

# **federal register**

---

**Wednesday  
March 29, 1989**

---

## **Part IV**

### **Department of Transportation**

---

**Federal Aviation Administration**

---

#### **14 CFR Part 61**

**Certification of Recreational Pilots and  
Annual Flight Review Requirements for  
Recreational Pilots and Non-Instrument-  
Rated Private Pilots With Fewer Than  
400 Flight Hours; Final Rule**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 61**

[Docket No. 24695; Amdt. 61-82]

RIN 2120-AA54

**Certification of Recreational Pilots and Annual Flight Review Requirements for Recreational Pilots and Non-Instrument-Rated Private Pilots With Fewer Than 400 Flight Hours****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Final rule.

**SUMMARY:** This final rule establishes a recreational pilot certificate. The recreational pilot certificate is intended to provide a lower cost alternative to the private pilot certificate by requiring less training than is currently required for private pilot certification. The recreational pilot certificate is intended for those persons interested in flying basic, experimental, or homebuilt aircraft in close proximity to a home airport while in airspace in which communication with air traffic control facilities is not required. The rule also establishes an annual flight review requirement for non-instrument-rated private pilots with fewer than 400 flight hours.

**EFFECTIVE DATE:** August 31, 1989.

**FOR FURTHER INFORMATION CONTACT:** Edna French, Manager, Project Development Branch, General Aviation and Commercial Division (AFS-850), Office of Flight Standards, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; Telephone (202) 267-8150.

**SUPPLEMENTARY INFORMATION:****Background**

This final rule establishing the recreational pilot certificate results, in part, from the recommendations of a committee formed by the National Association of Flight Instructors (NAFI). The committee, composed of industry and Government representatives, was assembled to review the current requirements for student and private pilot certification.

The committee found that current certification requirements imposed an unnecessary burden on persons who desire to fly basic, homebuilt, and experimental aircraft in close proximity to a home airport that does not have a control tower. Because private pilots were required to receive training in radio navigation, basic attitude

instrument flying, and radio communications procedures, training aircraft had become more complex and expensive. Additionally, the number of hours necessary to obtain private pilot certification was significantly greater because of these training requirements. The committee recognized that persons who intend to fly only basic, experimental, and homebuilt aircraft in close proximity to a home airport do not need to develop the additional skills required of a private pilot. Therefore, the committee recommended establishing a student recreational pilot certificate and a recreational pilot certificate to enable interested persons to be certificated to fly certain basic aircraft at significantly less cost than current regulations would allow.

The NAFI committee also identified weaknesses in current flight training procedures. The committee made several recommendations to address these problems. They included: (1) Requiring flight instructors to train students in specific maneuvers and procedures; (2) requiring students to pass a pro-solo written examination; (3) emphasizing current requirements for achieving a certain level of proficiency in pilot skills (i.e., training to a standard); (4) changing the biennial flight review requirement to an annual flight review for pilots with fewer than 400 hours of flight experience; and (5) requiring instruction and a logbook endorsement for pilots with fewer than 400 hours that have not acted as pilot-in-command (PIC) of an aircraft within the last 180 days. The NAFI committee recommendations were submitted as a petition for rulemaking and were published verbatim in the *Federal Register* (46 FR 10026; March 15, 1982).

Other bases for the final rule were recommendations from the General Aviation Safety Panel (the Safety Panel) and the Safety Review Task Force established by Secretary of Transportation Elizabeth Hanford Dole in December 1983. The Safety Panel consisted of 13 representatives from the general aviation community. It proposed an annual 2-hour training requirement for all pilots, regardless of total flying time or experience. The panel concluded that recurrent structured instruction for pilots would increase the level of safety, particularly for those pilots who are presently relying only on the biennial flight review to refresh their skills. The final rule requires an annual flight rule for low-time recreational and private pilots and further defines that flight review as 1 hour of flight instruction and 1 hour of ground instruction.

The Secretary's Safety Review Task Force identified this regulation as a

significant safety item in its August 1985 report. The Task Force recommended, "That the FAA and the Office of the Secretary of Transportation [OST] cooperate to expedite issuance of the Final Rules or other appropriate follow-up to Notices of Proposed Rulemaking [NPRMs] on recreational and private pilot certification and training \* \* \*"

The final rule is designed to provide multiple buffers between pilots desiring to fly in their familiar, local area for recreation and users of the increasingly complex airspace surrounding major population centers. These buffers provide a means of separating the mix of commercial aircraft and recreational aircraft which is intended to prevent midair collisions, such as that which occurred over Cerritos, California, in 1986.

The buffers include increased training in basic flying techniques, increased flight instructor supervision and control, increased testing requirements, limitations prohibiting the recreational pilot from flying in Terminal Control Areas (TCAs), Airport Traffic Areas (ATAs), Airport Radar Service Areas (ARSAs), or any airspace requiring communications with air traffic control. The recreational pilot has increased weather minimums and is restricted to flight in daylight hours only. For example, the recreational pilot must have at least 3 statute miles of visibility, even in uncontrolled airspace, whereas the private pilot may fly with a minimum of only 1 statute mile of visibility. Details of the privileges, requirements, and limitations are discussed in the following section.

**Discussion of the Public Comments and the Amendments**

This final rule is based upon Notice of Proposed Rulemaking No. 85-13 (50 FR 26286; June 25, 1985). All interested persons have been given an opportunity to participate in the rulemaking, and due consideration has been given to all matters presented.

The FAA received 2,881 comments in response to the NPRM. The issues discussed in these comments fall into six categories. All but the first category of comments relate to the new recreational pilot certificate. The categories are: (1) Changes affecting student and private pilots, (2) pilot qualifications, (3) aircraft restrictions, (4) operating restrictions, (5) training, and (6) currency requirements. Each category is discussed separately below.

To avoid renumbering, the rules pertaining to recreational pilots have been included in Subpart C, rather than in a separate subpart as proposed in the

Notice. Subpart C has been retitled "Student and Recreational Pilots." Recreational pilots may be placed in a separate subpart in a future rulemaking project.

#### *Changes Affecting Student and Private Pilots*

In addition to proposing a student recreational and recreational pilot certificate, NPRM 85-13 proposed numerous changes to current regulations governing student and private pilots. The proposal would have prohibited the following pilots from flying when the visibility was less than 3 statute miles during the day and less than 5 statute miles at night: student pilots, non-instrument-rated private pilots with fewer than 400 flight hours, and instrument-rated private pilots with fewer than 400 flight hours not flying under an IFR flight plan.

For all private pilots with fewer than 400 hours, the Notice proposed an annual flight review requirement and a prohibition against acting as pilot-in-command of an aircraft without additional instruction and a logbook endorsement if more than 180 days had passed since that person had acted as a PIC. The NPRM proposed the following: (1) A 2-hour annual training requirement consisting of 1 hour of flight instruction and 1 hour of ground instruction for private pilots, regardless of flight experience; (2) training and testing to a standard; (3) a minimum number of flights in lieu of a minimum number of hours to obtain private pilot certification; and (4) an instructor's endorsement for a private pilot to fly each make and model of high-performance aircraft flown by that pilot.

Most commenters oppose any changes to private pilot requirements. There are 1,537 comments opposing the use of a single rulemaking both to establish the recreational pilot certificate and to change requirements for other pilots. The specific proposals that would affect private pilots are opposed by approximately 90 percent of the commenters. The FAA has carefully reviewed these proposed private pilot rules and, with one exception, has decided not to make changes to private pilot requirements in the same rulemaking that establishes a recreational pilot certificate. The one exception is the annual flight review requirement for the non-instrument-rated private pilot who has logged fewer than 400 hours of flight time.

National Transportation Safety Board (NTSB) accident data indicate that pilot accident rates are much higher for pilots with fewer than 400 flight hours than they are for pilots with more than 400

flight hours. The data show a strong correlation between a higher number of total flight hours and lower accident rates. Instrument-rated private pilots have been tested and found competent in an operational environment that is more demanding than that of non-instrument-rated pilots. For this reason, and in the interest of safety, the FAA is adopting the proposal to require non-instrument-rated private pilots, with fewer than 400 hours of flight time, to satisfactorily complete an annual flight review in order to act as pilot-in-command of an aircraft. This requirement is found in new § 61.56(d).

The flight review requirements in § 61.56 are based on calendar months. To establish consistency throughout Part 61, requirements for both the biennial and annual flight reviews are based on calendar months.

The FAA has always required applicants for pilot certification to demonstrate a level of proficiency that meets the specified practical test performance standards. As stated in the NPRM, the overriding consideration for all pilot certification is proficiency. To emphasize the FAA's position, the NPRM proposed implementing two changes: (1) That student and recreational pilots receive both training and testing in specific required maneuvers and procedures, and (2) that aeronautical experience be measured in terms of a minimum number of flights instead of the standard minimum flight hour requirements.

The concept of training oriented toward maneuvers and procedures and demonstrating proficiency to a standard is included in the final rule for student pilots. (See § 61.87.) However, the flight proficiency required of an applicant for the recreational pilot certificate (§ 61.98) retains the concept of "pilot operations" to be consistent with the existing requirements for other pilot certificates.

In this final rule, the concept of minimum hour requirements, rather than a minimum number of flights, has been retained for private pilot certification. Commenters state that the definition of "flights" is too vague to assure compliance with the intent of the rule and is open to abuse. For example, in the case of a helicopter, a "flight" could be accomplished in seconds, simply by becoming airborne, hovering for a few seconds, and landing. Additionally, the concept of a minimum number of flights is not compatible with the minimum flight hour requirements of other pilot certificates and ratings and with the rules of the International Civil Aviation Organization. By retaining the current concept of minimum flight hours, it will be simpler for the recreational pilot to

use the recreational pilot certificate as a building block toward earning a higher grade pilot certificate.

This final rule does not establish a student recreational pilot certificate as was proposed in the NPRM. Instead, one student pilot certificate will permit training for either a recreational or a private pilot certificate. With only one student pilot certificate, a student pilot has the flexibility to decide whether to seek a private pilot certificate or a recreational pilot certificate after training is well under way. The one-student-pilot certificate approach is sensible because flight training in preparation for the first solo flight is not any different for whichever certificate is being sought. Skills and knowledge necessary for solo flight are common to both recreational and private pilots.

If the student pilot chooses to pursue a recreational pilot certificate, rather than a private pilot certificate, the student need not meet the requirements of § 61.93. Since the recreational pilot is restricted to a 50 nautical mile radius from an airport where flight instruction has been received (see "Operating Restrictions"), no solo cross-country endorsement is required. If the recreational pilot subsequently decides to pursue a private pilot certificate, this will be done through a series of endorsements to include receiving the cross-country solo training of § 61.93.

This final rule includes two new regulations for student pilots that were proposed in the NPRM. The first (§ 61.87(b)) is that student pilots will be required to pass a written examination before they will be permitted to fly solo. The second (§ 61.89(a)(6) and (7)) is that student pilots will not be permitted to fly solo if the visibility is below 3 statute miles during the day or 5 statute miles at night, and when the flight cannot be made without visual reference to the surface. The NAFI committee recommended a pre-solo written examination as a tool to help ensure that student pilots have basic knowledge of the flight rules and operating parameters of their aircraft. Seventy-five commenters approve of the pre-solo written requirement. Only 23 commenters oppose such a requirement. Several commenters are concerned about the quality and standardization of written examinations developed and administered by flight instructors. The FAA will develop and publish an advisory circular to provide guidance to flight instructors for developing and administering the pre-solo written examination. Most organized flight schools already use pre-solo written examinations. The requirement for

completing a pre-solo written examination prior to the first solo flight is adopted as proposed. The instructor would be required to retain a record of the date and results of this test under the record retention requirements of Part 61.

The FAA adopts from the NPRM a prohibition against student pilots flying solo when the visibility is below 3 statute miles during the day or 5 statute miles at night. There have been numerous reported cases of student pilots becoming lost or disoriented in marginal VFR conditions. A general prohibition against student pilots operating in marginal weather should alleviate much of this problem. Commenters addressing this issue oppose the proposed rule because it included certain private pilots with fewer than 400 flight hours in the prohibition. The proposal to include private pilots in this provision is not adopted in the final rule. The FAA agrees that such a change to the limitations of the private pilot certificate is not appropriate for this rulemaking. This matter may be reviewed in a future rulemaking project.

Section 61.89(a)(8) is also new and prohibits a student pilot from acting as PIC of an aircraft in a manner contrary to any limitations placed in the pilot's logbook by the instructor. While not actually imposing an additional limitation, § 61.89(a)(8) serves to clarify already existing policies.

#### *Pilot Qualifications*

The differences between the proposed qualifications for recreational pilots and those currently required for private pilots were discussed in the proposal. The three areas involved were: (1) Minimum age, (2) medical requirements, and (3) knowledge of the English language. The proposal retained the 17-year age limitation for the recreational pilot. Approximately 40 percent of the documents received on this issue support the proposed age requirement. The remaining comments are split between those suggesting a lower minimum age and those recommending that the minimum age be raised.

Those commenters who recommend lowering the minimum age for recreational pilots cite the 16-year minimum age requirement for glider and free balloon private pilots. The FAA has found that gliders and free balloons are far less complex, easier to operate, and slower than powered aircraft. There is no evidence to suggest that an equivalent level of safety could be attained by setting a lower minimum age for recreational pilots. Therefore, § 61.96(a) requires a minimum age of 17.

The NPRM listed alternative medical requirements for recreational pilots requiring either a third-class medical certificate, as is the case for private pilots, or requiring a certification by recreational pilot applicants that they have no known medical defects that would interfere with their ability to safely operate an aircraft. The NPRM also solicited recommendations for additional alternatives in determining a person's medical fitness.

An overwhelming majority of the comments received on this issue favor self-certification. Many of these commenters state that they do not qualify for a third-class medical certificate and that they would be able to fly powered aircraft if the rule allowed self-certification. Others cite the self-certification rules for pilots of gliders and free balloons as justification for medical self-certification of recreational pilots.

Commenters who favor a third-class medical requirement also presented their concerns. They note that pilots could be unaware of medical problems, and pilots with mental or neurological problems or drug dependencies could certify to their own good health without regard for the public safety.

The FAA shares the concerns of the commenters favoring a third-class medical requirement. A self-certification rule would allow many medically unqualified pilots to endanger the public by flying with physical defects that might affect their ability to operate an aircraft. The intent of a self-certification rule is not to allow medically unqualified pilots to fly aircraft but to save costs for pilots when safety is not derogated by allowing self-certification. The fact that some commenters to this rulemaking believe that they would be permitted to operate powered aircraft under a self-certification rule, although they are medically disqualified from receiving a third-class medical certificate, weighs heavily against adoption of a rule allowing self-certification.

Although pilots of free balloons and gliders are permitted to certify to their own health, the FAA requires all pilots of powered aircraft to possess a valid medical certificate issued under Part 67 of the Federal Aviation Regulations. Balloons and gliders typically require less demanding training and operate in sparsely populated areas. These unpowered aircraft are far less complex and operate at slower speeds than powered aircraft. Recreational pilots will be licensed to operate aircraft that could have cruise speeds in excess of 200 miles per hour.

After extensive review and deliberation, the FAA has determined that there is no basis for deleting the third-class medical requirement for recreational pilots simply because they would be restricted to small, single-engine aircraft and airspace in which communication with air traffic control is not required. Therefore, when exercising the privileges of the recreational pilot certificate, § 61.96(c) requires the pilot to hold a valid third-class medical certificate.

The third pilot requirement discussed in NPRM 85-13 concerned the airman's knowledge of the English language. The proposed rule did not require an applicant for a recreational pilot certificate to be able to read, speak, and understand the English language. The rationale for excluding the English language requirement for recreational pilots was that recreational pilots would be precluded from operating in airspace in which radio communication is required.

Only 10 commenters favor this rule, while 280 commenters oppose it. The opponents question whether a person who is unable to read, speak, and understand the English language could safely operate an aircraft that has manuals, limitations, gauges, and placards written in English. Furthermore, a pilot must be able to read and understand sources of aviation information such as the Airman's Information Manual, Federal Aviation Regulations, and weather reports and forecasts that are also in English. The FAA agrees with these concerns, and § 61.96(b) of the final rule requires that applicants for a recreational pilot certificate be able to read, speak, and understand English.

The requirement that a recreational pilot must pass an oral test was not included in the NPRM. To make the recreational pilot certification consistent with other pilot certifications, § 61.96(e) of the final rule includes such a requirement.

#### *Aircraft Restrictions*

The NPRM proposed prohibiting recreational pilots from acting as pilot-in-command of any aircraft that is certificated:

- (1) For more than four occupants (except in the case of a gyroplane which could only be single-place);
  - (2) For more than one powerplant;
  - (3) For a powerplant of more than 180 horsepower; or
  - (4) For retractable landing gear.
- The proposal would have further restricted recreational pilots by limiting them to airplanes, helicopters, and

gyroplanes. The certificate could not be used for gliders, airships, or free balloons.

Several commenters question the single-occupant limitation on gyroplanes, pointing out that two-place gyroplanes are less complex and easier to operate than helicopters. Furthermore, many training facilities use two-place gyroplanes, which would not be available to recreational pilots under the proposed rule. The FAA agrees that the single-place limitation on gyroplanes is unduly restrictive and has changed this restriction. Section 61.101(b)(1)(i) of the final rule allows recreational pilots to act as pilot-in-command of any gyroplane that complies with the other restrictions set forth above.

The NAFI proposal restricted the type of aircraft that could be operated by a recreational pilot to those with no more than two seats. Such a limitation is consistent with the basic premise that a recreational pilot certificate is to be used for recreational purposes, not for transportation. However, as pointed out in comments to the NAFI proposal, there are many basic aircraft with seating capacities of four seats and often these are used for student training or recreational flying. The FAA agreed with those comments and, consequently, Notice 85-13 proposed that recreational pilots be restricted to operating aircraft with no more than four seats.

Several commenters to the Notice suggest that recreational pilots be restricted to carrying no more than one passenger. Also, approximately 100 commenters agree with the four-seat occupancy limitation.

The FAA agrees that a maximum of one passenger is appropriate for the recreational pilot, and § 61.101(a)(1) provides for such a limitation. Further, the FAA has determined that limiting recreational pilots to two-seat aircraft is unnecessarily restrictive. Therefore, in accordance with § 61.101(b)(1)(i), a recreational pilot may fly a basic aircraft with a seating capacity of four or less.

The Notice proposed restricting recreational pilots to aircraft with one engine of no more than 180 horsepower and fixed landing gear. The comments were almost evenly divided for and against the 180-horsepower limitation. A few commenters object to the fixed landing gear restriction.

The greatest differences in systems complexity, control characteristics, and performance of aircraft are between those aircraft of more than 180 horsepower and retractable landing gear and those aircraft of 180 horsepower or less and fixed landing gear. Therefore, §§ 61.101(b)(1) (iii) and (iv) of this final

rule is adopted as proposed in the NPRM.

#### *Operating Restrictions*

The Notice limited recreational pilot flights to a 50 nautical mile radius from the departure airport. The intent of this restriction was to keep the pilot over familiar terrain and in close proximity to a familiar airport to facilitate a return if inclement weather were encountered and to reduce the risk of a pilot becoming lost.

Nearly 1,250 commenters object to the 50 nautical mile limit as too restrictive, impractical, and unenforceable. Approximately 200 commenters agree that the 50 nautical mile limit is consistent with the spirit of the recreational pilot certificate.

The creation of the recreational pilot certificate is an attempt to make aviation available to would-be enthusiasts who are precluded from flying because of the cost of training for a private pilot certificate. Since the recreational pilot is not required to be trained in two-way radio communications with Air Traffic Control (ATC), radio navigation, or basic attitude instrument flying, it is necessary to restrict the recreational pilot from operating in areas where the lack of training may have a negative effect on safety. The recreational pilot certificate is geared for sport and recreation only, not for transportation, and to serve that purpose, a 50 nautical mile limit is appropriate.

Several commenters state that the 50 nautical mile radius restriction from the departure airport could be defeated by effectively hopping cross-country in 50 nautical mile increments. Recreational pilots are not required to have training in cross-country flying. Therefore, cross-country flying in such a manner is not consistent with the intended use of a recreational pilot certificate. To keep the recreational pilot over familiar territory and near a familiar airport, § 61.101(a)(3) of the final rule specifies that a recreational pilot may act as pilot-in-command only on flights 50 nautical miles or less from an airport at which ground and flight instruction was received and only if the flight lands at an airport within 50 nautical miles of the departure airport.

Operating only over familiar territory not only assures an acceptable level of safety for the recreational pilot with respect to possibly becoming lost, it also assures that the recreational pilot will be familiar with landmarks that define boundaries of areas in which operations are not permitted. Such areas would include TCAs and ATAs. Knowledge of the area and typical nearby air traffic

operations will be emphasized in recreational pilot training to increase the safety of operations.

The recreational pilot must carry the logbook that shows the endorsement by an authorized instructor, indicating all required training has been completed. If the recreational pilot subsequently moves to a different airport, flight instruction must be received at that airport and the logbook appropriately endorsed again.

The proposed rule also would have prohibited recreational pilots from flying between sunset and sunrise. The majority of comments received addressing the daylight-only issue favor the restriction. Recreational pilots are not required to be trained in night operations and, therefore, must be restricted from operating an aircraft between sunset and sunrise. Section 61.101(b)(6) of the final rule incorporates this prohibition.

The NPRM proposed prohibiting recreational pilots from flying above 10,000 feet MSL, or 2,000 feet AGL, whichever is higher. Several hundred commenters object to the altitude restriction, outnumbering proponents of the proposal 12 to 1. Dissenting commenters argue that the limits are arbitrary. The 10,000-foot limit was selected because it is the established boundary between high-speed and low-speed traffic. There is no significant advantage to selecting a maximum altitude less than 10,000 feet, and by doing so, a new altitude boundary would be introduced, thus complicating the overall air space definition. Furthermore, if all operations of recreational pilots are compressed into a smaller airspace, the risk of mid-air collisions will be increased. Because recreational pilots are not authorized to fly in the cross-country environment, there is no reason to establish a limit higher than 10,000 feet MSL. The 2,000-foot AGL alternate limit provides for operation in mountainous areas where safe clearance of terrain would require an MSL altitude above 10,000 feet MSL.

A minimum visibility of 3 statute miles in all airspace was proposed in the NPRM. Most commenters agree with the proposal. The visibility restriction will prohibit the recreational pilot from flying when the visibility is marginal and the likelihood of accidental encounters with instrumental meteorological conditions is greater. The 3 statute mile minimum visibility limitation will apply in both controlled and uncontrolled airspace so that visibility limitations for recreational pilots will be the most restrictive and

related safety margins will be larger than for other pilots, consistent with the recreational pilot training and experience requirements.

Sections 61.101(b) (8) and (9) of the final rule incorporate the altitude and visibility limitations. These limitations are as proposed.

The NPRM proposed restricting recreational pilots from landing at airports with operating control towers. The 438 commenters who oppose the restriction contend that certain airports without control towers are busier than those with towers, and that in some areas there are no non-tower airports, thereby requiring a recreational pilot to drive many miles to be able to fly.

Recreational pilots are not required to have training in radio communications or air traffic control procedures. Therefore, in the interests of safety, recreational pilot privileges do not include flying at airports with operating control towers, in airspace where communication with air traffic control is required. The identification of such areas and an emphasis on remaining well clear of these areas will be an important part of the instructions required for every 50 nautical mile circle where a recreational pilot is authorized to fly. It should be noted that any further regulatory actions that increase the amount of limited use airspace or increase requirements for equipment to operate in such airspace (for example, altitude reporting equipment) will be compatible with the recreational pilot privileges and limitations because a fundamental objective of the rule is to keep recreational pilots out of all types of airspace where traffic densities require special equipment or procedures. The recreational pilot certificate is intended to be used by persons desiring to fly for sport or recreation which generally does not involve operations where radio communications or special equipment are required. It should be noted, however, that under § 61.98 a recreational pilot is required to have instruction in emergency procedures and in collision avoidance techniques. This instruction would include use of any radio equipment, including a transponder, if installed.

No commenters object to the proposed restrictions regarding international flights, sales demonstrations, and charitable flights. The aeronautical experience requirements for the recreational pilot certificate do not satisfy the international requirements for this class of certificate as established by the International Civil Aviation Organization. Therefore, § 61.101(b)(11) does not permit international flight. Since the

recreational pilot certificate is intended for sport and recreational use only, restrictions regarding sales demonstrations and charitable flights do not infringe on that use. Section 61.101(b) (12) and (13) incorporates these restrictions as proposed.

Several commenters note that the Notice had no prohibition against recreational pilots towing any objects and suggest that this restriction be added. The FAA agrees. The additional skills and complex maneuvers involved in aerial towing go beyond the training of a recreational pilot. Accordingly, this restriction is included among the limitations of recreational pilots in § 61.101(b)(14).

An additional limitation has been added to the final rule which restricts recreational pilots from acting as pilot-in-command of an aircraft without visual reference to the surface. Since recreational pilots will not be trained in maneuvering the aircraft solely by reference to the instruments, they will not be authorized to fly without visual reference to the ground. Therefore, § 61.101(b)(10) restricts recreational pilots from flying above a solid overcast layer of clouds. Visual reference to the ground must constantly be maintained.

The NPRM proposed that the recreational pilot complete a course of instruction covering dead reckoning. This requirement is not included in the final rule as it requires training for procedures that would not be needed by the recreational pilot.

Several hundred commenters oppose the creation of a recreational pilot certificate with so many limitations, claiming that the rule as presented in the NPRM would not allow a recreational pilot to earn additional certificates and ratings. The intent of the proposal was to create a certificate that would work as a building block toward other certificates and ratings. Section 61.101(f) of this final rule will permit recreational pilots to work toward an additional certificate or rating. They must meet appropriate aeronautical knowledge and training requirements and must carry a logbook that has been properly endorsed by an authorized flight instructor (an appropriately rated instructor certificated in accordance with Part 61).

With the appropriate endorsements from an authorized flight instructor as specified in § 61.101(g) and (h), a recreational pilot may fly an aircraft for which that pilot does not hold an appropriate category or class rating, at night (provided flight visibility is no less than 5 statute miles), in airspace that requires communication with air traffic control, or in excess of 50 nautical miles

from an airport at which flight instruction was received. These flights are required to be made without any passengers and must be for the purpose of obtaining additional certificates or ratings.

In recent months, the FAA has received a number of questions asking what flight instruction received from foreign flight instructors may be credited toward the requirements for a pilot certificate under the Federal Aviation Regulations. The concern arises from § 61.3(d) which provides that only the holder of a flight instructor certificate issued under Part 61 may give instruction required for solo flight, for solo cross-country flight, or for the issue of a certificate under Part 61. That paragraph specifically excepts lighter-than-air instruction and instruction in air transportation by an airline transport pilot. Section 61.41(b), however, is also an exception to § 61.3(d) and provides that flight instruction may be credited toward the requirements for a pilot certificate or rating issued under Part 61, if it is received from a flight instructor who is authorized to give that flight instruction by the licensing authority of a foreign contracting State to the Convention on International Civil Aviation and the flight instruction is given outside the United States. Flight instruction received from an Armed Force of either the United States or a foreign contracting State to the Convention on International Civil Aviation in a program for training military pilots may also be credited toward certification or rating requirements under Part 61.

Section 61.41 does not authorize a military flight instructor or a flight instructor licensed by a foreign contracting State to the Convention on International Civil Aviation to make the endorsements specified in § 61.3(d)(3) ("Endorse a student pilot certificate or logbook for solo operating privileges") or elsewhere in Part 61, or to provide the written statement required by § 61.39. While the endorsements specified in § 61.3(d)(2) ("Endorse a pilot logbook to show that he has given any flight instruction") are not literally permitted by the words of the regulations, § 61.41 has been interpreted to allow these endorsements since they are the customary means of evidencing that the required instruction has been given. Thus, an endorsement of a pilot logbook by a military flight instructor or a flight instructor licensed by a foreign contracting State to the Convention on International Civil Aviation, which shows that flight instruction has been received, may be permitted as evidence

that the training requirements for a pilot certificate or rating issued under Part 61 have been accomplished.

While the scope of this rulemaking is limited, the words "authorized instructor certificated under this part" have been used wherever applicable to clarify the intent of the specific regulation. The FAA intends to add clarifying language throughout Part 61 in subsequent rulemaking involving other provisions of the part.

Sections 61.193 and 61.195 (Flight instructor authorizations and limitations) have been expanded to incorporate the endorsements for recreational pilots. Although the changes to these sections were not specifically addressed in the NPRM, they are necessary for the recreational pilot certificate to serve as a building block toward other certificates and ratings. These changes are clearly consistent with the intent of the recreational pilot certificate and with numerous comments received. Other changes to § 61.193 are purely editorial in nature for the purpose of correcting reference numbers. Sections 61.23 (Duration of medical certificates), 61.31 (General limitations), and 61.51 (Pilot logbooks) have also been editorially revised to reference recreational pilots.

#### Training

To reduce the cost of training, recreational pilot applicants will not be required to receive training in some private pilot operations. Specifically, recreational pilot applicants will *not* be required to receive training in the following areas: (1) Operations at controlled airports, (2) radio communications, (3) controlling and maneuvering the aircraft solely by reference to instruments, (4) dead reckoning and radio navigation, and (5) night flying. To maintain an adequate level of safety, recreational pilots will have operational restrictions that are commensurate with those limited training requirements.

As discussed in the "Operating Restrictions" section of this preamble, recreational pilots will not be authorized to operate in TCAs or in other airspace where communication with air traffic control is required. Therefore, training in controlled airport operations or radio communications is not required. However, an essential part of all recreational pilot training will be detailed and complete familiarization with all areas that would require radio communication to assure that such areas can be accurately identified. For each 50 nautical mile area in which a recreational pilot is authorized to operate, instruction will cover

identification of landmarks that will help keep the recreational pilot well clear of any airspace requiring radio communication such as TCAs, Airport Radar Service Areas (ARSAs), and ATAs. This emphasis on visual reference points to identify airspace where recreational pilots are not authorized to operate will decrease the risk of conflicts with high-performance aircraft.

Furthermore, recreational pilots will be instructed on the location of typical air carrier routes and arrival and departure paths in the local area for all high-performance aircraft. The recreational pilot will be taught to identify these paths with respect to visual ground reference points. It should be noted that this type of instruction is consistent with the FAA's current emphasis on "back to basics" for all pilots.

The FAA has analyzed the very high density traffic areas. Through charting techniques, TCA, ARSA, and ATA airspace was identified and areas available for use by recreational pilots were also identified. The analysis shows that only very limited operations by recreational pilots will be allowed near any of the major traffic hubs. The analysis also shows that emphasis should be placed upon instruction that will teach recreational pilots how to maintain a safe distance from the boundaries of various types of airspace where traffic is under ATC control. This emphasis will be carried through in training programs and guidance material provided by the FAA in conjunction with the recreational pilot certificate and enforcement of the rule.

Recreational pilots will not be authorized to fly more than 50 nautical miles from the airport at which they received instruction. Also, recreational pilots will not be authorized to fly when the visibility is less than 3 statute miles. These restrictions provide additional assurance that a recreational pilot will not be operating in an environment where the aircraft must be controlled and maneuvered solely by reference to the instruments, and the pilot will remain over or near familiar territory. Therefore, training in dead reckoning, radio navigation, and controlling and maneuvering an aircraft solely by reference to instruments is not required.

Recreational pilots are restricted from operating aircraft between sunset and sunrise. Therefore, the recreational pilot will not be required to receive any night training.

The NPRM proposed a minimum number of instructional flights in lieu of the current minimum standard flight hour requirement for aeronautical

experience. This concept is not adopted in the final rule. (See "Changes Affecting Student and Private Pilots" for further explanation.)

The FAA has determined that a recreational pilot applicant will be required to have a minimum of 30 flight hours. (See §§ 61.99 and 61.100.) Fifteen of these hours must be flight instruction from an authorized flight instructor, including at least 2 hours outside the vicinity of the airport at which instruction is given, with a minimum of three landings at another airport at least 25 nautical miles from the departure airport, and 2 hours in preparation for the flight test within the 60 days preceding the test. Fifteen flight hours (10 in the case of gyroplanes) must be solo flight in the category of aircraft for which a rating is sought.

The required minimum experience for the recreational pilot was derived in a manner to provide a logical relationship between recreational pilot certificates and private pilot certificates. A private pilot must have at least 40 hours of flight experience, of which 20 hours must be with an instructor. At least 13 of these hours (3 dual and 10 solo) relate to cross-country operations, and 3 hours relate to night flying. Since most of this experience is not necessary for the intended operations of a recreational pilot, the recreational pilot is required to have at least 30 hours of flight experience, 10 hours fewer than the private pilot.

The final rule also provides for licensing pilots who live on islands with only one airport. If more than 10 nautical miles of water must be crossed to get to another airport, the applicant need not comply with the requirement of § 61.99(a)(1)(i). In that situation, the recreational pilot license will have an additional restriction that prohibits the carriage of a passenger more than 10 nautical miles from the island on which the flight training was received. This restriction parallels the private pilot limitations and appears in § 61.99(b) of the final rule.

#### Currency

The NPRM discussed a number of currency requirements that would have applied to recreational pilots and certain private pilots. The resolution of these issues as they apply to private pilots is discussed in the "Changes Affecting Student and Private Pilots" section of this preamble. With regard to the recreational pilot certificate, these proposals are discussed below.

Three currency requirements, in addition to those currently applicable to private pilots, were proposed for the

recreational pilot. They were: (1) An annual 2-hour training requirement consisting of 1 hour of ground instruction and 1 hour of flight instruction, (2) an annual flight review for pilots with fewer than 400 flight hours, and (3) flight instruction and a logbook endorsement if more than 180 days have passed since a recreational pilot with fewer than 400 flight hours has acted as pilot-in-command of an aircraft.

The annual flight review and 180-day pilot-in-command requirement will provide a means to monitor these pilots' proficiency levels and will require these pilots to demonstrate their competency and proficiency prior to exercising the privileges of their pilot certificate. NTSB accident data show that accident rates are much higher for non-instrument-rated pilots with fewer than 400 flight hours than for non-instrument-rated pilots with more than 400 flight hours. A more frequent review of skills and knowledge for recreational pilots is expected to result in more proficient pilots.

More than 1,300 commenters oppose the annual training requirement, while only 84 favor it. Those opposed were private pilots resisting any change to their private pilot license, especially changes that would result in an additional cost to maintain their certification. The FAA has considered the currency requirements and concludes that the annual training requirements are unnecessary if the annual flight review and 180-day pilot-in-command rule are implemented. If a recreational pilot does not successfully accomplish an annual flight review, then the flight instructor conducting the review will suggest appropriate additional instruction. Therefore, the annual 2-hour training requirement, as proposed in the Notice, is not adopted in the final rule. The second proposed currency requirement, the annual flight review, is incorporated in § 61.56(d) of the final rule and applies to recreational pilots with fewer than 400 flight hours and non-instrument-rated private pilots with fewer than 400 flight hours. For these pilots, the annual flight review is defined as a minimum requirement of 1 hour of flight instruction and 1 hour of ground instruction. In accordance with the third proposed currency requirement, § 61.101(d) of the final rule requires recreational pilots with fewer than 400 hours to receive flight instruction and a logbook endorsement if more than 180 days have passed since

they have acted as pilot-in-command of and aircraft.

These rules specifically allow the flight instructor giving the flight review to combine the 180-day pilot-in-command instruction with the annual flight review requirement. However, it is left to the flight instructor's discretion to determine whether it is appropriate to combine these requirements. Flight instructors should consider the recreational pilot's degree of competency and proficiency, the flying activity, and the complexity of the operating environment.

#### Regulatory Evaluation

##### *New § 61.56—Flight Review*

The benefits expected to result from this amendment are the avoided casualty costs resulting from accidents prevented because of the annual flight review that non-instrument-rated private pilots with less than 400 hours flight time will be required to receive. Currently these pilots are subject to the biennial flight review required of all pilots-in-command.

Accident rates have historically been about 60 percent higher for these low-time private pilots than for more experienced private pilots. Although one commenter attempts to demonstrate that the 400-hour total-flight-time criterion is invalid, the accident and activity data provided do not distinguish between types of pilot certificates, and no information on the composition of the activity base is included. The data and corresponding analysis are too general to support any specific conclusions.

The costs of the amendment primarily involve the additional aircraft operating costs and the labor cost of the flight instructor's time that will be incurred for pilots to comply with the flight review requirement. A sensitivity analysis approach has been used. Potential fatal accident rate reductions that could be achieved by the middle year of the 8-year period following adoption of the amendment have been estimated, and the costs-per-fatality-avoided that correspond to these accident rate reductions have been estimated. These mid-period fatal accident rate reductions have been assumed to approximate the average reduction over the entire period. Further, the cost-benefit relationships estimated for the midyear of the period are expected to remain approximately constant throughout the period because both costs and benefits vary together in proportion to activity level.

Historical accident data were reviewed for single-engine operations to

determine ratios of the occurrences of accidents and casualties of all types for every occurrence of a fatal accident. These ratios enable estimates to be made of changes in overall accident and casualty rates that would be associated with a change in fatal accidental rates. These ratios have been applied to the standard values (adjusted for inflation) prescribed in the FAA's *Economic Values for Evaluation of Federal Aviation Administration Investment and Regulatory Programs* (Report No. FAA-APO-81-3 for serious injuries and for destroyed and damaged aircraft, yielding an average injury and property damage cost of approximately \$361,000 (1986 dollars) from all accidents for every occurrence of a fatal accident. This value is the benefit of avoided injuries and hull losses realized for every fatal accident prevented. Deducting these quantifiable benefits (based upon an estimated potential accident rate reduction) from the total compliance costs of this amendment allow the cost-per-fatality-avoided to be determined.

Completion of the flight review will require a minimum of 1 hour of dual flight instruction and 1 hour of ground instruction. Based upon an \$18 per hour instructor's fee, and a typical rental rate of \$45 per hour for a non-retractable, single-engine airplane, the cost for each pilot to comply with the annual flight review has been estimated at \$81. A total average annual cost of \$6.4 million has been estimated for all affected private pilots to comply with the amendment. This total is based upon the FAA'S forecast of the future private pilot population. Adjustments have been made for the 13 percent of private pilots that hold instrument ratings, the approximately 50 percent of private pilots with more than 400 hours, a 10 percent upward adjustment for those pilots who require more than the minimum time to satisfactorily meet the flight review requirement, and those costs that would be incurred because of the existing biennial flight review requirement.

The FAA estimates that the subgroup of private pilots affected by this amendment would experience an average of about 80 fatal accidents annually in the absence of the new annual flight review requirement. Should the amendment result in an average 3 percent reduction in fatal accident rates, then an average of 4.8 fatalities will be avoided per year, and \$866,000 in quantifiable benefits will be realized annually in avoided property

damage and injury costs. Deducting the quantifiable benefits from the total annual compliance cost of \$6.4 million gives that portion of costs attributable to preventing fatalities. The cost-per-fatality-avoided, if a 3 percent reduction in fatal accident rates is achieved, is estimated at \$1.1 million. Similarly, should the amendment be more successful and result in an average 5 percent reduction in fatal accident rates, then an average of 8 fatalities will be avoided per year, \$1.4 million in quantifiable benefits in avoided property damage and injury costs will be achieved, and the cost-per-fatality-avoided will be \$620,000.

A regression analysis of the general aviation fatal accident rate data indicates that following implementation of the biennial flight review requirement, which became mandatory on November 1, 1974, there was a one-time 10 percent decrease in fatal accident rates beyond the existing long-term declining trend in accident rates (i.e., a statistically significant discontinuity was observed in the downward sloping curve of accident rates as a function of time). Although this regression analysis reflects all general aviation activity, a review of accident data for the low-time, non-instrumental-rated private pilots affected by this amendment indicates that this subgroup of pilots also experienced substantial reductions in accident rates following implementation of the biennial flight review. Current accident rates for private pilots with less than 400 hours total flight time, however, still remain approximately 60 percent higher than the rates for private pilots with more than 400 hours flight time. Therefore, further improvement is warranted for these low-time pilots. Because of the accident rate reductions observed following implementation of the biennial flight review, the FAA expects that a 3 to 5 percent reduction in average fatal accident rates will be achieved by the low-time private pilots affected by the annual flight review and that the acceptable costs estimated for each fatality avoided will result. (Although this review of low-time private pilots has focused on powered aircraft operations, accident data indicate that approximately 58 percent of nonpowered aircraft accidents involve pilots with less than 400 hours of total flight time.) These findings are summarized in Table 1.

TABLE 1.—SUMMARY OF THE COST-BENEFIT RELATIONSHIPS ESTIMATED FOR THE ANNUAL FLIGHT REVIEW REQUIREMENT

	Average 3 percent reduction in fatal accident rates	Average 5 percent reduction in fatal accident rates
Average annual fatal accidents avoided.....	2.4	8
Annual fatalities avoided.....	4.8	8
Annual property damage and injury costs avoided.....	\$866,000	\$1.4 mil
Cost-per-fatality-avoided (based upon an average total annual compliance cost of \$6.4 million)....	\$1.1 mil	\$620,000

*Amended Part 61—Subpart C—Student and Recreational Pilots*

The new recreational pilot certificate category will provide prospective pilots with a lower cost alternative to obtaining a private pilot certificate for those persons interested in flying a basic, experimental, or homebuilt aircraft in close proximity to a home airport that is not in airspace requiring communication with air traffic control facilities. Recreational pilot candidates will have the option of obtaining a simpler pilot certificate, with the privileges of that certificate limited because of the areas of instruction that will be eliminated from the existing private pilot curriculum (night flying, attitude instrument flight, radio navigation and dead reckoning, and radio communications). The student recreational pilot certificate category originally proposed in the Notice has not been adopted. Rather, the existing student pilot certificate category has been amended to permit training for either a recreational or private pilot certificate. Further, recreational pilots will be able to use the recreational pilot certificate as a building block toward earning the private pilot and other more advanced certificates and ratings. Establishment of the recreational pilot certificate category will improve the attractiveness of flying as a hobby in comparison to other forms of recreational activity from which the public may choose.

An estimate has been made of the savings in flight training costs that a recreational pilot applicant may achieve in comparison to a private pilot applicant. The minimum flight

experience requirements for a recreational pilot certificate will be 15 hours of dual instruction and 15 hours of solo flight, compared to 20 hours in each category required for a private pilot certificate. However, very few students earn their private pilot certificates in the minimum prescribed hours. FAA records indicate that the average private pilot applicant requires about 71 hours, composed of 42 hours of dual instruction and 29 hours of solo flight, to complete certification. The FAA expects that the average recreational pilot applicant will also require more than the minimum prescribed hours, and will typically be able to earn a certificate in 45 to 55 total flight hours, distributed evenly between dual instruction and solo flight. This will result in an average reduction of 16 to 26 flight hours of training for a recreational pilot in comparison to a private pilot.

In the Notice, the FAA estimated that the minimum reduction in training would only be on the order of 10 hours total flight time. However, inadequate allowance was made in the evaluation of the Notice for reduced training in cross-country procedures because of the 50 nautical mile distance restriction that will limit recreational pilot activities.

Aircraft rental rates for basic two-place and four-place airplanes typically used in flight instruction range from about \$35 to \$55 per hour. Flight instructors' fees typically range from about \$15 to \$20 per hour. Based upon these values, the average 71 flight hours required of private pilot applicants and the estimated 45 to 55 average flight hours recreational pilot applicants are expected to require to complete certification, the FAA estimates the savings that a prospective pilot may realize by obtaining a recreational certificate instead of a private certificate. These comparative flight training costs are summarized in Table 2.

To the extent that two-place homebuilt and experimental aircraft, equipped with dual controls and suitable for basic flight training, are available, some additional savings over the estimates in Table 2 may be achieved by recreational pilot applicants. (This evaluation has focused on recreational pilot applicants receiving training in airplanes because that is the aircraft category in which most students receive training. However, similar arguments apply to those recreational pilot applicants receiving training in helicopters and gyroplanes.)

TABLE 2.—COMPARISON OF RECREATIONAL AND PRIVATE PILOT FLIGHT TRAINING COSTS

	Totals based on \$85 airplane and \$15 instructor hourly rates	Totals based on \$55 airplane and \$20 instructor hourly rates
Private Pilot—Average 71 Hours (42 hours dual and 29 hours solo).....	\$3,100	\$4,750
Recreational Pilot—55 Total Hours (27.5 hours dual and 27.5 hours solo).....	\$2,350	\$3,600
Percent Savings.....	24%	24%
Dollar Savings.....	\$750	\$1,150
Recreational Pilot—45 Total Hours (22.5 hours dual and 22.5 hours solo).....	\$1,900	\$2,900
Percent Savings.....	39%	39%
Dollar Savings.....	\$1,200	\$1,850

Once initial certification has been completed, recreational pilots are not expected to realize any appreciable costs savings from flying as a continuing hobby in comparison to the costs they would have incurred as private pilots because recreational pilots will fly the same aircraft that are typically used today by private pilots for recreational flying.

For those individuals who now must become private pilots, but would prefer the simpler recreational certificate if it were available, savings in initial certification training costs of approximately 24 to 39 percent can be expected. For other members of the public, these savings will improve the attractiveness of flying as a hobby and provide an additional option to choose from in selecting recreational activities of all types.

Establishment of the recreational pilot certificate category is not expected to result in any appreciable implementation costs to the public, administrative costs to the FAA, or social costs related to higher accident rates.

The extent of recreational activity of all types is determined primarily by the level of disposable income available to the public. The decision to become a recreational pilot is completely voluntary. Should some individuals choose to become recreational pilots instead of pursuing alternative recreational activities, there will be a decrease in resources utilized in other recreational activities and an increase in resources used in recreational flying, but no net costs.

Flight schools are not expected to incur any appreciable costs in developing a training curriculum for recreational pilots because it will be the same as the existing curriculum for private pilots, only with certain items deleted.

The FAA is not expected to incur any appreciable increase in operating costs to accommodate recreational pilot activity. The highly restricted recreational pilot category is expected

to be appropriate for only a small group of pilots. Adequate excess capacity will exist in the automated Flight Service Station (FSS) system to handle the weather briefings and flight plan filings of the limited number of recreational pilots. These pilots are not expected to increase the system workload by more than 5 to 10 percent, and their activity will primarily occur during off-peak periods for FSS facilities. Further, because recreational pilots will operate outside of the ATC system, ATC costs are not expected to increase either.

To avoid an increase in accident rates, the privileges of recreational pilots will be restricted in a manner intended to compensate for the areas in which they will not receive training. The most significant restriction is the 50 nautical mile distance restriction, intended primarily to keep recreational pilots from experiencing accidental encounters with instrument meteorological conditions (IMC). Recreational pilots will not have some of the usual safeguards against accidental encounters with IMC because they will not have received training in two-way radio communications, radio navigation, or basic attitude instrument flying. Restricting recreational pilots to 50 nautical miles from an airport at which instruction was received is intended to avoid circumstances that have historically accounted for a large portion of accidents experienced by VFR pilots, even though exposure to IMC is usually unintentional and, therefore, relatively limited. Recreational pilots are expected to be safe pilots in the types of flying for which they have been trained and authorized to conduct and, therefore, are not expected to have any higher accident rates than pilots trained to existing standards currently experience.

#### *Amended § 61.87—Student Pilot Requirements for Solo Flight*

This amendment requires student pilots to pass a written examination administered by the flight instructor prior to solo flight. Many flight schools

already include such an exam in their training programs, and most prudent independent flight instructors require at least a pre-solo oral exam on these topics. Therefore, this amendment simply formalizes current practices and is not expected to result in any appreciable implementation costs. The FAA will incur incremental costs of about \$10,000 to print and distribute an advisory circular on the pre-solo exam.

#### *Amended § 61.89—Student Pilot General Limitations*

This amendment would prevent a student pilot from acting as pilot-in-command of an aircraft when the flight or surface visibility is less than 3 statute miles during daylight hours or 5 statute miles at night, or without visual reference to the surface. Although under existing regulations student pilots technically can fly when the visibility is less than required by this amendment, prudent flight instructors rarely allow students to fly when visibility conditions are less than the revised standards and frequently require even better visibility conditions. Therefore, this amendment simply formalizes current practice and is not expected to impose any economic impact.

#### *International Trade Impact Analysis*

The various regulations adopted in this final rule will have no impact on trade opportunities for both U.S. firms doing business overseas and foreign firms doing business in the United States. The amendments primarily affect the domestic operations of individual student, private, and recreational pilots, not of businesses involved in the sale of aviation products or services. Even in those rare instances in which a low-time private pilot certificate holder exercises the privileges of that certificate in operations incidental to the business activities of a firm that engages in foreign trade, the cost impact of the amended regulations on the overall activities of such a firm would be negligible.

**Regulatory Flexibility Determination**

The Regulatory Flexibility Act (RFA) of 1980 was enacted by Congress to ensure, among other things, that small entities are not disproportionately affected by government regulations. The FAA has determined that under the criteria of the RFA, these amended regulations will not have a significant economic impact on a substantial number of small entities.

The various regulations adopted in this final rule will primarily affect the operations of individual student, private, and recreational pilots, not the activities of business entities. However, in those instances in which a private pilot certificate holder is also the sole proprietor of a small business, and the holder exercises the privileges of his or her certificate in operations that are incidental to that business, the individual cost of compliance with the annual flight review requirement (the only amendment affecting private pilots in this final rule), will fall far short of the annual threshold cost level of \$3,866 (1986 dollars) prescribed in FAA Order 2100.14, "Regulatory Flexibility Criteria and Guidance," for determining whether or not a rule will have a significant economic impact on a small entity of this type.

**Paperwork Reduction Act**

The reporting requirements in this document have been previously approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96-511) and have been assigned OMB Control Number 2120-0021.

**Federalism Implications**

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

**Conclusion**

None of the provisions of this final rule will result in compliance costs that exceed \$100 million annually. Therefore, it has been determined that these amendments do not involve a rule change that is major under Executive Order 12291. In view of the substantial amount of public interest generated by the proposal and the Notice, this final rule is considered to be significant under

Department of Transportation Policies and Procedures (44 FR 11034; February 26, 1979). The various regulations adopted in this final rule will primarily affect the operations of individual pilots, not the activities of business entities. Therefore, in accordance with the Regulatory Flexibility Act, I certify that these amendments will not have a significant economic impact, positive or negative, on a substantial number of small entities. A summary of the regulatory evaluation is printed in the preamble to this final rule, and a copy of the full regulatory evaluation is filed in the docket and may be obtained by contacting the person listed under "FOR FURTHER INFORMATION CONTACT."

**List of Subjects in 14 CFR Part 61**

Aviation safety, Student pilots, Eligibility requirements, Aeronautical knowledge, Operational experience, Cross-country flight privileges, Limitations.

**Final Rule**

Accordingly, Part 61 of the Federal Aviation Regulations (14 CFR Part 61) is amended as follows:

**PART 61—CERTIFICATION: PILOTS AND FLIGHT INSTRUCTORS**

1. The authority citation for Part 61 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1355, 1421, 1422, and 1427; 49 U.S.C. 106(g) (Revised, Pub. L. 97-449; January 12, 1983).

2. By amending § 61.5 by redesignating paragraphs (a) (1) (ii), (iii), and (iv) as (a)(1)(iii), (iv), and (v), respectively; and by adding a new paragraph (a)(1)(ii) to read as follows:

**§ 61.5 Certificates and ratings issued under this part.**

- (a) \* \* \*
- (1) \* \* \*
- (ii) Recreational pilot.

3. By amending § 61.23 by revising paragraphs (a)(3), (b)(2) and (c) to read as follows:

**§ 61.23 Duration of medical certificates.**

- (a) \* \* \*
- (3) The 24th month after the month of the date of examination shown on the certificate, for operations requiring only a private, recreational, or student pilot certificate.
- (b) \* \* \*
- (2) The 24th month after the month of the date of examination shown on the certificate, for operations requiring only a private, recreational, or student pilot certificate.

(c) A third-class medical certificate expires at the end of the 24th month after the month of the date of examination shown on the certificate, for operations requiring a private, recreational, or student pilot certificate.

4. By amending § 61.31 by redesignating paragraphs (f)(2), (f)(3), and (f)(4) as (f)(3), (f)(4), and (f)(5), respectively; and by adding a new paragraph (f)(2) to read as follows:

**§ 61.31 General limitations**

- (f) \* \* \*
- (2) The holder of a recreational pilot certificate when operating under the provisions of § 61.101 (f), (g), and (h).

5. By amending § 61.51 by revising paragraphs (c)(2)(i) and by adding a new paragraph (d)(3) to read as follows:

**§ 61.51 Pilot logbooks.**

- (c) \* \* \*
- (2) \* \* \*
- (i) A recreational, private, or commercial pilot may log pilot-in-command time only that flight time during which that pilot is the sole manipulator of the controls of an aircraft for which the pilot is rated, or when the pilot is the sole occupant of the aircraft, or, except for a recreational pilot, when acting as pilot-in-command of an aircraft on which more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is conducted.
- (d) \* \* \*

(3) A recreational pilot must carry his or her logbook that has the required instructor endorsements on all solo flights—

- (i) In excess of 50 nautical miles from an airport at which instruction was received;
- (ii) In airspace in which communication with air traffic control is required;
- (iii) Between sunset and sunrises; and
- (iv) In an aircraft for which the pilot is not rated.

6. By adding a new § 61.56 to read as follows:

**§ 61.56 Flight review.**

- (a) As used in this section, a flight review consists of a review of—
- (1) The current general operating and flight rules of Part 91 of this chapter; and
- (2) Those maneuvers and procedures which, in the discretion of the person giving the review, are necessary for the pilot to demonstrate the safe exercise of the privileges of the pilot certificate.

(b) No person may act as pilot-in-command of an aircraft, within the period specified in paragraph (c) or (d) of this section, as applicable, unless that person has—

(1) Accomplished a flight review given in an aircraft for which that pilot is rated by an appropriately rated instructor certificated under this part or other person designated by the Administrator; and

(2) A logbook endorsed by the person who gave the review certifying that the pilot has satisfactorily accomplished the flight review.

(c) Except as provided in paragraph (d) and (e) of this section, each pilot must have complied with the requirements of this section since the beginning of the 24th calendar month before the month in which that pilot acts as pilot-in-command.

(d) Except as provided in paragraph (e) of this section, each recreational pilot who has logged fewer than 400 hours flight time and each non-instrument-rated private pilot who has logged fewer than 400 hours flight time must have complied with the requirements of this section since the beginning of the 12th calendar month before the month in which that pilot acts as pilot-in-command. The flight review required by this paragraph will consist of a minimum of 1 hour flight instruction and 1 hour ground instruction.

(e) A person who has, within the period specified in paragraphs (c) and (d) of this section, satisfactorily completed a pilot proficiency check conducted by the FAA, an approved pilot check airman, or a U.S. Armed Force, for a pilot certificate, rating, or operating privilege, need not accomplish the flight review required by this section.

(f) The requirements of this section may be accomplished in combination with the requirements of § 61.57 and other applicable recency requirements, at the discretion of the instructor.

7. By amending § 61.57 by deleting the text of paragraphs (a) and (b) and marking them reserved; and by inserting a comma after the word "paragraph" in the next to last sentence of paragraph (c).

8. By amending § 61.69 by revising paragraph (a) to read as follows:

**§ 61.69 Glider towing: Experience and instruction requirements.**

(a) He holds a current pilot certificate (other than a student or recreational pilot certificate) issued under this part.

9. By revising the title of Subpart C to read as follows:

**Subpart C—Student and Recreational Pilots**

10. By revising § 61.81 to read as follows:

**§ 61.81 Applicability.**

This subpart prescribes the requirements for the issuance of student pilot certificates and recreational pilot certificates and ratings, the conditions under which those certificates and ratings are necessary, and the general operating rules and limitations for the holders of those certificates and ratings.

11. By revising the title of § 61.83 to read as follows:

**§ 61.83 Eligibility requirements: Student pilots.**

\* \* \* \* \*

12. By revising the title and text of § 61.87 to read as follows:

**§ 61.87 Solo flight requirements for student pilots.**

(a) *General.* A student pilot may not operate an aircraft in solo flight unless that student meets the requirements of this section. The term "solo flight," as used in this subpart, means that flight time during which a student pilot is the sole occupant of the aircraft, or that flight time during which the student acts as pilot-in-command of an airship requiring more than one flight crewmember.

(b) *Aeronautical knowledge.* A student pilot must have demonstrated satisfactory knowledge to an authorized instructor, of the appropriate portions of Parts 61 and 91 of the Federal Aviation Regulations that are applicable to student pilots. This demonstration must include the satisfactory completion of a written examination to be administered and graded by the instructor who endorses the student's pilot certificate for solo flight. The written examination must include questions on the applicable regulations and the flight characteristics and operational limitations for the make and model aircraft to be flown.

(c) *Pre-solo flight training.* Prior to being authorized to conduct a solo flight, a student pilot must have received and logged instruction in at least the applicable maneuvers and procedures listed in paragraphs (d) through (j) of this section for the make and model of aircraft to be flown in solo flight, and must have demonstrated proficiency to an acceptable performance level as judged by the instructor who endorses the student's pilot certificate.

(d) For all aircraft (as appropriate to the aircraft to be flown in solo flight), the student pilot must have received pre-solo flight training in—

(1) Flight preparation procedures, including preflight inspections, powerplant operation, and aircraft systems;

(2) Taxiing or surface operations, including runups;

(3) Takeoffs and landings, including normal and crosswind;

(4) Straight and level flight, shallow, medium, and steep banked turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures, and collision and wake turbulence avoidance;

(7) Descents with and without turns using high and low drag configurations;

(8) Flight at various airspeeds from cruising to minimum controllable airspeed;

(9) Emergency procedures and equipment malfunctions; and

(10) Ground reference maneuvers.

(e) For airplanes, in addition to the maneuvers and procedures in paragraph (d) of this section, the student pilot must have received pre-solo flight training in—

(1) Approaches to the landing area with engine power at idle and with partial power;

(2) Slips to a landing;

(3) Go-arounds from final approach and from the landing flare in various flight configurations including turns;

(4) Forced landing procedures initiated on takeoff, during initial climb, cruise, descent, and in the landing pattern; and

(5) Stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall.

(f) For rotorcraft (other than single-place gyroplanes), in addition to the maneuvers and procedures in paragraph (d) of this section and as allowed by the aircraft's performance and maneuver limitations, the student pilot must have received pre-solo flight training in—

(1) Approaches to the landing area;

(2) Hovering turns and air taxiing (for helicopters only) and ground maneuvers;

(3) Go-arounds from landing hover and from final approach;

(4) Simulated emergency procedures, including autorotational descents with a power recovery or running landing in gyroplanes, a power recovery to a hover in a single engine helicopter, or approaches to a hover or landing with one engine inoperative in multiengine helicopters; and

(5) Rapid decelerations (helicopters only).

(g) For single-place gyroplanes, in addition to the appropriate maneuvers

and procedures in paragraph (d) of this section, the student pilot must have received pre-solo flight training in—

(1) Simulated emergency procedures, including autorotational descents with a power recovery or a running landing;

(2) At least three successful flights in gyroplanes under the observation of a qualified instructor; and

(3) For nonpowered single-place gyroplanes only, at least three successful flights in a gyroplane towed from the ground under the observation of the flight instructor who endorses the student's pilot certificate.

(h) For gliders, in addition to the appropriate maneuvers and procedures in paragraph (d) of this section, the student pilot must have received pre-solo flight training in—

(1) Preflight inspection of towline rigging, review of signals, and release procedures to be used;

(2) Aerotows, ground tows, or self-launch;

(3) Principles of glider disassembly and assembly;

(4) Stall entries from various flight attitudes with recovery initiated at the first indication of a stall, and recovery from a full stall;

(5) Straight glides, turns, and spirals;

(6) Slips to a landing;

(7) Procedures and techniques for thermalling in convergence lift or ridge lift as appropriate to the training area; and

(8) Emergency operations including towline break procedures.

(i) In airships, in addition to the appropriate maneuvers and procedures in paragraph (d) of this section, the student pilot must have received pre-solo flight training in—

(1) Rigging, ballasting, controlling pressure in the ballonets, and superheating; and

(2) Landings with positive and with negative static balance.

(j) In free balloons, in addition to the appropriate maneuvers and procedures in paragraph (d) of this section, the student pilot must have received pre-solo flight training in—

(1) Operation of hot air or gas source, ballast, valves, and rip panels, as appropriate;

(2) Emergency use of rip panel (may be simulated);

(3) The effects of wind on climb and approach angles; and

(4) Obstruction detection and avoidance techniques.

(k) The instruction required by this section must be given by an authorized flight instructor who is certificated—

(1) In the category and class of airplanes, for airplanes;

(2) Except as provided in paragraph (k)(3) of this section, in helicopters or gyroplanes, as appropriate, for rotorcraft; and

(3) In airplanes or gyroplanes, for single-place gyroplanes.

(l) The holder of a commercial pilot certificate with a lighter-than-air category rating may give the instruction required by this section in—

(1) Airships, if that commercial pilot holds an airship class rating; and

(2) Free balloons, if that commercial pilot holds a free balloon class rating.

(m) Flight instructor endorsements. No student pilot may operate an aircraft in solo flight unless that student's pilot certificate and logbook have been endorsed for the specific make and model aircraft to be flown by an authorized flight instructor certificated under this part, and the student's logbook has been endorsed, within the 90 days prior to the student operating in solo flight, by an authorized flight instructor certificated under this part who has flown with the student. No flight instructor may authorize solo flight without endorsing the student's logbook. The instructor's endorsement must certify that the instructor—

(1) Has given the student instruction in the make and model aircraft in which the solo flight is to be made;

(2) Finds that the student has met the flight training requirements of this section; and

(3) Finds that the student is competent to make a safe solo flight in that aircraft.

13. By amending § 61.89 by amending paragraph (a)(4) by deleting the word "or"; by amending paragraph (a)(5) by deleting the period and adding a semicolon after "British Columbia"; by adding new paragraphs (a)(6), (a)(7), and (a)(8); and by revising paragraph (b) to read as follows:

**§ 61.89 General limitations.**

(a) \* \* \*

(6) With a flight or surface visibility of less than 3 statute miles during daylight hours or 5 statute miles at night;

(7) When the flight cannot be made with visual reference to the surface; or

(8) In a manner contrary to any limitations placed in the pilot's logbook by the instructor.

(b) A student pilot may not act as a required pilot flight crewmember on any aircraft for which more than one pilot is required by the type certificate of the aircraft or regulations under which the flight is conducted, except when receiving flight instruction from an authorized flight instructor on board an airship and no person other than a required flight crewmember is carried on the aircraft.

14. By revising the title and text of § 61.93 to read as follows:

**§ 61.93 Cross-country flight requirements (for student and recreational pilots seeking private pilot certification).**

(a) *General.* No student pilot may operate an aircraft in solo cross-country flight, nor may that student, except in an emergency, make a solo flight landing at any point other than the airport of takeoff, unless the student has met the requirements of this section. The term cross-country flight, as used in this section, means a flight beyond a radius of 25 nautical miles from the point of departure.

(b) Notwithstanding paragraph (a) of this section, an authorized flight instructor, certificated under this part, may permit the student to practice solo takeoffs and landings at another airport within 25 nautical miles from the airport at which the student receives instruction if the flight instructor—

(1) Determines that the student pilot is competent and proficient to make those landings and takeoffs;

(2) Has flown with that student prior to authorizing those takeoffs and landings; and

(3) Endorses the student pilot's logbook with an authorization to make those landings and takeoffs.

(c) *Flight training.* A student pilot, in addition to the pre-solo flight training maneuvers and procedures required by § 61.87(c), must have received and logged instruction from an authorized flight instructor in the appropriate pilot maneuvers and procedures of this section. Additionally, a student pilot must have demonstrated an acceptable standard of performance, as judged by the authorized flight instructor certificated under this part, who endorses the student's pilot certificate in the appropriate pilot maneuvers and procedures of this section.

(1) For all aircraft—

(i) The use of aeronautical charts for VFR navigation using pilotage and dead reckoning with the aid of a magnetic compass;

(ii) Aircraft cross-country performance, and procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(iii) Cross-country emergency conditions including lost procedures, adverse weather conditions, and simulated precautionary off-airport approaches and landing procedures;

(iv) Traffic pattern procedures, including normal area arrival and

departure, collision avoidance, and wake turbulence precautions;

(v) Recognition of operational problems associated with the different terrain features in the geographical area in which the cross-country flight is to be flown; and

(vi) Proper operation of the instruments and equipment installed in the aircraft to be flown.

(2) For airplanes, in addition to paragraph (c)(1) of this section—

(i) Short and soft field takeoff, approach, and landing procedures, including crosswind takeoffs and landings;

(ii) Takeoffs at best angle and rate of climb;

(iii) Control and maneuvering solely by reference to flight instruments including straight and level flight, turns, descents, climbs, and the use of radio aids and radar directives;

(iv) The use of radios for VFR navigation and for two-way communication; and

(v) For those student pilots seeking night flying privileges, night flying procedures including takeoffs, landings, go-arounds, and VFR navigation.

(3) For rotorcraft, in addition to paragraph (c)(1) of this section and as appropriate to the aircraft being flown—

(i) High altitude takeoff and landing procedures;

(ii) Steep and shallow approaches to a landing hover;

(iii) Rapid decelerations (helicopters only); and

(iv) The use of radios for VFR navigation and two-way communication.

(4) For gliders, in addition to the appropriate maneuvers and procedures in paragraph (c)(1) of this section—

(i) Landings accomplished without the use of the altimeter from at least 2,000 feet above the surface;

(ii) Recognition of weather conditions and conditions favorable for cross-country soaring; and

(iii) The use of radios for two-way radio communications.

(5) For airships, in addition to the appropriate maneuvers and procedures in paragraph (c)(1) of this section—

(i) Control of gas pressure with regard to superheating and altitude; and

(ii) Control of the airship solely by reference to flight instruments.

(6) For free balloons, the appropriate maneuvers and procedures in paragraph (c)(1) of this section.

(d) No student pilot may operate an aircraft in solo cross-country flight, unless—

(1) The instructor is an authorized instructor certificated under this part and the student's certificate has been

endorsed by the instructor attesting that the student has received the instruction and demonstrated an acceptable level of competency and proficiency in the maneuvers and procedures of this section for the category of aircraft to be flown; and

(2) The instructor has endorsed the student's logbook—

(i) For each solo cross-country flight, after reviewing the student's preflight planning and preparation, attesting that the student is prepared to make the flight safely under the known circumstances and subject to any conditions listed in the logbook by the instructor; and

(ii) For repeated specific solo cross-country flights that are not greater than 50 nautical miles from the point of departure, after giving that student flight instruction in both directions over the route, including takeoffs and landings at the airports to be used, and has specified the conditions for which the flights can be made.

15. By adding new §§ 61.96, 61.97, 61.98, 61.99, and 61.100 to read as follows:

**§ 61.96 Eligibility requirements: Recreational pilots.**

To be eligible for a recreational pilot certificate, a person must—

(a) Be at least 17 years of age;

(b) Be able to read, speak, and understand the English language, or have such operating limitations placed on the pilot certificate as are necessary for the safe operation of aircraft, to be removed when the recreational pilot shows the ability to read, speak, and understand the English language;

(c) Hold at least a current third-class medical certificate issued under Part 67 of this chapter;

(d) Pass a written test on the subject areas on which instruction or home study is required by § 61.97;

(e) Pass an oral and flight test on maneuvers and procedures selected by an FAA inspector or designated pilot examiner to determine the applicant's competency in the appropriate flight operations listed in § 61.98; and

(f) Comply with the sections of this part that apply to the rating sought.

**§ 61.97 Aeronautical knowledge.**

An applicant for a recreational pilot certificate must have logged ground instruction from an authorized instructor, or must present evidence showing satisfactory completion of a course of instruction or home study in at least the following areas of aeronautical knowledge appropriate to the category and class of aircraft for which a rating is sought:

(a) The Federal Aviation Regulations applicable to recreational pilot privileges, limitations, and flight operations, the accident reporting requirements of the National Transportation Safety Board, and the use of the applicable portions of the "Airman's Information Manual" and the FAA advisory circulars;

(b) The use of aeronautical charts for VFR navigation using piloting with the aid of a magnetic compass;

(c) The recognition of critical weather situations from the ground and in flight and the procurement and use of aeronautical weather reports and forecasts;

(d) The safe and efficient operation of aircraft including collision and wake turbulence avoidance;

(e) The effects of density altitude on takeoff and climb performance;

(f) Weight and balance computations; and

(g) Principles of aerodynamics, powerplants, and aircraft systems.

**§ 61.98 Flight proficiency.**

The applicant for a recreational pilot certificate must have logged instruction from an authorized flight instructor in at least the pilot operations listed in this section. In addition, the applicant's logbook must contain an endorsement by an authorized flight instructor who has found the applicant competent to perform each of those operations safely as a recreational pilot.

(a) *In airplanes.* (1) Preflight operations, including weight and balance determination, line inspection, airplane servicing, powerplant operations, and aircraft systems;

(2) Airport and traffic pattern operations, collision and wake turbulence avoidance;

(3) Flight maneuvering by reference to ground objects;

(4) Pilotage with the aid of magnetic compass;

(5) Flight at critically slow airspeeds, and the recognition of and recovery from imminent and full stalls entered from straight flight and from turns;

(6) Emergency operations, including simulated aircraft and equipment malfunctions;

(7) Maximum performance takeoffs and landings; and

(8) Normal and crosswind takeoffs and landings.

(b) *In helicopters.* (1) Preflight operations including weight and balance determination, line inspection, helicopter servicing, powerplant operations, and aircraft systems;

(2) Airport and traffic pattern operations, collision and wake turbulence avoidance;

(3) Hovering, air taxiing, and maneuvering by reference to ground objects;

(4) Pilotage with the aid of magnetic compass;

(5) High altitude takeoffs and roll-on landings, and rapid decelerations; and

(6) Emergency operations, including auto-rotative descents.

(c) *In gyroplanes.* (1) Preflight operations including weight and balance determination, line inspection, gyroplane servicing, powerplant operations, and aircraft systems;

(2) Airport and traffic pattern operations, collision and wake turbulence avoidance;

(3) Flight maneuvering by reference to ground objects;

(4) Pilotage with the aid of a magnetic compass;

(5) Maneuvering at critically slow air speeds, and the recognition of and recovery from high rates of descent at low airspeeds; and

(6) Emergency procedures, including maximum performance takeoffs and landings.

**§ 61.99 Airplane rating: Aeronautical experience.**

(a) An applicant for a recreational pilot certificate with an airplane rating must have had at least a total of 30 hours of flight instruction and solo flight time which must include the following:

(1) Fifteen hours of flight instruction from an authorized flight instructor, including at least—

(i) Except as provided for in paragraph (b), 2 hours outside of the vicinity of the airport at which instruction is given, including at least three landings at another airport that is located more than 25 nautical miles from the airport of departure; and

(ii) Two hours in airplanes in preparation for the recreational pilot flight test within the 60-day period before the test.

(2) Fifteen hours of solo flight time in airplanes.

(b) *Pilots based on small islands.*

(1) An applicant who is located on an island from which the flight required in § 61.99(a)(1)(i) cannot be accomplished without flying over water more than 10 nautical miles from the nearest shoreline need not comply with § 61.99(a)(1)(i). However, if other airports that permit civil operations are available to which a flight may be made without flying over water more than 10 nautical miles from the nearest shoreline, the applicant must show completion of a dual flight between those two airports which must

include three landings at the other airport.

(2) The pilot certificate issued to a person under paragraph (b)(1) of this section contains an endorsement with the following limitation which may subsequently be amended to include another island if the applicant complies with paragraph (b)(1) of this section with respect to that island:

*Passenger carrying prohibited in flights more than 10 nautical miles from (appropriate island).*

(3) The holder of a recreational pilot certificate with an endorsement described in paragraph (b)(2) of this section is entitled to removal of the endorsement if the holder presents satisfactory evidence of compliance with the applicable flight requirements of § 61.93(c) to an FAA inspector or designated pilot examiner.

**§ 61.100 Rotorcraft rating: Aeronautical experience.**

An applicant for a recreational pilot certificate with a rotorcraft category rating must have at least the following aeronautical experience:

(a) For a helicopter rating, an applicant must have a minimum of 30 hours of flight instruction and solo flight time in aircraft, which must include the following:

(1) Fifteen hours of flight instruction from an authorized flight instructor including at least—

(i) Two hours of flight instruction in helicopters from an authorized flight instructor outside the vicinity of the airport at which instruction is given, including at least three landings at another airport that is located more than 25 nautical miles from the airport of departure; and

(ii) Two hours of flight instruction in preparation for the flight test within the 60-day period preceding the test.

(2) Fifteen hours of solo time in helicopters including—

(i) A takeoff and landing at an airport that serves both airplanes and helicopters; and

(ii) A flight with a landing at a point other than an airport.

(b) For a gyroplane rating, an applicant must have a minimum of 30 hours of flight instruction and solo flight time in aircraft, which must include the following:

(1) Fifteen hours of flight instruction from an authorized flight instructor including at least—

(i) Two hours of flight instruction in gyroplanes from an authorized flight instructor outside the vicinity of the airport at which instruction is given, including at least three landings at

another airport that is located more than 25 nautical miles from the airport of departure; and

(ii) Two hours of flight instruction in preparation for the flight test within the 60-day period preceding the test.

(2) Ten hours of solo flight time in a gyroplane, including flights with takeoffs and landings at paved and unpaved airports.

**§ 61.102 [Redesignated from § 61.101]**

16. By redesignating § 61.101 under Subpart D—Private Pilots as § 61.102 under Subpart D—Private Pilots.

17. By adding new § 61.101 under Subpart C—Student and Recreational Pilots to read as follows:

**§ 61.101 Recreational pilot privileges and limitations.**

(a) A recreational pilot may—

(1) Carry not more than one passenger; and

(2) Share the operating expenses of the flight with the passenger.

(3) Act as pilot-in-command of an aircraft only when—

(i) The flight is within 50 nautical miles of an airport at which the pilot has received ground and flight instruction from an authorized instructor certificated under this part;

(ii) The flight lands at an airport within 50 nautical miles of the departure airport; and

(iii) The pilot carries, in that pilot's personal possession, a logbook that has been endorsed by the instructor attesting to the instruction required by paragraph (a)(3)(i) of this section.

(b) Except as provided in paragraphs (f) and (g) of this section, a recreational pilot may not act as pilot-in-command of an aircraft—

(1) That is certificated—

(i) For more than four occupants;

(ii) With more than one powerplant;

(iii) With a powerplant of more than 180 horsepower; or

(iv) With retractable landing gear.

(2) That is classified as a glider, airship, or balloon;

(3) That is carrying a passenger or property for compensation or hire;

(4) For compensation or hire;

(5) In furtherance of a business;

(6) Between sunset and sunrise;

(7) In airspace in which communication with air traffic control is required;

(8) At an altitude of more than 10,000 feet MSL or 2,000 feet AGL, whichever is higher;

(9) When the flight or surface visibility is less than 3 statute miles;

(10) Without visual reference to the surface;

130

dep wal (v pro l terr in v flow (v inst the ( par (i app incl lan (i clin (i by inc des aid ( nav cor ( nig pro go- ( pai ap) ( pro ( lar ( on ( na co) ( ap in us fee an co ra ap in to re m (c ai ur in ar

(11) On a flight outside the United States;

(12) To demonstrate that aircraft in flight to a prospective buyer;

(13) That is used in a passenger-carrying airlift and sponsored by a charitable organization; and

(14) That is towing any object.

(c) A recreational pilot may not act as a required pilot flight crewmember on any aircraft for which more than one pilot is required by the type certificate of the aircraft or the regulations under which the flight is conducted, except when receiving flight instruction from an authorized flight instructor on board an airship and no person other than a required flight crewmember is carried on the aircraft.

(d) A recreational pilot who has logged fewer than 400 flight hours and who has not logged pilot-in-command time in an aircraft within the preceding 180 days may not act as pilot-in-command of an aircraft until the pilot has received flight instruction from an authorized flight instructor who certifies in the pilot's logbook that the pilot is competent to act as pilot-in-command of the aircraft. This requirement can be met in combination with the requirements of §§ 61.56 and 61.57 at the discretion of the instructor.

(e) The recreational pilot certificate issued under this subpart carries the notation "Holder does not meet ICAO requirements."

(f) For the purpose of obtaining additional certificates or ratings, while under the supervision of an authorized flight instructor, a recreational pilot may fly as sole occupant of an aircraft—

(1) For which the pilot does not hold an appropriate category or class rating;

(2) Within airspace that requires communication with air traffic control; or

(3) Between sunset and sunrise, provided the flight or surface visibility is at least 5 statute miles.

(g) In order to fly solo as provided in paragraph (f) of this section, the recreational pilot must meet the appropriate aeronautical knowledge and flight training requirements of § 61.87 for

that aircraft. When operating an aircraft under the conditions specified in paragraph (f) of this section, the recreational pilot shall carry the logbook that has been endorsed for each flight by an authorized pilot instructor who—

(1) Has given the recreational pilot instruction in the make and model of aircraft in which the solo flight is to be made;

(2) Has found that the recreational pilot has met the applicable requirements of § 61.87; and

(3) Has found that the recreational pilot is competent to make solo flights in accordance with the logbook endorsement.

(h) Notwithstanding paragraph 61.101(a)(3), a recreational pilot may, for the purpose of obtaining an additional certificate or rating, while under the supervision of an authorized flight instructor, act as pilot-in-command of an aircraft on a flight in excess of 50 nautical miles from an airport at which flight instruction is received if the pilot meets the flight training requirements of § 61.93 and in that pilot's personal possession is the logbook that has been endorsed by an authorized instructor attesting that:

(1) The recreational pilot has received instruction in solo cross-country flight and the training described in § 61.93 applicable to the aircraft to be operated, and is competent to make solo cross-country flights in the make and model of aircraft to be flown; and

(2) The instructor has reviewed the student's preflight planning and preparation for the specific solo cross-country flight and that the recreational pilot is prepared to make the flight safely under the known circumstances and subject to any conditions listed in the logbook by the instructor.

18. By amending § 61.193 by revising paragraph (a)(5); by adding new paragraphs (a)(6) and (a)(7); by amending paragraph (b)(1) by changing "§ 61.87(d)(1)" to "§ 61.87(b) and (k)" and by changing "§ 61.93(c)(1)" to "§ 61.93(d)"; by amending paragraph (b)(2) by changing "§ 61.87(d)(1)" to "§ 61.87(k)"; by amending paragraph

(b)(3) by changing "§ 61.93(c)(2)" to "§§ 61.93(d) and 61.101(h)" and by inserting the words "or recreational pilot" after the words "student pilot"; by redesignating and revising paragraph (b)(6) as paragraph (b)(7); and by adding new paragraphs (b)(6) and (b)(8) to read as follows:

§ 61.193 Flight instructor authorizations.

(a) \* \* \*

(5) The flight review required in § 61.56;

(6) The instrument competency check required in § 61.57(e)(2); and

(7) The pilot-in-command requirements in § 61.101(d).

(b) \* \* \*

(6) In accordance with §§ 61.57(e)(2) and 61.101(d), the logbook of a pilot the CFI has instructed authorizing the pilot to act as pilot-in-command.

(7) In accordance with § 61.187, the logbook of an applicant for a flight instructor certificate certifying that the CFI has examined the applicant and found the applicant competent to pass the practical test required by this part; and

(8) In accordance with § 61.101(g) and (h), the logbook of a recreational pilot the CFI has instructed authorizing solo flight.

\* \* \* \* \*

19. By amending § 61.195 by adding a new paragraph (g) to read as follows:

§ 61.195 Flight instructor limitations.

\* \* \* \* \*

(g) *Recreational pilot endorsements.* The flight instructor may not endorse a recreational pilot's logbook unless the instructor has given that pilot the ground and flight instruction required under this part for the endorsement and found that pilot competent to pilot the aircraft safely.

Issued in Washington, DC, on March 24, 1989.

Robert E. Whittington,

Acting Administrator.

[FR Doc. 89-7460 Filed 3-28-89; 8:45 am]

BILLING CODE 4910-13-M