
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/91****Hub Blade Socket Lubrication Holes****9/2008**

Applicability: Hartzell Propeller Inc. left-hand rotating ()HC-()(2,3)Y(K,R)-2 two- and three-bladed, aluminium hub, "compact" series propellers, with hubs having a non-suffix serial number (SN), and lubrication holes located on the shoulder of the hub blade socket installed on Lycoming Engines LIO-360 series and LO-360 series reciprocating engines, installed on Piper Aircraft, Inc. Seneca PA-34-200 and Seminole PA-44-180, and Hawker Beechcraft Corporation Model 76 Duchess, aeroplanes.

Note 1: The parentheses appearing in the propeller model number indicates the presence or absence of an additional letter(s) that varies the basic propeller model. This AD still applies regardless of whether these letters are present or absent in the propeller model designation.

- Requirement:**
1. Perform an Eddy Current Inspection (ECI) of the area around the lubrication holes of the hub blade sockets in accordance with paragraphs 3.A. through 3.A.(3)(d) of Hartzell Propeller Inc. Alert Service Bulletin (ASB) No. HC-ASB-61-297, Revision 1, dated 14 November 2007.
 2. If any cracks are found, remove the propeller hub from service.
 3. If no cracks are found, mark the propeller using paragraph 3.A.(5)(a) of the Accomplishment Instructions of Hartzell Propeller Inc., ASB No. HC-ASB-61-297, Revision 1, to indicate compliance with this ASB.
 4. Do not install on any engine in any aircraft propeller hubs that have a non-suffix SN, or an "E" suffix letter in the SN removed from affected propellers in this AD.

Optional Terminating Action

As optional terminating action to the repetitive ECIs required by this AD, replace the non-suffix SN propeller hub with a propeller hub identified by an "A" or "B" suffix letter in the propeller hub SN.

Replacement propeller hub part numbers can be found in paragraph 2.A., Material Information, of Hartzell Propeller Inc. ASB No. HC-SB-61-297, Revision 1.

Propellers - Variable Pitch - Hartzell

AD/PHZL/91 (continued)

Previous Credit

ECIs of the propeller hubs done before the effective date of this AD that use Hartzell Propeller Inc. ASB No. HC-SB-61-297, dated 17 September 2007, comply with the requirements specified in this AD.

Later revisions of the above SB, approved by the United States Federal Aviation Administration (FAA) as an Alternate Method of Compliance (AMOC) to FAA AD 2008-13-28 are considered acceptable for compliance with the equivalent Requirements of this Directive.

Note 2: FAA AD 2008-13-28 Amdt 39-15591 dated 19 June 2008 refers.

Compliance: For Requirement 1:

Initial inspection within 50 flight hours after the effective date or within 12 months after the effective date of this AD, whichever occurs first, unless previously accomplished; and

Thereafter repetitively at intervals not to exceed 50 flight hours or 12 months, whichever occurs first.

For Requirement 2:

Before further flight.

For Requirement 3:

At completion of the inspection as detailed in Requirement 1 of this AD.

For Requirement 4:

From the effective date of this AD.

This Airworthiness Directive becomes effective on 28 August 2008.

Background: The FAA has received four reports of propeller hub cracks, including two in-flight blade separation events. The issuing of this AD is intended to prevent failure of the propeller hub, which could result in blade separation and loss of control of the aeroplane.



James Coyne
Delegate of the Civil Aviation Safety Authority

16 July 2008