model HC-E5N-3( ), HC-E5N-3( )(L), and HCE5B-5( ) propellers. Hartzell Propeller Inc. model HC-E5N-3( ) and HC-E5N-3( )(L) propellers are installed on, but not limited to, Piaggio P-180 Avanti aeroplanes with propeller serial numbers (SNs) up to and including HF229 or KU92, except those SNs listed in the following Table 1. Hartzell Propeller Inc. HC-E5B( ) propellers are installed on Grumman S-2 Tracker aeroplanes with propeller SNs up to and including HN14.

**Table 1: Propeller SNs Not Affected by This AD**

#### **HC-E5N-3( )L**

HF4, HF5, HF6, HF7, HF18, HF20, HF26, HF28, HF30, HF34, HF45, HF50, HF52, HF74, HF76, HF87, HF93, HF94, HF97, HF101, HF109, HF121, HF122, HF126, HF130, HF133, HF135, HF137, HF140, HF147, HF149, HF152, HF153, HF156, HF158, HF164, HF165, HF179, HF183, HF184, HF188, HF190, HF195, HF205, HF213, HF215, HF225, HF226, HF230, HF231, HF232, HF233, HF234, HF235

#### **HC-E5N-3( )**

KU1, KU3, KU14, KU15, KU16, KU19, KU34, KU41, KU45, KU51, KU57, KU69, KU74, KU79, KU84, KU86, KU87, KU89, KU93, KU94, KU95, KU96, KU103

#### **HC-E5B-5( )**

HN15

**Requirement:**

1. Do a onetime eddy current inspection of the propeller mounting holes in accordance with Hartzell Service Bulletin (SB) HC-SB-61-295, Revision 2, dated 1 August 2007.
2. Replace the propeller hub if any crack is found.

*Note: FAA AD 2007-24-14 Amdt 39-15280 dated 21 November 2007 refers.*

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/90 (continued)

Compliance: For Requirement 1:

1. If the propeller hub Time In Service (TIS) is unknown, or more than 1,800 hours but fewer than 4,500 hours, inspect the mounting holes within 12 calendar months, or within the next 150 hours TIS, or at the next scheduled airframe "A" check inspection.
2. If the propeller hub TIS is 1,800 hours or fewer, or 4,500 hours or more, inspect the mounting holes within 12 calendar months, or within 600 hours TIS, or at the next scheduled airframe "B" check inspection, whichever comes first.

For Requirement 2:

Before further flight.

This Airworthiness Directive becomes effective on 31 July 2008.

Background: This AD results from the discovery of a five-bladed propeller hub with a large crack on the mounting flange of the hub. It was determined that the hubs at risk are in two populations. The first population is those hubs with unknown hours, or with between 1,800 and 4,500 hours TIS. The second population is all other hubs with fewer than 1,800 or more than 4,500 hours TIS.



James Coyne  
Delegate of the Civil Aviation Safety Authority

13 June 2008