
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 - General**AD/PROP/5****Incomplete Maintenance****10/2005**

Applicability: Hartzell Propeller, Inc., McCauley Propeller Systems, and Sensenich Propeller Manufacturing Company, Inc. propeller models last returned to service by Southern California Propeller Service of Inglewood, CA., listed in the following Table 1:

Table 1. - Applicable Propeller Models

Hartzell Propeller, Inc.
0HC-0(2,3,4)Y0-0.
0HC-0(2,3,4)(X,V,MV,W,Z,P,R) (F,G,L,K,R,20,30,31)-0.
0HA-0-0.
HC-B(3,4)(M,P,R,T)(A,N,P)-0.
HC-(D,E)(4,5)(A,B,N,P)-0.
McCauley Propeller Systems
020030C000-0: All constant speed two-bladed propeller models.
030030C000-0: All constant speed three-bladed propeller models.
10000/0: All metal propeller models.
Sensenich Propeller Manufacturing Company, Inc.
All metal propeller models.

These actions are against propeller models returned to service by Southern California Propeller Service. Southern California Propeller Service is not to be confused with propeller repair stations known as California Propeller or as Propeller Service of California. Southern California Propeller Service was issued Air Agency Certificate number of VXS617L in 1992, which was revoked in June of 1998.

Propellers - General

AD/PROP/5 (continued)

For Hartzell propeller models listed in Table 1 of this Directive, any letter or number (or lack of a letter or number) could appear where open parentheses are shown in the model number. Model numbers could show any combination of letters or numbers where the model number shows parentheses with a series of numbers or letters.

Requirement: For propeller models listed in Table 1 of this Directive, that have been overhauled since being returned to service by Southern California Propeller Service by an authorized repair station other than Southern California Propeller Service, no further action is required.

Perform the following actions in accordance with propeller manufacturer's service documentation:

1. Disassemble,
2. Clean,
3. Inspect for the following:
 - a. Cracks,
 - b. Corrosion or pits,
 - c. Nicks,
 - d. Scratches,
 - e. Blade minimum dimensions,
 - f. Unapproved localized heating of blade,
 - g. Unapproved use of helicoil inserts in actuating pin holes,
 - h. Improperly drilled actuating pin holes,
 - i. Chemical conversion coat or paint or both applied over corrosion,
 - j. Lack of chemical conversion coating,
 - k. Lack of paint on internal surfaces,
 - l. Bolts incorrectly torqued,
 - m. Incorrect parts,
 - n. Incorrect installation of parts,

Propellers - General

AD/PROP/5 (continued)

- o. Reinstallation of parts intended for one-time use, and
 - p. Lack of proper shot peening.
- 4. Repair and replace with serviceable parts, as necessary,
- 5. Reassemble and test.

Note: FAA AD 2005-14-11 Amendment 39-14188 and FAA Special Airworthiness Information Bulletin No. NE-01-19, dated 20 March 2001, refers.

Compliance: Within 10 hours time-in-service after the effective date of this Directive.

This Airworthiness Directive becomes effective on 29 September 2005.

Background: This Directive results from the investigation of a failed propeller blade and subsequent inspections of various propeller models returned to service by Southern California Propeller Service, of Inglewood, California, United States of America. This Directive is issued to prevent blade failure that could result in separation of a propeller blade and loss of control of the aeroplane.



James Coyne
Delegate of the Civil Aviation Safety Authority

18 August 2005