

94-03-11

Amendment 39-8818.

Docket 94-ANE-06.

Applicability: Hartzell Propeller Inc. HC-B4 series propellers, except those propellers installed on Mitsubishi MU-2B-26A, -36A, -40, and -60 aircraft. The affected propellers are installed on but not limited to the following aircraft: Beech F90 King Air, A100 and A100A King Air, B100 King Air; Construcciones Aeronauticas, SA (CASA) C-212-CB, -CC, and -CF; DeHavilland Heron—Saunders conversion ST-27B; DornierDO228-100, -101, -200, -201, -202, -212; Embraer EMB-121A1 Xingu; Fairchild SA226-TB Merlin IIIB; LetL-410A; and Shorts SC-7 series 3, variant 200.

NOTE: This airworthiness directive (AD) does not contain an exhaustive list of aircraft which utilize these propellers. Other Type Certificated models may not be included in the list, and other aircraft may use the affected propeller models through, for example, installation approvals made by Supplemental Type Certificate or FAA Form 337 "Major Repair and Alteration." It is the responsibility of the owner, operator, or person returning the aircraft to service to determine if an aircraft has an affected propeller.

Compliance: Required as indicated, unless accomplished previously.

To prevent possible fatigue cracks in propeller hub arm assemblies progressing to failure, resulting in departure of the hub arm and blade, that may result in engine separation and subsequent loss of aircraft control, accomplish the following:

- (a) For each Hartzell Propeller Inc. HC-B4 series propeller currently installed on an aircraft other than Mitsubishi MU-2B series aircraft, determine if the propeller hub arm assembly has ever seen service on a Mitsubishi MU-2B series aircraft prior to performing the inspections required by the compliance schedule contained in paragraph (b) of this AD:
 - (1) Determine if the currently installed propeller hub assembly matches a serial number (S/N) in Table 1 of Hartzell Propeller Inc. Alert Service Bulletin (ASB) No. A186, dated January 25, 1994; and
 - (2) If the currently installed propeller hub assembly's S/N is not listed in Table 1 of Hartzell Propeller Inc. ASB No. A186, dated January 25, 1994, and an aircraft and propeller maintenance record search confirms the currently installed propeller hub assembly has not been previously installed on a Mitsubishi MU-2B series aircraft, or the service history cannot be determined, no further action is required.
 - (3) If the record search reveals that the S/N of the currently installed propeller hub arm assembly is listed in Table 1 of Hartzell Propeller Inc. ASB No. A186, dated January 25, 1994, or the propeller hub arm assembly was installed previously on a Mitsubishi MU-2B series aircraft, remove the propeller hub arm assembly in accordance with the compliance schedule listed in paragraph (b) of this AD, and inspect and rework in accordance with the requirements of paragraph (c) of this AD.

- (b) For propeller hub arm assemblies identified in paragraph (a)(3) of this AD, remove from service in accordance with the following schedule:

- (a) Remove affected propeller hub arm assemblies from the aircraft and return to Hartzell Service Center, 5465 West State Route 185, Piqua, OH 45356-2634 USA, telephone (513) 778-4205, for inspection and specified rework, in accordance with Hartzell Propeller Inc. ASB No. A186, dated January 25, 1994.
- (b) Reinstall serviceable propeller hub arm assemblies that had the hub arm bores inspected and reworked, as necessary, pilot tubes replaced, and were marked at the end of the hub arm assembly S/N with a suffix letter "M" in accordance with Hartzell Propeller Inc. ASB No. A186, dated January 25, 1994.
- (c) A blade strike is defined as a propeller having any blade or blades that have been bent beyond serviceable limits in accordance with Hartzell Propeller Inc. Service Letter (SL) 61S, dated December 10, 1993.
- (d) The "calendar month" compliance time stated in this AD allows the performance of the required action prior to the last day of the month in which compliance is required.

NOTE: For example, if action is required 2 calendar months from April 28, 1994, the required actions are to be performed not later than June 30, 1994.

- (e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Chicago Aircraft Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Chicago Aircraft Certification Office.

NOTE 1: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Chicago Aircraft Certification Office.

NOTE 2: Although Hartzell Service Center is presently the only FAA-approved repair facility authorized to conduct the requirements of this AD, other facilities may be authorized through the alternative method of compliance procedure in paragraph (g) of this AD.

- (f) Except when propeller hub arm assemblies experience a blade strike after the effective date of this AD, special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.
- (g) The removal, inspection, and rework shall be done in accordance with the following service documents:

Document No.	Pages	Revision	Date
Hartzell ASB No. A186	1-4	Original	January 25, 1994

Total pages: 4.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Hartzell Propeller Inc., One Propeller Place, Piqua, OH 45356-2634. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

- (h) This amendment becomes effective on February 28, 1994.