



SUBJ: Propeller Spinner Section

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners, operators, and certificated repair facilities of Piper PA-24, Piper PA-28R-180, Piper PA-28R-200, and Mooney M20() airplanes, except for the Mooney M20(J), equipped with **Hartzell Propeller spinner assemblies, part numbers (P/N) 835-54(P) or 835-58(P)**, of the potential for cracking of the spinner dome which could lead to failure and liberation of the spinner. The airworthiness concern is not an unsafe condition that would warrant airworthiness directive action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

We have received reports of Hartzell spinners, P/N 835-54(P) and 835-58(P), installed on the aircraft listed above which have developed cracks. These cracks will propagate with use, eventually leading to spinner liberation and damage to the airplane.

The reported failures have caused in-flight vibrations resulting in premature landings. Many of these spinners were newly manufactured and had a relatively low amount of time-in-service. Hartzell Propeller conducted testing and analysis on the spinner failures and noted that during some flight operations a resonant vibratory condition was present. Hartzell Propeller has developed a replacement spinner configuration that mitigates the vibratory environment. There are approximately 380 airplanes affected by this condition. Spinners installed on Mooney M20 (J) airplanes in accordance with Hartzell STC SA02414CH-D are not affected by this condition because they do not have the subject spinner assembly installed.

Recommendations

If a crack on the spinner is discovered during pre-flight inspection, we recommend replacement of the spinner before further flight. If a crack is not found, then, within 50 flight hours we recommend replacement of the spinner assembly. Guidance may be found Hartzell Service Bulletin HC-SB-61-311, Revision 5, dated December 13, 2011 and Hartzell Alert Service Bulletin HC-ASB-61-332, Revision 5, dated December 13, 2011, or later FAA approved revisions.

For Further Information Contact

Christopher Richards, Aerospace Engineer, Chicago Aircraft Certification Office, FAA; phone: 847-294-7156; fax: 847-294-7834; email: christopher.j.richards@faa.gov.

For Related Service Information Contact

Hartzell Propeller Inc., One Propeller Place, Piqua, Ohio 45356; phone: 937-778-4379; fax 937-778-4391; email: techsupport@hartzellprop.com.