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Docket Management System  
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U.S. DEPARTMENT OF TRANSPORTATION

**Reference: Docket Number FAA-2002-13744(NPRM for SFAR 73 Renewal)-4**

Dear Sirs:

Because the R22 is still the most widely used primary trainer, we believe the renewal of SFAR 73 as it pertains to the R22 helicopter may be appropriate. However, we strongly object to the inclusion of the R44 in the SFAR 73 renewal for the following reasons.

- 1) While the R22 and R44 are similar in appearance and both incorporate teetering rotor systems, handling qualities are significantly more benign in the R44 due to its larger size and heavier rotor. And, the R44 is rarely used for primary instruction. The R44 flight and autorotation characteristics are very similar to those of the Bell 206 Jetranger series, which is not subject to SFAR 73.
- 2) When SFAR 73 was originally issued in 1995, there were approximately 160 R44s in service and available flight experience was very limited. Now, seven years later, nearly 1300 R44s have been delivered, more than any other helicopter during that period, and much more flight experience has been obtained. The R44 now has one of the lowest, if not the lowest, accident rate of any light helicopter.
- 3) Since 1995, there have been a number of changes made to reduce the R44's vulnerability to low-G mast bumping and low-RPM rotor stall, either of which could produce in-flight main rotor blade to fuselage contact. These changes included the following:
  - a) A limitation was added to require the RPM governor to be on except during emergency procedures training (reference R44 RFM, page 2-7 and AD 97-02-15).
  - b) The low-RPM warning light and horn threshold was increased from 95% to 97% (reference R44 Service Bulletin SB-7A and AD 97-02-15).
  - c) A placard and a limitation were added prohibiting low-G cyclic pushovers (reference R44 RFM pages 2-7 and 2-12 and AD 95-11-10).

- d) Hydraulic power controls were added and have been incorporated into the majority of R44s, improving stability and reducing pilot workload.
- e) Service Bulletin SB-5 was issued which replaced the main rotor teeter stops with an improved stop design, which more effectively limits main rotor blade flapping.
- f) FAA Practical Test Standards were revised to include low rotor RPM avoidance, detection, corrective action, and recovery procedures for both private and commercial pilots (reference FAA-S-8081-HD, page 1-23).
- g) FAA Practical Test Standards were revised to include low-G avoidance, detection, and recovery procedures for both private and commercial pilots (reference FAA-S-8081-HD, page 1-24).

As a result of these changes, there have not been any inflight low-RPM or low-G main rotor blade to fuselage contact accidents involving the R44 helicopter during the past seven years. There is no valid reason or justification for including the R44 in SFAR 73. We therefore request the R44 be excluded from SFAR 73 when it is renewed.

Your favorable consideration of this request will be greatly appreciated.

Yours truly,  
ROBINSON HELICOPTER COMPANY

  
Frank Robinson  
President

FDR/jdn