

# ROBINSON HELICOPTER COMPANY

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## SERVICE LETTER #22

Date: 17 February 1984

To: All R22 Owners, Operators, Dealers, & Service Centers

Subject: Replacement Bearings for Tail Rotor Teeter Hinge, and,  
Severe Hazard When Using any Non-Approved Bearings

Rotorcraft Affected: All R22 Helicopters

Background: Several failures have occurred when non-approved bearings were installed in the tail rotor teeter hinge. The bearings were stamped with the same Mil spec (MS) number and in two cases were from the same manufacturer but used different Teflon liners. After a few hours of operation the liners seized in flight forcing the inner ball to rotate on the teeter hinge bolt and started cutting the bolt. Failure of the teeter hinge bolt could lead to catastrophic loss of the tail rotor.

### B115-1 Bearing Replaces A103-4 Bearing for Tail Rotor Teeter Hinge

Use only new B115-1 bearings for replacement in the tail rotor teeter hinge. Any unused A103-4 bearings in your spares inventory may be returned to RHC for full credit. Be sure to follow the latest installation procedures and checks given in the R22 Maintenance Manual to insure proper bolt clamp-up.

## C A U T I O N

Do not use any commercially available bearings in the R22 unless they are supplied by RHC. Many ball, roller, and spherical bearings used in the R22 appear similar to commercially available bearings. In some cases they may even be marked with the same MS or vendor part number. But they are not equivalent. The bearings used in the R22 are subjected to special aircraft inspections by the manufacturers and in many cases have special internal clearances, special chamfers or tolerances, or, are made from special materials. These critical differences will usually not be apparent to the mechanic installing the bearings.