ROBINSON
HELICOPTER COMPANY

2901 Airport Drive, Torrance, California 90505   ■ PHONE (310) 539-0508 ■ FAX (310) 539-5198

SERVICE BULLETIN SB-22

DATE: 30 May 97

TO: All R44 Owners, Operators, and Service Centers

SUBJECT: Tail Rotor Guard

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0001 through 0333 excluding S/N 0182, 0224, 0228, 0253, 0301, and 0331.

TIME OF COMPLIANCE: Within next 50 flight hours or by 31 Jul 97, whichever occurs first.

BACKGROUND: RHC has received reports of the DO79-1 tail rotor guard failing just aft of the attachment at the lower vertical stabilizer. These failures are suspected to have been caused by a combination of in-flight vibratory loads and ground handling loads. A properly balanced tail rotor greatly reduces flight loads. Shortening the guard will also reduce critical flight loads by changing its resonant frequency.

COMPLIANCE PROCEDURE:

1. Order 1 each of the following:

   C654-18 Decal
   HS-51248 K1110 Plug

2. Cut 4.0 ± 0.1 inches off aft end of DO79-1 guard using a tube cutter or hack saw. (Length from attachment at lower vertical stabilizer to aft end should be 24 ± 1 inches after modification.) Deburr end and remove metal filings from inside guard.

3. Install HS-51248 K1110 plug using B270-1 or B270-9 adhesive (Ref. R44 Maintenance Manual Section 1.420). Touch-up prime and paint as required.

4. Install C654-18 decal on top of guard centered on aftmost white paint stripe with lettering upright when viewed from left side of ship.

5. Balance tail rotor per R44 Maintenance Manual Section 10.240.

6. Record compliance with R44 SB-22 in aircraft maintenance record (logbook).

Note: Caution all personnel that the tail rotor guard should never be used for ground handling.

Approximate Cost:

Labor: 1.5 manhours.

Parts: No charge if ordered by 31 Jul 97 with aircraft serial number.

THE DESIGN ENGINEERING ASPECTS OF THIS BULLETIN HAVE BEEN SHOWN TO COMPLY WITH THE APPLICABLE FEDERAL AVIATION REGULATIONS AND ARE FAA APPROVED.