DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 61 [Docket No. 28095; SFAR No. 73]

RIN 2120-AF66

Robinson R–22/R–44 Special Training and Experience Requirements

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT). **ACTION:** Final rule; Request for comments.

SUMMARY: This Special Federal Aviation Regulation (SFAR) establishes special training and experience requirements for pilots operating the Robinson model R-22 or R-44 helicopters to maintain safe operation of Robinson helicopters. It also establishes special training and experience requirements for certified flight instructors conducting student instruction or flight reviews. The FAA has determined this emergency SFAR is needed to respond to the number of accidents involving the Robinson model R-22 and R-44 helicopters. The intended effect of this emergency action is to increase awareness of and training for the potential hazards of particular flight operations in the Robinson helicopters.

DATES: This final rule is effective March 27, 1995. This final rule expires December 31, 1997. Comments must be received by May 30, 1995.

ADDRESSES: Comments should be submitted in triplicate to Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC–200), Docket No. 28095, 800 Independence Avenue, SW., Washington, DC 20591.

FOR FURTHER INFORMATION CONTACT: Robert J. O'Haver, Operations Branch, AFS–820, General Aviation and Commercial Division, 800 Independence Ave. SW., Washington, DC 20591; Telephone: (202) 267–7031.

SUPPLEMENTARY INFORMATION:

Comments Invited

All interested persons are invited to comment on this SFAR by submitting such written data, views, or arguments as they may desire, including comments relating to the environmental, energy, or economic impacts. Communications should identify the regulatory docket or SFAR number, and be submitted in triplicate to the Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC–200), Docket No. 28095, 800 Independence

Ave., Washington, DC 20591. All communications received will be considered by the Administrator. The rules in this SFAR may be changed as a result of comments received from the public. All comments submitted will be available for examination in the Rules Docket in Room 915-G of the FAA Building, 800 Independence Ave., Washington, DC 20591. Persons wishing to have the FAA acknowledge receipt of their comments must submit a selfaddressed, stamped postcard with the following statement: "Comments to Docket Number 28095." The postcard will then be dated, time stamped, and returned by the FAA.

Availability of This SFAR

Any person may obtain a copy of this SFAR by submitting a request to the FAA, Office of Public Affairs, ATTN: APA–200, 800 Independence Avenue, SW., Washington, D.C. 20591, or by calling the Office of Public Affairs at (202) 267–3484. Persons wanting a copy of this SFAR must identify the SFAR by asking for "Docket No. 28095; Robinson R–22/R–44 Special Training and Experience Requirements Final Rule."

Persons interested in being placed on a mailing list for future notices should request a copy of Advisory Circular 11– 2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

Background

Part 61 of Title 14 of the Code of Federal Regulations (14 CFR part 61) details the certification requirements for pilots and flight instructors. Particular requirements for pilots and flight instructors in rotorcraft are found in Subparts C through G, and Appendix B of part 61. These requirements do not address any specific type or model of rotorcraft. However, the FAA has determined that specific training and experience requirements are necessary for the safe operation of Robinson R–22 and R–44 model helicopters.

The R–22 is a 2-seat, reciprocating engine-powered helicopter that is frequently used as low-cost initial student training aircraft. The R–44 is a 4-seat helicopter with similar operating characteristics and design features of the R–22. The R–22 is the smallest helicopter in its class and incorporates a unique cyclic control and rotor system. Certain aerodynamic and design features of the aircraft cause specific flight characteristics that require particular pilot awareness and responsiveness.

Currently, there are 855 registered R– 22's and three R–44's in the United States. Since the R–22 was certificated,

there have been 339 accidents in the U.S. involving R-22's. The FAA found that the R-22 met 14 CFR part 27 certification requirements and issued a type certificate in 1979; however, the R-22 has had a high number of fatal accidents due to main rotor/airframe contact when compared to other piston powered helicopters. Many of these accidents have been attributed to pilot performance or inexperience, leading to low rotor revolutions per minute (RPM) or low "G" conditions that resulted in mast bumping or main rotor-airframe contact accidents. Its small size and relatively low operating costs result in its use as a training or small utility aircraft, and its operation by a significant population of relatively inexperienced helicopter pilots.

In its analysis of accident data, the FAA has found that apparently qualified pilots may not be properly prepared to safely operate the R-22 and R-44 helicopters in certain flight conditions. The FAA has determined that additional specific pilot training is necessary for safe operation of these helicopters as part of a comprehensive program that responds to the high number of accidents involving these helicopters. Other elements of this program include addressing design and operational issues, cited by the National Transportation Safety Board (NTSB), that may have been contributing factors in some of the accidents.

In addition to the specific pilot training and experience requirements recommended by a R-22 and R-44 Flight Standardization Board established on January 8, 1995, and the subject of this SFAR, the FAA has taken several other actions to alert pilots and owners to the hazards of these helicopters. Individual notice to every certificated rotorcraft pilot, including all rotorcraft certified flight instructors who instruct in these helicopters, was given by the FAA when it issued the Special Airworthiness Alert No. ASW-95-01 on January 10, 1995. This alert, provided specific guidance in avoiding and dealing with low rotor RPM and low G conditions. This guidance was made mandatory when the FAA issued to all owners of these helicopters Airworthiness Directives Nos. 95-02-03 and 95-02-04 on January 12, 1995, which amended these helicopters' operating envelope by limiting operations in certain atmospheric conditions, such as turbulence, and reduced operating speed in turbulent conditions to avoid the situations described in the Alert. Finally, the FAA is undertaking an aggressive engineering and design review of these helicopters and their operations as well as