

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

**Airworthiness Directive**

**90-02-23 HARTZELL PROPELLER, INC.:** Priority Letter AD issued January 22, 1990.

Applies only to Hartzell propellers listed in the hub model/serial number list below and installed on Acrobatic Aircraft (regardless of engine type) or installed on any aircraft with Lycoming TIO-540 series engines and IO-540 series engines rated at 260 horsepower or higher certificated in any category including, but not limited to:

Bellanca 8KCAB and 17-31A  
Britten Norman Islander BN-2A-2, BN-2A-3, BN-2A-20, BN-2A-21  
British Aerospace Bulldog B125 (Formerly Scottish Aviation)  
Christen Pitts S-1T, S-2, S-2A, S-2S, S-2B  
Great Lakes 2T-1A-1, 2T-1A-2  
Moravan Zlin 526L  
Piper Cherokee Six, Saratoga, Lance PA-32(R,T)-300(T), PA-32S-300,  
PA-32(R)-301(T)  
Socata TB30

Applicability for Propeller Models is as follows:

<b>PROPELLER MODELS</b>	<b>PROPELLER SERIAL NUMBER RANGE</b>
-------------------------	--------------------------------------

HC-C2YK-1B( ) or HC-C2YR-1B( )	CH19835 through CH26050
--------------------------------	-------------------------

HC-C2YK-2( ) or HC-C2YR-2( )	AU4322 through AU7032
------------------------------	-----------------------

HC-C2YK-4( ) or HC-C2YR-4( )	ALL
------------------------------	-----

HC-E2YK-1B( ) or HC-E2YR-1B( )	DK1018 through DK1685
--------------------------------	-----------------------

Compliance is required within the next 25 hours time-in-service after receipt of this Priority Letter AD, unless already accomplished within the last 25 hours time-in-service and, thereafter, at intervals not to exceed 50 hours time-in-service or 50 flights from the last inspection, whichever occurs first.

To prevent possible cracks in the propeller hubs from progressing to failure which can result in blade separation and lead to possible engine separation and subsequent loss of aircraft control, accomplish the following:

(a) Visually inspect the affected propeller hub for cracks using a 10X glass in accordance with Hartzell Service Bulletin (SB) No. 164, dated October 3, 1989.

(b) If any indication of a crack is found, prior to further flight, remove the propeller assembly and replace with a serviceable propeller assembly.

(c) Report cracks found in writing to the Manager, Chicago Aircraft Certification Office, within 10 days of the inspection. Reporting approved by the Office of Management and Budget (OMB) under OMB No. 2120-0056.

(d) Aircraft may be ferried in accordance with the provisions of Federal Aviation Regulations (FAR) 21.197 and 21.199 to a location where compliance with the AD can be accomplished.

(e) Upon submission of substantiating data in writing by an owner or operator, through an FAA Airworthiness Inspector, an alternate method of compliance with the requirements of this Priority Letter AD or adjustments to the compliance time specified in this Priority Letter AD may be approved by the Manager, Chicago Aircraft Certification Office, Small Airplane Certification Directorate, Aircraft Certification Service, Federal Aviation Administration, 2300 East Devon Avenue, Des Plaines, Illinois 60018.

Documents pertinent to this Priority Letter AD may be obtained from Hartzell Propeller, Inc., One Propeller Place, Piqua, Ohio 45356, or may be examined at the Office of Assistant Chief Counsel, Federal Aviation Administration, ATTN: Rules Docket No. 89-ANE-44, 12 New England Executive Park, Burlington, Massachusetts 01803.

Priority Letter AD 90-02-23 issued on January 22, 1990, is effective immediately upon receipt.