evaluating potential design improvement for the Robinson helicopters.

## Discussion

The FAA has determined, after reviewing the NTSB accident reports of 30 fatal accidents since 1982 in which main rotor/airframe contact occurred, that certain flight maneuvers caused, or contributed to, the accidents. In four recent R-22 and R-44 accidents, main rotor/airframe contact occurred while the helicopters were apparently well within the aircraft's defined operating envelope. Although the pilots assumed to be operating the flight controls at the time of the accidents had little experience, the investigations found no evidence that the pilots were

improperly operating the helicopters. There is a clear relationship between pilot inexperience in the R-22 and R-44 helicopters and main rotor/airframe contact accidents. An analysis of this type of accident, indicates that in 23 of the 30 fatal accidents, the pilot apparently manipulating the controls had less than 200 flight hours in helicopters or less than 50 flight hours in the model of Robinson helicopter they were operating. It appears that pilots with more than a minimal level of experience are more likely to recognize situations that would cause this type of accident. However, the FAA has determined that all pilots, regardless of their level of experience, need to have a greater awareness of the flight conditions that have led to these accidents and a capability to respond appropriately when those conditions are encountered. Accordingly, the agency is initiating a two-fold program, including ground and flight training. For pilots that have 200 flight hours in helicopters and at least 50 hours in either the R22 or R44 Robinson helicopter, as appropriate, flight training would not be required because of their overall experience, and their specific experience in the Robinson helicopter. For rated pilots who do not have this experience and students pilots, there are specific flight training requirements. In both cases, the intent is to ensure that the pilots, either through accumulated experience or flight training, have the skills necessary to avoid, as well as react to, situations that can cause main rotor/ airframe contact. While experience is beneficial in avoiding this type of accident, the FAA believes that there is a need for all pilots operating the Robinson helicopters to be aware of certain characteristics associated with the Robinson R22 and R44 helicopter. For this reason, the FAA is imposing an awareness training requirement on all

individuals operating Robinson R22 and R44 aircraft.

In addition, the FAA is requiring that any pilot operating a Robinson R22 helicopter, as pilot in command, to complete future flight review requirements of Part 61 in the R22. A separate flight review is required for the R-44. Pilots with less experience (i.e. those with less than 200 flight hours in helicopters and at least 50 hours in the model of Robinson helicopters) are required to complete an annual flight review. Similarly, the pilot in command currency requirements of Part 61 must be met in the particular model Robinson helicopter. The purpose of these provisions is to ensure persons operating Robinson  $R2\bar{2}$  and R44maintain proficiency and competency over time.

Finally, the SFAR establishes criteria for flight instructor who wish to continue to instruct or conduct flight reviews in a Robinson helicopter. These criteria are established to insure that the instructors are knowledgeable and competent to conduct the awareness and flight training. This SFAR requires that each individual who receives awareness training or flight training obtain an endorsement in that individuals logbook from a CFI who has met the criteria.

The FAA has determined that the provisions of this SFAR for requiring student pilots, pilots, and flight instructors to undergo special awareness training, additional recency of experience requirements, and the additional aeronautical flight experience above the current requirements in Part 61 will provide for safe operation of the Robinson R–22 and R–44 helicopters.

The FAA has determined that prompt action regarding these helicopters is necessary, and therefore that notice and comment concerning this rule is not in the public interest. The additional training prescribed in the rule should be taken as rapidly as possible. Nonetheless, the FAA believes that adherence to the Alert and Airworthiness Directives noted above, together with appropriate caution in operating these aircraft, will provide for safe operations for the next 30 days until this SFAR takes effect. No additional extension of this 30 day period is anticipated, however.

## **Ongoing FAA Actions**

The rule expires on December 31, 1997, but may be terminated sooner or extended through the publication of notice, comment and final rule action if circumstances so warrant. This action is one of several on-going actions related to the Robinson helicopters. The FAA

may take additional actions or modify these actions already taken as a result of further study or comments received concerning this rule.

## **Regulatory Evaluation Summary**

Proposed changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect or regulatory changes on small entities. Third, the Office of Management of Budget (OMB) directs agencies to assess the effect of regulatory changes on international trade. However, OMB may exempt classes of regulations from the Executive Order's requirements, in addition to those explicitly exempt, such as rules unlikely to involve significant policy issues for which even a brief delay could impose significant costs. In addition, DOT Order 2100.5 "Policies and Procedures for Simplification, Analysis, and Review of Regulations' states that an emergency regulation that overwise would be nonsignificant is excepted from the requirements for any Evaluation. Thus, because of the emergency nature of this SFAR, the FAA has not prepared a full regulatory evaluation.

## **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a rule will have a significant economic impact on a substantial number of small entities. FAA Order 2100.14A, Regulatory Flexibility Criteria and Guidance, provides threshold cost and small entity size standards for complying with RFA review requirements in FAA rulemaking actions. Small entities are independently owned and operated small businesses and small not-forprofit organizations. A substantial number of small entities is defined as a number that is 11 or more and which is more than one-third of the small entities subject to this rule. The FAA has determined that this rule will not result in a significant economic impact, either detrimental or beneficial, on a substantial number of small entities, however, the public is invited to comment on this determination particularly with respect to the number