

R44

SERVICE BULLETIN SB-15

DATE: 02 August 1996

TO: R44 Owners, Operators, and Service Centers

SUBJECT: Main Rotor Gearbox Ring Gear Bolts

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0001 thru 0232 except S/N 0019, 0067, 0118, 0135, and 0215.

TIME OF COMPLIANCE: Within next 100 hours time in service or by 01 October 1996, whichever occurs first.

BACKGROUND: RHC has found three R44 main rotor gearboxes in which bolts clamping the ring gear to the gear carrier loosened in service. Looseness caused severe fretting in the joint. Excessive fretting can lead to a fatigue failure of the main rotor drive system.

COMPLIANCE PROCEDURE:

- 1) Service Centers will require one MT124-2 spanner nut socket. Instructions for gearbox inspection and modification per this service bulletin are included with KI-102 kits which are available to approved Service Centers.
- 2) For each R44 to be modified by a Service Center, reference helicopter serial number and order KI-102 kit.
- 3) Drain main rotor gearbox.
- 4) Remove main rotor gearbox per R44 Maintenance Manual (MM) Section 7.110.
- 5) Return gearbox to RHC for modification or perform inspection and modification per instructions in KI-102 kit.
- 6) Reinstall gearbox per R44 MM Section 7.120.
- 7) Fill gearbox with A257-2 oil to middle of sight glass.
- 8) Check main rotor balance per R44 MM Section 10.

Approximate Cost:

Labor: US\$400*

Parts: KI-102 Kit no charge
MT124-2 socket no charge to approved R44 Service Centers

*Although not covered by the R44 Warranty, as a special goodwill gesture, RHC will pay \$400 to approved R44 Service Centers for each R44 gearbox modified, provided they comply with this SB and do not charge aircraft owner more than an additional \$400 for work performed. There is no charge for gearboxes modified at RHC.