

SERVICE LETTER #32

(Note: S.L. #31 dated 12 Apr 88 was labeled #30 in error.
Please correct your copy.)

DATE: 7 November 1988

TO: All R22 Owners and Service Centers

SUBJECT: Overrunning Sprag Clutch Bearings

AIRCRAFT AFFECTED: Any R22, but especially those aircraft with
A018-2 Clutch Assemblies manufactured or
overhauled between 1 Feb 88 and 31 Oct 88.

BACKGROUND: The sprag clutch and its two ball bearings are sealed inside the upper V-belt sheave. On several R22s, the additive tolerances of the ball bearings and the A166-1 Drive Shaft have not produced a tight enough press fit to prevent the bearing inner races from rotating. When this occurs, the shaft eventually wears allowing the sprag clutch housing to rotate eccentric to the sprag clutch inner race, and the sprags may malfunction. The pilot will notice a growl during steep approaches or power recovery autorotations. Also, oil may be leaking from the seals on each side of the upper sheave.

CORRECTIVE ACTION:

Inform all pilots flying your R22 helicopters to report any oil leakage from the seals on either side of the upper sheave found during pre-flight inspections; also, to report any unusual growl or vibration which occurs during a steep approach or a power recovery autorotation.

If either observation is reported, immediately ground the helicopter and return the A018 Clutch Assembly to RHC for repair.