HARTZELL PROPELLER INC.

Propellers Blades - Inspection of Hartzite Blades

- 1. Planning Information
 - A. Effectivity
 - (1) Hartzell propeller models HC-(1, D)2X20-() with 8428() or 8427() Hartzite blades are affected by this Service Bulletin.
 - (2) Hartzell propeller models HC-42XF-() with 8428() Hartzite blades are affected by this Service Bulletin.
 - B. Concurrent Requirements

None.

- C. Reason
 - (1) Longitudinal cracks or splitting between laminations of Hartzite blade shanks have been observed in a few instances after the blades have experienced several hundred hours of operation.
 - (2) The cracks start at one of the lag screws at the base of the blade on the leading or trailing edge and extend outboard of the hub clamp an inch or so. This suggests that splitting is caused by the wedge action of the screws coupled with extended vibration.
 - (3) The incidence of small longitudinal cracks does not ordinarily reduce the strength of the propeller with respect to the centrifugal loads, it is important that cracks are identified before they have the potential for subsequent blade failure initiating at the cracks.
- D. Description

All 8427() and 8428() Hartzite blades are to be visually inspected for cracks extending outboard of the blade clamps.

- E. Compliance
 - (1) Prior to next flight, visually inspect for cracks or grease seeping from the blade outboard of blade clamps.
 - (2) Visually inspect for cracks or grease seeping from the blade outboard of blade clamps every 10 flight hours thereafter.
 - <u>NOTE</u>: Hartzite blades cannot be repaired, overhauled, or converted to "V" shank blades. Replace Hartzite blades with aluminum blades at overhaul.

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F. Approval

FAA approval has been obtained on technical data in this publication that affects type design.

G. Manpower

Approximately 2 man hours are required to perform this inspection.

H. Weight and Balance

No change.

I. Electrical Load Data

No change.

J. References

None

K. Other Publications Affected

Hartzell Hydro Selective Propeller Overhaul Manual 100D

- 2. Material Information
 - A. Material Necessary for Each Propeller/Component

None

- 3. Accomplishment Instructions
 - A. Remove spinner dome in accordance with the appropriate manual.
 - B. Visually inspect blades outboard of clamps for cracking or grease seeping from the blade.
 - (1) Blades with cracks or visible grease seepage must be retired from service.
 - C. Repeat inspection every 10 flight hours.
 - D. Indicate compliance with this Service Bulletin in propeller logbook.