



EASA Safety Information Notice

No.: 2007-33

Issued: 26 September 2007

Subject: Nonconformities discovered on inspected and overhauled propellers

Ref. Publication: FAA Special Airworthiness Information Bulletin (SAIB) NE-07-53, dated September 25, 2007.

Introduction: This Safety Information Notice (SIN) refers to FAA SAIB NE-07-53 (attached to this document as pages 2 and 3) and alerts aircraft owners, operators and certificated repair facilities of nonconformities that have been discovered on inspected and overhauled propellers.

Applicability: Any aircraft that has one of the affected propellers installed.

Recommendation: This Safety Information Notice is for information only.

Contact: For further information contact the Airworthiness Directives, Safety and Research Section, Certification Directorate, EASA.
E-mail: ADs@easa.europa.eu .



SAIB: NE-07-53

SUBJ: Propeller assemblies overhauled by Desert Aircraft Blade Service

Date: September 25, 2007

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, operators, and certificated repair facilities of **any aircraft equipped with any propeller, inspected or overhauled by Desert Aircraft Blade Service (Air Agency Certificate No. D9BR993J)**, of potential propeller nonconformities that might exist. A field service difficulty report concerning two Hartzell Propeller Inc. model HC-92ZK-2B two-bladed propellers (S/Ns 1349F and 1350F) installed on a Piper PA-23-23 airplane. The airplane was ground run and the mechanic noted there was an unusual vibration. The propellers were removed and sent to another propeller repair station for evaluation. An FAA Flight Standards Principal Maintenance Inspector (PMI) witnessed the subsequent teardown of these two propeller assemblies. During the teardown inspection, several nonconformities were discovered.

Background

The nonconformities cited in the propeller teardown reports compiled by the FAA PMI are as follows:

- All propeller link pins had corrosion.
- Three out of the four blade retention bearings were worn beyond published service limits with associated corrosion pitting.
- The propeller hub pilot tubes had corrosion pitting and excessive wear beyond published service limits.
- The feathering spring sub- assemblies had deep scratches.
- Blade retention clamp bolts were worn beyond service limits.
- Blade retention clamp nuts were worn and no longer provided a secondary safety method.
- The propeller pitch control link arms were corroded.
- Three out of the four propeller blades measured outside the published service limits.
- All four propeller blades were found with surface corrosion, pitting, and nicks when the paint was removed. No primer paint or alodine corrosion treatment was found as required by the published service documentation.
- Airworthiness Directive (AD) 95-11-08 was not completed.
- AD 2005-18-12 was not properly completed.

Because of the observed condition of the propeller assemblies discovered during this inspection, it is considered likely that other propeller assemblies overhauled or inspected by Desert Aircraft Blade Service and returned to service may have similar nonconformities. To date, there are no other reports of any propeller failures or other propeller service difficulties.

Recommendations

We recommend that any propeller, inspected or overhauled by Desert Aircraft Blade Service (Air Agency Certificate No. D9BR993J), be inspected in accordance with the applicable propeller manufacturer's published service documentation. Also, we recommend that any propeller, inspected

or overhauled by Desert Aircraft Blade Service (Air Agency Certificate No. D9BR993J), be inspected for compliance with all applicable airworthiness directives. Further, if any nonconformities are discovered, we recommend you contact the FAA (see the following contact information) and submit a report summary of the nonconformities that includes the propeller manufacturer's name, propeller model, and applicable aircraft installation information.

For Further Information Contact

Tim Smyth, Senior Propulsion Engineer, FAA, Chicago Aircraft Certification Office, 2300 East Devon Avenue, Des Plaines, IL, 60018; phone (847) 294-7132; fax (847) 294-7834; email: timothy.smyth@faa.gov.