<u>86-05-12</u>

Amendment 39-5333.

Applies to Hartzell Model HC-B3TN-5()/T10282() propellers installed on Fairchild Model SA226-TC aircraft modified by Garrett STC SA344GL or Par Air STC SA4872SW with TPE331-10UA engines.

Compliance required prior to accumulating 1,000 hours time in service since new or 300 hours time in service since overhaul, or within 30 days after the effective date of this AD, whichever occurs later, unless already accomplished.

To prevent propeller blade separation near the hub which could result in engine separation from the aircraft, accomplish the following:

- (a) Remove propeller from aircraft.
- (b) Accomplish the following in accordance with Hartzell Service Bulletin No. 136C dated March 3, 1986, or FAA approved equivalent:
 - (1) Disassemble propeller and visually inspect the blade pilot tube bore area. Particular attention shall be made to area between the inner needle bearing assembly and bearing spacer.
 - (2) Remove all evidence of scratches, tool marks, corrosion, etc. in the blade pilot tube bore area. Do not exceed the maximum rework limitations defined in the service bulletin.
 - (3) Etch the blade pilot tube bore area prior to penetrant inspection. Ensure removal of all etching solution.
 - (4) Penetrant inspect the blade pilot tube bore area.
 - (5) Coat the blade pilot tube bore area with alodine.
 - (6) Install bearing spacer and inner needle bearing assembly. Pilot tube bore must be lubricated to facilitate bearing installation.
- (c) Replace, prior to further flight, all blades showing evidence of cracks or other unairworthy conditions with airworthy blades.
- (d) Place the following WARNING in the Limitation Section of the FAA approved airplane flight manual supplement: "The TPE331-10UA engine is capable of developing in excess of the maximum allowable torque approved for this installation. Use of torque in excess of the maximum approved limits may cause propeller failure."
- NOTES:
 - (1) Propeller blades with serial numbers subsequent to F74359 have had the intent of this AD incorporated during manufacture and are not affected by this AD.
 - (2) This AD does not apply to propellers installed on TPE331-3 engines unless the propellers were previously installed on TPE331-10UA engines for at least 1000 hours time in service since new or at least 300 hours time in service since overhaul.

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

Upon request, an equivalent means of compliance with the requirements of this AD may be approved by the Manager, Chicago Aircraft Certification Office, FAA, 2300 East Devon Avenue, Des Plaines, Illinois 60018.

Hartzell Service Bulletin No. 136C dated March 3, 1986, identified and described in this document is incorporated herein and made a part hereof pursuant to 5 U.S.C. 552(a)(1). All persons affected by this directive who have not already received this document from the manufacture may obtain copies upon request to Hartzell Propeller Products Division, TRW Aircraft Components Group, 350 Washington Ave., Piqua, Ohio 45356. This document also may be examined at the Office of Regional Counsel, FAA, Attn: Rules Docket No. 86-ANE-9, 12 New England Executive Park, Burlington, Massachusetts 01803, weekdays, except Federal holidays, between 8:00 a.m. and 4:30 p.m.

This amendment becomes effective June 27, 1986, as to all persons except those persons to whom it was made immediately effective by priority letter AD 86-05-12 issued March 7, 1986, which contained this amendment.