CHRISTEN *

PRODUCT LETTER

No: 000321

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By: FLC Date: 06-04-83 Page: 1 of 1

Send To: 916 ENGINE MOUNT KIT

C * MULTIPLE LETTER MAILING *
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S SEE FIRST LETTER FOR
T NAME AND ADDRESS.

Subject: INSTALLATION OF ANTI-CHAFE AND ANTI-VIBRATION TAPE ON PROPELLER HUB OF EAGLE II AIRCRAFT

The propeller spinner assembly for the Eagle II aircraft is supplied as a part of the propeller by TRW-Hartzell Propeller Company. The spinner assembly is composed of a bullet-shaped shell and two internal bulkheads. One of the bulkheads has an open center which is designed to fit over the hub of the propeller and is epoxy-mounted inside the shell at the forward end. The other bulkhead is mounted on the aft side of the propeller assembly, and it is attached to the aft end of the shell with machine screws. The mounting of the spinner on the propeller assembly is depicted on the enclosed copy of Engineering Sketch X-90167.

Several Eagle II builders have discovered cracks in the spinner bulkheads when performing periodic inspections. Investigation of the cracking problem has revealed that radial play between the forward propeller bulkhead and the propeller hub allows sufficient movement of the spinner assembly to cause fatigue and eventual cracking of the bulkheads or shell.

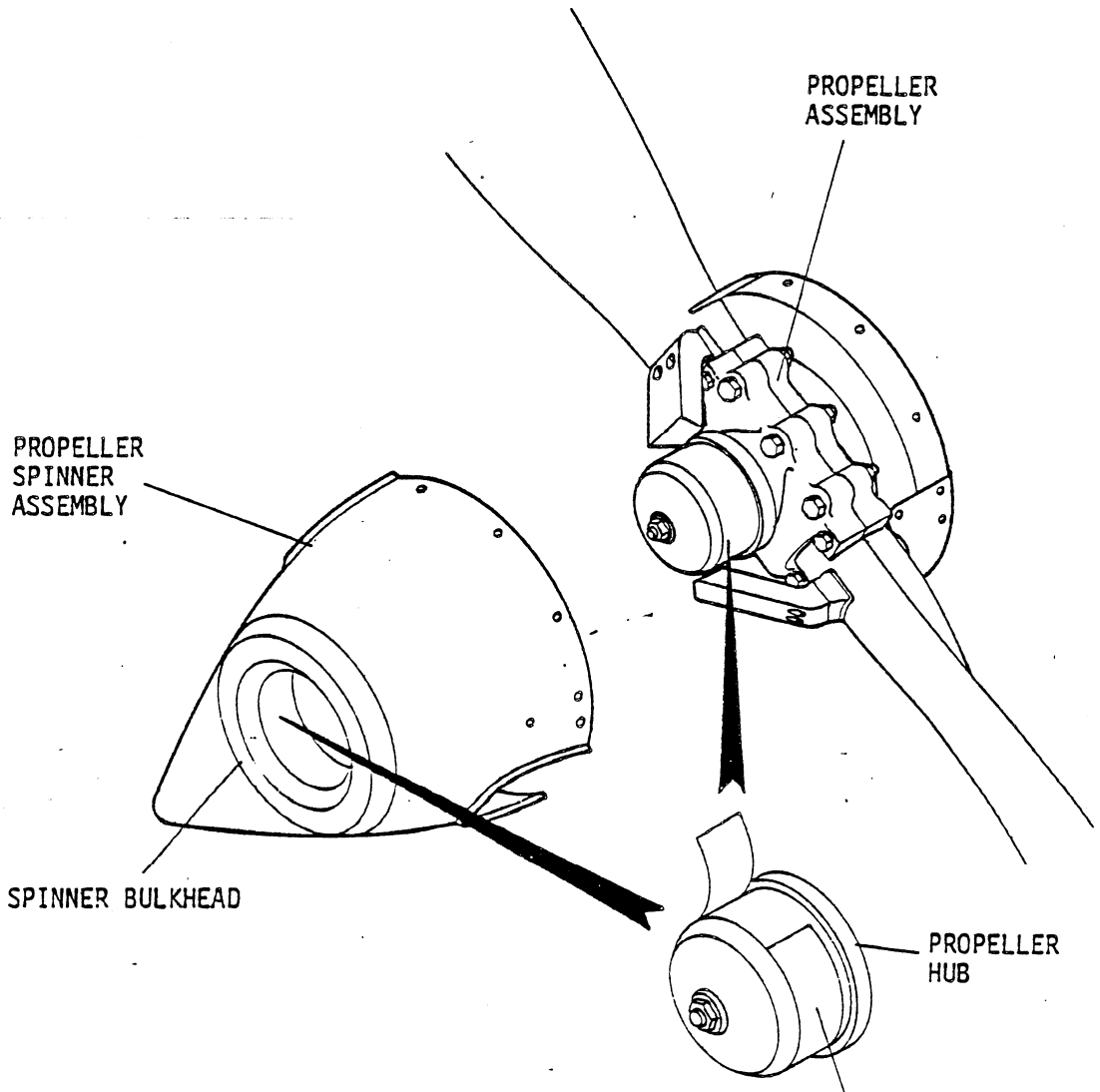
In discussing this problem with a Hartzell representative, we learned that Hartzell is well aware of the cracking problem and that for all installations they recommend that the hub of the propeller be wrapped with glass filament adhesive tape to provide a low-friction snug fit between the hub and the forward propeller bulkhead. The tape provides increased spinner support and vibration damping which eliminates the fatigue and cracking problem.

Although the Hartzell representative stated that the use of tape on the propeller hub is standard procedure, he acknowledged that it is not described anywhere in Hartzell propeller literature and that many aircraft manufacturers might not be aware of the need for its use. The tape is not supplied by Hartzell with the propeller or spinner, and it took considerable time for Christen to obtain from Hartzell a specification for the tape and the name and address of a vendor source. Hartzell preferred not to supply the tape to Christen directly.

All Eagle II builders should immediately inspect the spinner shell and bulkheads for cracks and should install the enclosed tape on the hub of the propeller as shown in the enclosed sketch. The tape will be a standard part of 919 Propeller Kits delivered in the future.

ENCLOSED: ENGINEERING SKETCH X-90167

6.0 FT 50900-001 TAPE



50900-001 GLASS FILAMENT ADHESIVE TAPE WRAPPED AROUND HUB TO PRODUCE SNUG FIT BETWEEN HUB AND SPINNER BULKHEAD.

UNLESS OTHERWISE SPECIFIED: TOLERANCES: FRAC.± 1/64 DEC. XXX± .005 ANGLES± 0° 30' DIMENSIONS IN INCHES DO NOT SCALE DRAWING	MATERIAL AND CONDITION: NOTED			CHRISTEN INDUSTRIES HOLLISTER, CALIFORNIA	
	FINISH: NONE			ENGINEERING SKETCH	
	DRAWN BY: I. CLEDE	DATE: 6-1-83	PROJECT: EAGLE II AIRCRAFT	TITLE: PROPELLER HUB TAPING	
	APPROVED BY: [signature]	DATE: 6-1-83		CODE: PA	NO.: X-90167	ISSUE:

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