

R22

SERVICE BULLETIN #71

DATE: 18 June 1992

TO: All R22 Owners and Service Centers

SUBJECT: Inspection of Upper V-Belt Sheave

ROTORCRAFT AFFECTED: R22 Helicopters S/N 1447 thru 2096; all A170-1 Rev I or J sheaves delivered on overhauled R22s and by Customer Service between May 1990 thru May 1992, and all A170-2 Rev J Sprayed Steel Sheaves.

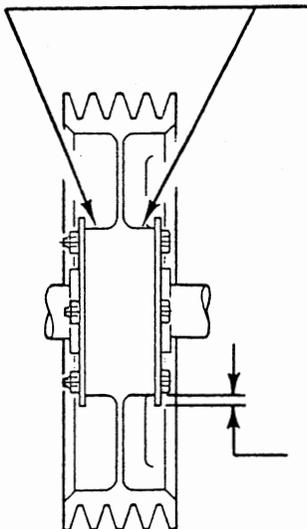
TIME OF COMPLIANCE: Immediate on receipt of this Service Bulletin and during each pre-flight check until the Sheave is replaced with an A170-1 or -2 Rev K or later Sheave.

BACKGROUND: In 1990 the A170 Sheave material was changed from a casting to a machined part. The change included some dimensional modifications, one of which, was a reduction in the flange thickness from approximately .28 to .20 inches. Despite the higher strength of the machined material, there have been two reported cases of cracks developing in the thinner flange. The flange thickness was increased to .30 inches for all A170-1 and -2 Rev K and later Sheaves.

COMPLIANCE PROCEDURE:

Owners Visually check the flanges on both sides of the A170 Sheave for cracks during each daily pre-flight check as described below.

Service Centers Visually inspect the flanges on both sides of the A170 Sheave for any crack indications during each 100 hour or annual inspection and dye penetrant inspect any suspect areas.



Flanges to be checked for crack indications (all around).

Use a strong light and look for any indications of a crack starting at the edges of the flanges next to the seal retaining plates. Rotate the drive system so you can observe the complete circumferences of the flanges. If any crack indications are found, dye penetrant inspect the suspect area. If it is a crack, ground the aircraft until the sheave is replaced.

If this depth is greater than .30 inches, a Rev I or J Sheave is installed and this Service Bulletin applies.

Upper Sheave