SERVICE BULLETIN SB-35

DATE: 26 July 1999

TO: All R44 Owners, Operators, and Service Centers

SUBJECT: C908-1 Yoke Replacement

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0219 and S/N 0535 thru 0608 except S/N 0565, 0582, and 0592.

TIME OF COMPLIANCE: Within next 25 flight hours or by 1 September 1999, whichever occurs first.

<u>BACKGROUND:</u> A C908-1 yoke assembly failed in flight, apparently due to a welding flaw. The failure caused complete loss of main and tail rotor drive. Fortunately, the pilot performed a successful autorotation with no additional damage. To assure that no future failures occur, RHC is recalling all yokes from the same production lot.

COMPLIANCE PROCEDURE:

NOTE: Use R44 Maintenance Manual (MM) change 6 dated 18 Mar 99 or later and R44 Illustrated Parts Catalog (IPC) revised 31 Mar 99 or later in conjunction with instructions below.

- 1. Order exchange C908-1 yoke from RHC Customer Service.
- 2. Remove C706-1 tailcone cowling.
- 3. Disconnect clutch lateral centering strut, disconnect aft end of clutch at A947-2 flex plate.
- 4. Remove C947-1 forward flex plate.
- 5. Apply rotor brake to prevent C908-1 yoke from rotating. Remove MS24665-210 cotter pin, AN320-8 yoke retaining nut, and C141-10 washer.
- 6. Release rotor brake, maneuver clutch, and rotate yoke as required for clearance, then remove yoke.

CAUTION

Do not damage C051-1 actuator when maneuvering clutch.

- 7. Install exchange C908-1 yoke and C141-10 washer. Install AN320-8 nut and torque per R44 MM Section 1.330. Install MS24665-210 cotter pin.
- 8. Adjust Hall Effect Sender gap per R44 MM Section 7.141.

- 9. Install C947-1 forward flex plate and connect clutch lateral centering strut. Torque fasteners per R44 MM Section 1.320.
- 10. Check A947-2 flex plate shimming and connect aft end of clutch per R44 MM Section 7.330.
- 11. Check sheave alignment per R44 MM Section 7.230.
- 12. Install C706-1 tailcone cowling.
- 13. Make appropriate maintenance record entries.
- 14. Return removed yoke to obtain core charge refund and labor credit.

Approximate Cost:

Parts: \$840 core charge, full refund if core returned within 15 days.

Labor: 2 manhours. (RHC will also issue a labor credit of US \$60 if core

returned within 15 days.)