THE ENSTROM HELICOPTER CORPORATION
TWIN COUNTY AIRPORT, P.O. BOX 490, MENOMINEE, MICHIGAN 49858

SERVICE INFORMATION LETTER

Date: September 26, 1980

Subject: Tail Rotor Teeter Bearing P/N KRP8A-C

Models: F-28C, 280C

Effectivity: N/A

Reports received from operators indicate misunderstanding as to the serviceability of the KRP8A-C teetering hinge bearing. The KRP8A-C is not a ball type bearing, but rather a sliding surface type that is designed to operate without lubrication. This bearing was installed because of its fail-safe qualities, and for its expected increased service life. Some of these bearings have been removed from service prematurely because of suspected looseness.

A teetering bearing that is heard clicking on rotor coast-down requires only axial reshimming. It is not an indication of pending bearing failure. Axial play may be shimmed out to zero when the hub is installed into the spindle. An axial preload on the bearing of .004 to .006 inches is recommended (see Assembly Instructions). The radial play tolerance for a serviceable KRP8A-C bearing is .005 to .008 inches.

Teetering bearing shim P/N 28-15203-3, 4, 5, & 6 (.001 inch, .002 inch, .003 inch, and .005 inch) are available from Enstrom Customer Service.

ASSEMBLY OF TAIL ROTOR HUB & TEETERING BEARING INTO SPINDLE

1. Place hub P/N 28-15206 into spindle P/N 28-150014-13.

2. Press KRP8A-C bearing into spindle being careful to align P/N 28-15206 hub into bearing. Press on outer race of bearing.

3. Install snap ring P/N 28-14121-11 or N5000-112-PP with flat side against bearing KRP8A-C.

4. Press second bearing into spindle and on other side of hub. Install snap ring.

5. Using aluminum drift, tap ends of hub to set bearings against snap rings.

6. With hub set against one bearing, measure space with feeler gauge between shoulder of hub and inner race of opposite bearing to establish size of shims. Measure for a tight fit. Then add .004 ..006 shims to your measurement for a preload.

7. Remove both snap rings.

8. Using aluminum drift, tap ends of hub to push bearings outward far enough to allow installing shims over end of hub.

9. Divide required shims (P/N 28-15203) into equal amounts and install on each side of hub.

10. Reassemble per steps 1 through 5.

11. Rotate hub and check for tight preload. (Must be able to rotate by hand.)

12. Install washer (P/N 28-14120-11) and screw (P/N MS21262-6) into hub ends. Torque to 15 inch pounds.

    NOTE: Preload may be lost on hub when screw is torqued and reshimming may be necessary.