

SERVICE BULLETIN SB-75

DATE: 22 November 1994

TO: All R22 Owners, Operators and Service Centers

SUBJECT: Replacement of Forward Flex Plates

ROTORCRAFT AFFECTED: All R22 Helicopters equipped with A193-1 or A947-1 Rev A thru D flex plates. (R22s overhauled after May 1994 and New R22s S/N 2439 and on have A947-1 Rev E or subsequent flex plates.)

TIME OF COMPLIANCE: Prior to 31 January 1995.

BACKGROUND: As described in SB-73, there have been some recent failures of the A193-1 and A947-1 Rev A thru D flex plates. The FAA issued AD94-11-01 which requires repetitive removal and inspection of the flex plate every 50 hours after it has been in service for 500 hours or two years.

RHC has developed a new much stronger A947-1 Rev E and subsequent flex plate which will eliminate the repetitive 50 hour inspections required by the AD. The FAA has notified RHC that the AD is being revised to remove the inspection requirement for A947-1 Rev E and later flex plates. To relieve operators of this burdensome inspection and to encourage rapid replacement of the earlier design flex plates, RHC is offering the new design flex plates with a 50% discount provided the new flex plate is ordered by 31 January 1995.

COMPLIANCE PROCEDURE:

- 1) Order a new A947-1 Rev E or later flex plate, 4 each NAS6605-6 bolts, 4 each MS21042L5 nuts, and 4 each B330-16 palnuts. (Order must include helicopter serial number).
- 2) With clutch disengaged, support forward end of A166-1 clutch shaft and remove A947-1 (or A193-1) forward and A947-2 (or A193-2) intermediate flex plates; record any shim locations for reinstallation.
- 3) Install new A947-1 Rev E or later flex plate and any shims which were noted. Use AN960-516 or -516L washers under nut so 2-4 threads are exposed. Torque fasteners per R22 Maintenance Manual (MM) Section 1.320.
- 4) Check sheave alignment per MM Section 7.230.
- 5) Check A166-1 clutch shaft angle per MM Section 7.240.

(OVER)

COMPLIANCE PROCEDURE (cont'd):

- 6) Perform intermediate flex plate installation and shimming per MM Section 7.330.
- 7) Record compliance with SB-75 in aircraft maintenance record (logbook) and destroy old flex plate to prevent inadvertent installation in another R22.

Approximate Cost:

Labor: 1 1/2 manhours

Parts: \$243 if ordered prior to 31 Jan 95 (Order must include helicopter serial number). \$486 if ordered after 31 Jan 95.