ROBINSON HELICOPTER COMPANY

2901 Airport Drive, Torrance, California 90505

Page 1 of 2

R44 SERVICE LETTER SL-40

- DATE: 07 September 2011
- TO: R44 and R44 II owners, operators, and maintenance personnel
- **SUBJECT:** MRGB Oil Level Fluctuation
- **ROTORCRAFT AFFECTED:** R44 helicopters S/N 2065 thru 2121, and R44 II helicopters S/N 12848 thru 13127, unless previously accomplished.
- **BACKGROUND:** RHC has received reports of oil level fluctuating in main rotor gearboxes with sealed drive shafts. During cooling after flight, low pressure inside a sealed shaft may draw oil up into the shaft and affect oil level indication. If oil level fluctuates, a vent hole may be drilled in the aluminum spacer at the top of the shaft to equalize pressure.

COMPLIANCE PROCEDURE:

- Refer to Figure 1. If data plate indicates C251-2 shaft is revision P (or subsequent), or if C251-2 revision O (or prior) shaft's data plate is marked with a yellow paint dot, the recommendations of this letter have been complied with and no further action is necessary.
- 2. If main rotor gearbox oil level fluctuates and no leaks are detected, remove main rotor blades per R44 Maintenance Manual (MM) § 9.111.
- 3. Remove main rotor hub per MM § 9.121.
- 4. Refer to Figure 1. Mark hole location in C252-1 spacer as shown; remove sealant as required.
- 5. Vacuum debris while drilling and slowly drill 0.063-inch diameter hole thru spacer (material is 0.060 inch thick aluminum; adjust drill stop accordingly).
- 6. Mark shaft data plate with yellow paint dot in upper left corner.
- 7. Install main rotor hub per MM § 9.122.
- 8. Install main rotor blades per MM § 9.112.
- 9. Track and balance main rotor per MM § 10.230.
- 10. Make appropriate maintenance record entries.

Approximate Cost:

| Consumables: | A257-9 Anti-seize | |
|--------------|--|--|
| | MS20995C32 0.032-inch dia. Safety wire | |
| Parts: | Balance weight(s), as required Various | |
| | (2) B330-16 Palnut \$ 0.25 ea | |
| | C117-8, -9, -10, or -11 Shim(s), as required \$ 17.50 ea | |
| | (3) C189-14 Nut, as required \$ 17.75 ea | |
| | (3) MS24665-423 Cotter pin \$ 0.11 ea | |
| | (3) NAS634-105 Bolt, as required \$ 79.50 ea | |

Parts may be obtained from any R44 Dealer or Service Center, or ordered directly from RHC Customer Service via <u>www.robinsonheli.com</u>, fax, or phone.

Labor: 7.0 man-hours, or 1.0 man-hour when performed concurrently with an inspection requiring blade removal, such as adjusting teeter hinge friction.

